## 2022-2023 TRADITIONAL UNDERGRADUATE ACADEMIC CATALOG <br> POINT LOMA NAZARENE UNIVERSITY

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## TRADITIONAL UNDERGRADUATE

Welcome to the 2022-2023 Traditional Undergraduate Catalog. To navigate through the catalog, please use the navigation bar to the left.

## 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 (p. 7))

## Official Catalog

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

## About the University

- Introduction to the University (p. 6)
- University Mission (p. 7)
- Point Loma Campus and Facilities (p. 8)
- Accreditation, Affiliations and State Authorization (p. 11)
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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 oceanfront campus in San Diego and strategic additional campus locations 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 selfperpetuating 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 selfworth 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.

## University Profile

Programs at the graduate level are organized for the general purpose of giving the student a fundamental understanding and thorough mastery of a major field of study and of advanced preparation for a professional career.

Graduate Programs exist to:

- Recognize and foster superior scholarship through postbaccalaureate instruction, seminars, and research;
- Develop professional skills and competence;
- Encourage the acquisition and mastery of responsible and thorough methods of research;
- Enable students to improve their ability to think critically and achieve a greater measure of intellectual independence;
- Encourage the integration of the student's faith and learning; and
- Accelerate the engagement of graduates' faith in their professions.

Graduate study requires independent direction, a mature approach to study, and a commitment to professional goals. Students who have demonstrated a high level of achievement in undergraduate work and who want to increase their professional skills, expand their knowledge, and qualify for more demanding responsibilities are invited to apply for admission to Point Loma Nazarene University's Graduate and Professional Studies programs.

Courses and programs are offered through departments and schools of the university. Faculty determine the standards of admission, the standards for retention, the requirements for graduation, regulations governing transfer credit, and other matters pertaining to academic activities and responsibilities of graduate students. Thus, to receive graduate credit and to be eligible for a graduate degree, a student must be properly admitted to a graduate degree program and must meet the standards set by the faculty.

## Community Standards

Above all, Point Loma Nazarene University is a Christian community. Regardless of personal religious perspectives, when students enroll at Point Loma, they have entered into this unique community. Thus, the university community hopes that students will sense the love and holiness that characterizes life in Christ throughout their time of participation in the community. Faculty and staff desire to model that life in all they do.

Studying in a Christian community has several ramifications. First, it has an impact on the quality of workmanship - Christians offer God and each other their very best work. Students and faculty alike are held to a very high standard of workmanship. Second, work in a Christian community is characterized by integrity; there is a level of trust that makes life in Christian community uplifting. Third, work is grounded in Christ-like love and service. Faculty and students commit themselves to service in their
professions, community, and places of worship. Fourth, students, faculty, and staff are expected to live disciplined lives. Living and working in Christian community affects our life-style choices.

## 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 Wesleyanholiness 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 classrooms and offices have been added to the historic buildings to provide a unique campus setting. Newer facilities include an expanded athletic complex, the Fermanian School of Business and Business Center, the Cooper Music Center with its 400seat 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 and Ryan Library, 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 writings by and about Jacobus 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 a small Peter Mitten sculpture, a Salvador Dali marble cross, sculptures by Scott Stearman and an original Norman Rockwell painting used as a 1931 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 21 st 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 http:// www.pointloma.edu/library (http://www.pointloma.edu/library/).

## Department of Public Safety

The Department of Public Safety exists to provide a safe living, learning, and working environment for university students and employees. The department operates 24 hours a day on the Point Loma Campus and staffs the Liberty Station Conference Center and Health Promotion Center during business hours. All Public Safety Officers are licensed by the California Bureau of Security and Investigative Services and are trained in first aid, CPR, and AED use.

The university encourages students to report campus crimes and suspicious activity to Public Safety or other campus officials as well as to the San Diego Police Department. In addition to overseeing campus
security and emergency preparedness, Public Safety also enforces the University Vehicle Code (UVC) and Freshman Vehicle Policy. Students should refer to the Traditional Undergraduate Student Handbook and the UVC for complete rules and regulations concerning parking and driving on campus.

Additional resources regarding campus safety are available at the website maintained by the Department of Public Safety (https:// www.pointloma.edu/offices/public-safety/). Students may contact Public Safety at (619) 849-2525 for assistance 24 hours a day.

## 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 https://view.pointloma.edu/.

## Software

Students have the opportunity to purchase third party software at a discounted rate through OnTheHub (https:// pointloma.onthehub.com/WebStore/Security/Signin.aspx?rurl= \%2fWebStore\%2fProductsByMajorVersionList.aspx\%3fcmi_cs \%3d1 \%26cmi_mnuMain\%3df189368a-f0a6-e811-8109-000d3af41938).

## 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 (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 (http:// workday.pointloma.edu/)
- Email - http://gmail.pointloma.edu (http://gmail.pointloma.edu/)
- Learning management system - http://canvas.pointloma.edu (http:// canvas.pointloma.edu/)
- Library research materials - https://www.pointloma.edu/library (https://www.pointloma.edu/library/)
- Virtual lab environment - https://view.pointloma.edu (https:// view.pointloma.edu/)
- ITS self-service knowledge base - https://help.pointloma.edu (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-aday, 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


## 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 is located in the Center for Faculty Development on the west side of lower Bond Academic Center. It is open during normal business hours as a resource for all faculty.

## The Early Childhood Learning Center

The Early Childhood Learning Center has the unique opportunity of serving the PLNU campus and Point Loma community as an interactive Christ-centered laboratory school. The mission of the Early Childhood Learning Center is to provide a high quality educational experience for university students through observations, demonstration teaching, and individualized experiences with young children. The Center is designed to encourage the social, emotional, cognitive, physical, and spiritual growth of children and to give guidance and support to parents in achieving a more effective and fulfilled parenthood.

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, and students interact, play, work, and learn together. The Center gives 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.

Our current and former clients include the San Diego \& Imperial Counties Labor Council, San Diego Chamber of Commerce, Brookfield Properties, The Salvation Army, 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, 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 1001 Marina Village Parkway, Suite 402, 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 ${ }^{1}$
Accreditation Council for Education in Nutrition and Dietetics (formerly CADE) Accreditation Review Commission on Education for the Physician Assistant 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
${ }^{1}$ 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 Science
Academy of Nutrition and Dietetics
Accord Network
Accreditation Council for Business Schools and Programs
African Studies Association
Alpha Psi Omega, National Theatre Honor Society
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 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 Arts
American Library Association
American Marketing Association
American Mathematical Society
American Physical Society
American Political Science Association
American Psychiatric Nurses Association

American Psychological Association
American School Counselor Association
American Scientific Affiliation
American Sociological Association
American Studies Association
Asian American Journalists Association
Association for Asian Studies
Association for Christians in Student Development
Association for Computing Machinery
Association for Institutional Research
Association for Psychological Science
Association for Supervision and Curriculum Development
Association for Women in Mathematics
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 Christians in the Mathematical Sciences
Association of College and Research Libraries
Association of Departments of English
Association of Governing Boards of Universities and Colleges
Association of Independent California Colleges and Universities
Association of Independent Liberal Arts Colleges for Teacher Education
Association of Marian Helpers
Association of National Advertisers
Association of Pediatric Hematology/Oncology Nurses
Association of Rehabilitation Nurses
Association of the United States Army
Association of Women's Health, Obstetric, and Neonatal Nurses
Association of Writers \& Writing Programs
British Society for the History of Mathematics
Broadcast Education Association
Bronte Society
California Academic and Research Libraries
California Association for Bilingual Education
California Association for Health, Physical Education, Recreation, and Dance
California Association of Clinical Nurse Specialists
California Association of Colleges of Nursing
California Association of Family and Consumer Sciences
California Association of Professors of Education Administration
California Association of Resource Specialists and Special Education
Teachers
California Association of Teachers of English
California Chicano News Media Association
California Council on Teacher Education
California Psychological Association
California Society of Certified Public Accountants
California Sociological Association
Canadian Society for the History and Philosophy of Mathematics
Catholic Biblical Association of America
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 Board

College Music Society
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 Accreditation
Council for Advancement and Support of Education
Council of Administrators of Family and Consumer Sciences
Council of Independent Colleges
Council on Undergraduate Research
Credential Counselors and Analysts of California
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 Association
International Writing Centers Association
Investigative Reporters and Editors
Learning Disabilities Association
Mathematical Association of America
Midwest Modern Language Association
Modern Language Association
Music Teachers National Association
NAFSA: Association of International Educators
National Association for Business Economics
National Association for Education of Young Children
National Association for Music Education
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 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 Scholars
National Association of Schools of Music
National Association of Social Workers
National Association of Student Personnel Administrators
National Athletic Trainers' Association
National Career Development Association
National Coalition Against Domestic Violence
National Council of Teachers of English
National Institute for Computer-Assisted Reporting
National Parliamentary Debate Association
National Register of Health Service Psychologists
National Science Teachers Association
National Society of Hispanic MBAs
National Strength and Conditioning Association
National Women's Studies Association
North American Association of Christians in Social Work
North American Christian Foreign Language Association
Nurses Service Organization
Nurses Christian Fellowship (Intervarsity)
Pacific Sociological Association

Phi Beta Kappa
Phi Delta Kappa
Phi Delta Lambda, Alpha Chapter of the Nazarene Honor Society Phi Kappa Phi
Phi Upsilon Omicron, National Honor Society of Family and Consumer Sciences
Psi Chi, The International Honor Society in Psychology
Religion News 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
Shape America
Sigma Theta Tau, International Honor Society for Nursing (Zeta Mu Chapter) Sigma Xi
Société des Professeurs francais 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 and Gender
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
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 (http://www.pointloma.edu/offices/office-institutional-effectiveness-research/disclosures/).

## Student Life and Formation

The mission of the Office of Student Life and Formation is to faithfully call the Point Loma Nazarene University community to spiritual vitality centered on the Lordship of Jesus Christ. As an office, we believe in whole person development and are called to journey with each student, providing opportunities to learn, grow, and serve. It is the office's goal and prayer to equip the PLNU community to love God, love others, and love the world with body, mind, and spirit.

Student Life and Formation at Point Loma Nazarene University is dedicated to engaging students in the active and energizing process of learning. The Office of Student Life and Formation coordinates a multitude of co-curricular programs in the areas of Spiritual Life, Student Life, and Residential Life.

## Corporate Worship

## Chapel

Chapel is offered four times a week. We have morning gatherings on Monday, Wednesday, and Friday at 9:45 a.m., as well as an evening gathering on Thursday at 9:00 p.m. On Wednesday, Chapel is offered at the Point Loma campus and the Liberty Station campus. Chapel gatherings are designed to encourage greater intimacy with God and one another while also inviting us to respond to God's calling to minister and serve 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 Student Life and Formation: "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 Student Life and Formation.

## 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 Student Life and Formation 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 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

Student Life and Formation 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.

## Community Ministries

Community 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 wellbeing 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-faith based children's homes and other nonprofit organizations. We offer three to four one-day 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 worshiping with a Nazarene 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.

## 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 cocurricular 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 freshman, sophomore, and junior 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 oncampus 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 $4.4 \mathrm{cu} . \mathrm{ft}$.) 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 Traditional Undergraduate Student Handbook (https://pointloma-public.courseleaf.com/handbooks/tug-handbook/).

## Student Care and Engagement

The offices within Student Care and Engagement 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 within Student Care and Engagement, including the following offices and services: 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), Alpha Groups, and Transfer Activities Group.

## 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. LEAD provides leadership development to the broader community of student leaders in all departments.

## 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:

1. providing meaningful, student-sponsored educational, social, cultural, religious, and service opportunities for member students;
2. fostering constructive communication and interaction between the members and the administration and faculty;
3. fostering good relations between ASB members and the university's surrounding community;
4. establishing rapport with other student associations with similar objectives; and
5. 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 Traditional Undergraduate 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 in the drop-down menu at http:// catalog.pointloma.edu/. 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 http://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, multi-ethnic, 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 multiethnic 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 (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 proceduresinterpreting 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 office of Student Life and Formation, and the Wellness Center. http://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.

## Loma Outside

If students are looking for a weekend adventure, Loma Outside outfits multiple student-led trips across the Southwestern States throughout the year. 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 (https:// lomaoutside.com/).

## Alpha Groups

Alpha Groups exist to help first year students transition to life at Loma by providing a weekly group experience on every residential freshmen hall. Upperclassmen co-leaders guide freshmen in engaging conversation as they get to know self, others, the PLNU community, and find their place of belonging. Alpha Groups occur each Monday night, at 9:00 p.m., all across campus and cover topics pertinent to the first year experience. Alpha Groups are fun, consistent, and $100 \%$ freshmen focused!

## Transfer Activities Group (TAG)

TAG serves as a central point of information for resources, services, opportunities and events designed specifically for transfer students by former transfer students. Student leaders provide new transfer students with assistance, support and connections to campus resources to facilitate a smooth transition to the PLNU community.

## Wellness Center, Medical

The Wellness Center, located in Nicholson Commons on the first floor, is home to the student health clinic and health outreach. The Wellness Center is staffed with a physician, nurse practitioner, registered nurse, and a 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 and nutritional consultation for main campus undergraduate students. https://www.pointloma.edu/offices/wellness-center/medicalservices (https://www.pointloma.edu/offices/wellness-center/medicalservices/). 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.

The Wellness Center is located in Nicholson Commons, 1 st floor. https://www.pointloma.edu/offices/wellness-center (https:// www.pointloma.edu/offices/wellness-center/). Hours of operation are Monday-Friday, 8 am to 4:00 pm; Call the Wellness Center (619-849-2574) to schedule an appointment.

## Wellness Counseling Center

The Wellness Counseling Center provides clinical and campus-based assistance to all undergraduate students registered for classes on the
main campus. We help students maintain and develop emotional wellbeing to achieve your educational and personal goals, and promote a healthy and inclusive community through relationship building, education, crisis intervention, and support. Our individual services are based on a brief therapy model, designed to help students manage immediate problems and provide short-term therapy for six to eight sessions. These services are ideal for issues that have arisen recently or that are expected to resolve relatively quickly. If you are facing ongoing difficulties (6 months or longer), or if you have engaged in ongoing therapy in the past, it is likely that you will be provided with a recommendation for establishing a relationship with a provider in the community to ensure you have access to less limited mental health treatment.

Decisions regarding treatment recommendations are made by counselors in consultation with the Senior Clinician. When off-campus therapy is recommended or preferred by students, a counselor will support you through the process of getting connected. We will help identify several referral options and provide information on how to access health insurance benefits and transportation options. Local counseling options include providers within walking distance to campus, counseling services at the Mission Valley campus, and some that provide low or sliding scale fee services.

## 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, even if they are studying abroad and regardless of the number of units enrolled.

The University highly recommends that students validate their health insurance 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.

## 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/.

## 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
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
Administrative Assistant: Shelley Fruchey

## Academic Studies

Vice Provost: Jim Daichendt, Ph.D.
Office: Academic Deans Center, Room 01
Telephone: (619) 849-2412
Email: jimdaichendt@pointloma.edu
Administrative Assistant: Marvin Milian

## 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.

## Educational Access Center

## Pamela Harris, Director

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 Educational Access Center (EAC) 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 EAC (eac@pointloma.edu) determines, provides, and coordinates disabilityrelated 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 center. The center also partners with other entities on campus to address accessibility issues and advocacy.

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, etc. The EAC provides assistive/adaptive computer technology and training. There is no cost to the student for the services or accommodations provided by the EAC. Students are responsible for acquainting themselves with the procedures for use of accommodations. These procedures are available on the Educational Access Center website.

To qualify for accommodations, students must provide appropriate documentation about their disabilities to the Educational Access Center. Documentation provided to the EAC 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, attention deficit disorder, and mental health evaluations. Contact the EAC 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 (within the past three years) 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 Educational Access Center may file a grievance by contacting the ADA Coordinator at ADA@pointloma.edu.

## Tutorial Services

## Nillie Graf, Tutorial Center Manager

The Tutorial Center provides a variety of free tutoring and academic enrichment services to assist undergraduate students in managing course requirements, such as:

- Review sessions in select departments
- Individual online tutoring with PLNU student tutors (available for specific courses)
- Live help from Brainfuse tutors, an online tutoring partner
- Brainfuse Writing and Language Lab

Students are encouraged to contact the Tutorial Center by phone (619-849-2593) or email (tutorialservices@pointloma.edu) to request access login to Brainfuse. New accounts will take a minimum of 48 hours to set up. The Brainfuse login is required to schedule a session with PLNU student tutors on Tutor Match.

## Career Services

## Rebecca Smith, Executive Director

Point Loma Nazarene University asks our students, "Who are you called to be?"

Career exploration is one way to discern your calling. Consider your interests. Think about classes you enjoy. Plan for experiences that hone your skills and give you insight, from internships to ministries!

Our team partners with your faculty on Career Presentations through classes in all academic departments. We also offer the following services:

Career Workshops - These workshops are scheduled weekly, featuring strategies on updating resumes and LinkedIn profiles, interview preparation, job search, and alumni networking. Workshops take place in person and via Zoom. Register on Handshake now!

Advising Sessions - Research shows that group sessions and peer advising are highly effective in the process of career exploration. Students learn from each other, as they ask relevant questions, practice active listening, and reflect with career services facilitators (who may also be alumni employers, hiring managers, industry recruiters, or executive coaches). Join us for an interactive session by registering on Handshake.

Questions? Connect with us at http://www.pointloma.edu/ career-services (http://www.pointloma.edu/careerservices/) or careerservices@pointloma.edu.

## 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:

1. 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.
2. 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.
3. PLNU maintains high academic standards for all students, including student-athletes. Scheduling of competition and travel will minimize academic disruption.
4. 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.
5. Intercollegiate Athletics will provide opportunities for fan engagement and the cultivation of school spirit.
6. The Athletics Department will align its fundraising and promotional efforts with the efforts of the offices of University Advancement and Admissions.
7. 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.
8. 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.
9. 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.
10. 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.

## Colleges, Schools, and Departments Index of Offerings

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## 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:
Code Title Units

## Required First Year Courses

| PSY 1001 | Psychology of Personal Development - First Year <br> Experience (FE) |
| :--- | :--- |

Select one of the following:

| WRI 1010 | College Composition: Writing and Research - First <br> Year Experience (FE) | 4 |
| :--- | :--- | :--- |
| WRI 1016 | College Composition: Research - First Year <br> Experience (FE) ${ }^{1}$ | 2 |

${ }^{1}$ 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: James Daichendt, Ed.D.
Office: Bond Academic Center, Deans' Suite
Telephone: (619) 849-2412
Fax: (619) 849-7018
Email: gdaichen@pointloma.edu
Director of Operations: Marvin Milian

## 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. 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.

## 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

For information about Accreditations and Affiliations, please click here (p. 11).

## 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, co-chair; Melissa Newman, co-chair
Department of History and Political Science - Kelli McCoy, chair
Department of Literature, Journalism, Writing and Languages - Jacque
Mitchell, co-chair; Paula Cronovich, co-chair
Department of Music - Daniel Jackson, chair

## Centers

The Margaret Stevenson Center for Women's Studies - Kelli McCoy, codirector; Kara Lyons-Pardue, co-director

## Curricula

Students should refer to the information in this catalog for a complete listing of program characteristics, degree requirements, and course descriptions offered by academic areas within the 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 Foundational Explorations. 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

Chair - J. David Carlson, M.F.A.
David Adey, M.F.A.
Cranbook Academy of Art
J. David Carlson, M.F.A.

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
To view requirements for majors, minors, and certificates, see the Degree Program Information (p. 244) page.

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## Art

ART 1000 Introduction to Art (FE) (2 Units)
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.
ART 1002 Fundamentals of Art (FE) (3 Units)
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 Graphic Design or Visual Arts majors.
ART 1003 Two-Dimensional Design (3 Units)
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 Units) 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 Units)

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 (FE) (3 Units)

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 (FE) (3 Units)
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 Units)
Introductory experiences in the creation and production of computergenerated 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 Units)
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 Drawing 2: Advanced Practices (3 Units)

Emphasizes the technical and expressive qualities of drawing as a finished work of art. Focus is given to technical development, conceptual ideation, historical contextualization, and contemporary experimental practices.
Prerequisite(s): ART 1015 or consent of instructor.
ART 2010 Painting: Color and Technique (3 Units)
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 Units)
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 Units)
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 Units)

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 2024 Ceramics: Foundations in Clay (3 Units)
Introduction to clay, glazes, firing, and studio procedures through the production of hand-built and wheel thrown forms. There is an emphasis on function and athletics as it relates to both historical and contemporary practices.
Prerequisite(s): ART 1003 or ART 1004 or consent of instructor.

## ART 2026 Photography: Digital (3 Units)

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 Units)

This course investigates "thinking with" type and how it shapes content, gives language a physical body, and enables the flow of messages. It looks at type's diversity from letter form, to the massing of letters into larger bodies, as well as spatial organization. It explores the relationship between social and cultural history, theory, and technology and how they influence typographic design from print to screen.
May be repeated once for credit.
Prerequisite(s): ART 1003, ART 1015, ART 2002, ART 2003

## ART 3004 Modern Art History (3 Units)

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 Units)

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 Units)
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 Units)
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.
May be repeated once for credit.
Prerequisite(s): ART 1003, ART 2002 or consent of instructor.
ART 3019 Visual Arts in the Classroom I (3 Units)
Theory and practice in the teaching of the visual arts in early education though 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 Units)
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 Art and Design or the Department of Sociology, Social Work, and Family Sciences.
Prerequisite(s): ART 1003 and ART 1004

ART 3021 Photography: Alternative Processes (3 Units)
Explores alternative processes and techniques in photography such as liquid emulsions, alternative negative creation and alternative cameras. Emphasis on the photograph as contemporary art.
May be repeated once for credit.
Prerequisite(s): ART 2021 or ART 2026 or consent of instructor.
ART 3022 Sculpture II: Objects and Installation (3 Units)
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 Units)

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 3024 Ceramics: Advanced Methods in Clay (3 Units)
Students are exposed to intermediate level projects in ceramics design. Focus is placed on increasing skills, confidence, and knowledge using a variety of techniques
Prerequisite(s): ART 1003 or ART 1004, and ART 2024, or consent of instructor.

## ART 3025 Non-Western Art History (3 Units)

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 Units)
Explores conceptual applications of technology in photography and the merging of digital and chemical techniques. Emphasis on the photograph as contemporary art.
May be repeated once for credit.
Prerequisite(s): ART 1003, ART 2002, and ART 2021 or ART 2026 or consent of instructor.

## ART 3030 Illustration I (3 Units)

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.
May be repeated once for credit.
Prerequisite(s): ART 1003, ART 1015 or consent of instructor.
ART 3031 Illustration II (3 Units)
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 Units) 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.
May be repeated once for credit.
Prerequisite(s): ART 1003, ART 1015, ART 2003, ART 3003
ART 3035 Design History: Industrial Revolution to Contemporary Design (3 Units)
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 Units)

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 Units)
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.
May be repeated once for credit.
Prerequisite(s): ART 1015

## ART 3090 Advanced Studio Practice (3 Units)

Studio practice course for visual art students. Emphasis is placed on contemporary art strategies and theoretical issues.
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 Units)
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 Unit)
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 Units)
Learn advanced web HTML and CSS programming languages, usercentered 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.
May be repeated once for credit.
Prerequisite(s): ART 3015
ART 4055 Visual Arts in the Classroom II (3 Units)
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 Units) 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 Units)

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 Units)

Students observe and participate in art or design-related professional settings under qualified supervisors.
May be repeated for a maximum of six (6) units. Credit/No Credit. Prerequisite(s): Consent of instructor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.

## ART 4071 Graphic Design Portfolio Review (3 Units)

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 Units)
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 Units)

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 (6) units.
Prerequisite(s): Consent of department chair.

## 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 $\mathrm{K}-12$ grade levels.

## Computer Requirements

All Art Education majors are required to own a personal Mac OS operated laptop capable of supporting and operating Adobe Creative Suite. A personal Mac OS laptop is required upon entry into ART 2002, which is typically taken in the fall or spring of the freshman year.

## Required Concentrations

- Graphic Design (p. 26)
- Visual Arts (p. 26)

| Code | Title | Units |
| :---: | :---: | :---: |
| 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 (FE) | 3 |
| ART 2001 | History of Art II (FE) | 3 |
| ART 2002 | Introduction to Computer Graphics | 3 |
| ART 2003 or ART 2006 | Graphic Design I: Visual Symbolism Drawing 2: Advanced Practices | 3 |
| ART 2010 | Painting: Color and Technique | 3 |
| ART 2024 | Ceramics: Foundations in Clay | 3 |
| CHD 1050 | Human Development | 3 |
| Upper-Division Requirements |  |  |
| ART 3025 | Non-Western Art History | 3 |
| EDU 3002 | Foundations of Education and Learning Theory | 3 |
| Choose one (1) | the following Art History courses: | 3 |


| ART 3004 | Modern Art History |
| :--- | :--- |
| ART 3005 | Contemporary Art History |
| ART 3035 | Design History: Industrial Revolution to <br>  <br>  |

Choose one (1) of the following Visual Arts courses: 3

| ART 3019 | Visual Arts in the Classroom I |
| :--- | :--- |
| ART 4055 | Visual Arts in the Classroom II (recommended) |

Concentration Courses

| ART 3003 | Graphic Design II: Typography <br> and ART 3033 <br> and Graphic Design III: Branding and Identity |
| :--- | :--- |
|  | Programs |

## Capstone Courses

| ART 4068 | Graphic Design Portfolio Preparation | 3 |
| :--- | :--- | ---: |
| ART 4070 | Internship | $1-3$ |
| ART 4071 | Graphic Design Portfolio Review | 3 |

## Total Units

## Visual Arts Concentration

| Code | Title | Units |
| :--- | :--- | ---: |
| Lower-Division Requirements |  |  |
| ART 1003 | Two-Dimensional Design | 3 |
| ART 1004 | Three-Dimensional Design: Composition and <br>  <br> ART 1015 | Space |


| ART 2000 | History of Art I (FE) | 3 |
| :---: | :---: | :---: |
| ART 2001 | History of Art II (FE) | 3 |
| ART 2002 | Introduction to Computer Graphics | 3 |
| ART 2003 or ART 2006 | Graphic Design I: Visual Symbolism Drawing 2: Advanced Practices | 3 |
| ART 2010 | Painting: Color and Technique | 3 |
| ART 2024 | Ceramics: Foundations in Clay | 3 |
| CHD 1050 | Human Development | 3 |
| Upper-Division Requirements |  |  |
| ART 3025 | Non-Western Art History | 3 |
| EDU 3002 | Foundations of Education and Learning Theory | 3 |
| Choose one (1) of the following Art History courses: |  | 3 |
| ART 3004 | Modern Art History |  |
| ART 3005 | Contemporary Art History |  |
| ART 3035 | Design History: Industrial Revolution to Contemporary Design |  |
| Choose one (1) of the following Visual Arts courses: |  | 3 |
| ART 3019 | Visual Arts in the Classroom I |  |
| ART 4055 | Visual Arts in the Classroom II |  |
| Concentration Courses |  |  |
| Choose one (1) two-course sequence from the following: |  | 6 |
| ART 2021 and ART 3021 | Photography: Darkroom and Film and Photography: Alternative Processes |  |
| ART 2022 and ART 3022 | Sculpture: Materials and Fabrication and Sculpture II: Objects and Installation |  |
| ART 2023 and ART 3023 | Printmaking I and Printmaking II |  |
| ART 2024 and ART 3024 | Ceramics: Foundations in Clay and Ceramics: Advanced Methods in Clay |  |
| ART 3010 and ART 3030 or ART 3045 | Painting II and Illustration I Life Drawing |  |
| Capstone Courses |  |  |
| ART 3090 | Advanced Studio Practice | 3 |
| ART 4066 | Senior Studio Exhibition or Research Preparation | 3 |
| ART 4072 | Exhibition or Research Project | 3 |
| Total Units |  | 57 |

## 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. (p. 25) (Single Subject Art California Teaching Credential)
- Biology, B.A. (p. 109) (Single Subject Science California Teaching Credential)
- Health and Human Performance, B.A. (p. 99) (Single Subject Physical Education California Teaching Credential)
- French, B.A. (p. 66) (Single Subject World Languages: French California Teaching Credential)
- History, B.A. (p. 45) (Single Subject Social Sciences Teaching Credential)
- Literature-English Education, B.A. (p. 67) (Single Subject English Teaching Credential)
- Mathematics, B.S. (p. 137) (Single Subject Mathematics Teaching Credential)
- Music Education, B.A. (p. 88) (Single Subject Music California Teaching Credential)
- Spanish, B.A. (p. 69) (Single Subject World Languages: Spanish California Teaching Credential)

For the 4 -year credential track, the following 3000 or 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 3rd credential course, meeting all program, university and state requirements for classroom observations and tests required prior to student teaching. Students will be vetted through a screening process, which may include a faculty interview, prior to being placed in student teaching. Candidates major in the academic discipline of their choice (e.g. Kinesiology) 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

| Code | Title | Units |
| :---: | :---: | :---: |
| EDU 3002 | Foundations of Education and Learning Theory ${ }^{1}$ | 3 |
| EDU 3006 | Principles of Language Acquisition ${ }^{1}$ | 3 |
| EDU 4004 | Foundations of Special Education ${ }^{1}$ | 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 ${ }^{1}$ | 3 |
| EDU 4021 | General Methods for Secondary Teachers ${ }^{1}$ | 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 |
| Choose one (1) course from the following based on major: |  | 3 |
| EDU 4033 | Methods for Teaching Secondary Mathematics (Mathematics Majors) |  |
| EDU 4034 | Methods of Teaching Secondary Science (Biology Major) ${ }^{2}$ |  |


| EDU 4035 | Methods of Teaching Secondary Social Science (History Majors) |
| :---: | :---: |
| EDU 4036 | Methods for Teaching Secondary Foreign Language (French/Spanish Majors) |
| EDU 4037 | Methods for Teaching Secondary Visual Arts (Art Education Majors) ${ }^{3}$ |
| EDU 4038 | Methods for Teaching Secondary Physical Education (Exercise and Sports Science Majors) |
| EDU 4039 | Content-Specific Pedagogy for Secondary Teachers (Music Education Majors) ${ }^{4}$ |
| Total Units | 33 |
| Requires 20 hours of supervised field experience working with students in a classroom setting. |  |
| BIO 4063 also satisfies this credential requirement. |  |
| ART 4055 also satisfies this credential requirement. |  |
| ${ }^{4}$ MUE 4054 also satisfies this credential requirement. |  |

## Graphic Design, B.A. <br> 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.

## Computer Requirements

All Graphic Design majors are required to own a personal Mac OS operated laptop capable of supporting and operating Adobe Creative Suite. A personal Mac OS laptop is required upon entry into ART 2002, which is typically taken in the fall or spring of the freshman year.

## Concentrations

- Illustration Design (p. 27)
- Interactive Web Design (p. 28)
- Interdisciplinary (p. 28)
- Marketing (p. 29)


## Illustration Design Concentration

| Code | Title | Units |
| :--- | :--- | ---: |
| Lower-Division Requirements |  |  |
| ART 1003 | Two-Dimensional Design | 3 |
| ART 1004 | Three-Dimensional Design: Composition and <br>  <br> ART 1015$\quad$Space | 3 |
| ART 2000 | Drawing I | 3 |


| or ART 2001 | History of Art II (FE) |
| :---: | :---: |
| ART 2002 | Introduction to Computer Graphics |
| ART 2003 | Graphic Design I: Visual Symbolism |
| ART 2010 | Painting: Color and Technique |
| Choose one (1) course from the following: |  |
| ART 2006 | Drawing 2: Advanced Practices |
| ART 2023 | Printmaking I |
| ART 2026 | Photography: Digital |
| Upper-Division Requirements |  |
| ART 3003 | Graphic Design II: Typography |
| ART 3004 | Modern Art History |
| or ART 3005 | Contemporary Art History |
| ART 3015 | Introduction to Interactive Web Design |
| ART 3030 | Illustration I |
| ART 3031 | Illustration II |
| ART 3033 | Graphic Design III: Branding and Identity Programs |
| or ART 3035 | Design History: Industrial Revolution to Contemporary Design |
| ART 3045 | Life Drawing |
| ART 4050 | Interactive Web Design |
| ART 4068 | Graphic Design Portfolio Preparation |
| ART 4070 | Internship (1 unit required) |
| ART 4071 | Graphic Design Portfolio Review |
| otal Units | 5 |

## Interactive Web Design Concentration

| Code | Title | Units |
| :---: | :---: | :---: |
| 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 (FE) | 3 |
| or ART 2001 | History of Art II (FE) |  |
| ART 2002 | Introduction to Computer Graphics | 3 |
| ART 2003 | Graphic Design I: Visual Symbolism | 3 |
| Choose one (1) course from the following: |  | 3 |


| ART 2006 | Drawing 2: Advanced Practices |
| :--- | :--- |
| ART 2010 | Painting: Color and Technique |
| ART 2022 | Sculpture: Materials and Fabrication |
| ART 2023 | Printmaking I |
| ART 2026 | Photography: Digital |


| Upper-Division Requirements |  |  |
| :--- | :--- | :--- |
| ART 3003 | Graphic Design II: Typography | 3 |
| ART 3004 | Modern Art History | 3 |
| or ART 3005 | Contemporary Art History |  |
| 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 | 3 |
|  | Contemporary Design |  |
| ART 4050 | Interactive Web Design | 3 |
| ART 4068 | Graphic Design Portfolio Preparation | 3 |
| ART 4070 | Internship (1 unit required) | 1 |


| ART 4071 | Graphic Design Portfolio Review | 3 |
| :--- | :--- | ---: |
| Choose one (1) course from the following: | 3 |  |
| ART 3021 | Photography: Alternative Processes |  |
| ART 3031 | Illustration II |  |
| MGT 3082 | Applied Entrepreneurship | $\mathbf{4 9}$ |
| Total Units |  |  |


| Code | Title | Units |
| :--- | :--- | ---: |
| Lower-Division Requirements |  |  |
| ART 1003 | Two-Dimensional Design | 3 |
| ART 1004 | Three-Dimensional Design: Composition and <br>  <br>  <br> ART 1015$\quad$ Space | 3 |
| ART 2000 | Drawing I | 3 |
| or ART 2001 | History of Art I (FE) |  |
| ART 2002 | Introduction to Computer Graphics | 3 |
| ART 2003 | Graphic Design I: Visual Symbolism |  |
| ART 2010 | Painting: Color and Technique | 3 |
| Choose one (1) course from the following: | 3 |  |


| ART 2006 | Drawing 2: Advanced Practices |
| :--- | :--- |
| ART 2023 | Printmaking I |
| ART 2026 | Photography: Digital |

Upper-Division Requirements
ART $3003 \quad$ Graphic Design II: Typography
ART 3004 Modern Art History 3
or ART 3005 Contemporary Art History
ART 3015 Introduction to Interactive Web Design 3
ART 3030 Illustration I 3
ART 3031 Illustration II 3

ART $3033 \quad$ Graphic Design III: Branding and Identity Programs 3
or ART 3035 Design History: Industrial Revolution to Contemporary Design
ART 3045 Life Drawing 3
ART 4050 Interactive Web Design 3
ART 4068 Graphic Design Portfolio Preparation 3
ART 4070 Internship (1 unit required) 1

| ART 4071 | Graphic Design Portfolio Review | 3 |
| :--- | ---: | ---: |
| Total Units | 55 |  |

## Interdisciplinary Concentration

| Code | Title | Units |
| :--- | :--- | ---: |
| 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 (FE) | 3 |
| or ART 2001 | History of Art II (FE) | 3 |
| ART 2002 | Introduction to Computer Graphics | 3 |
| ART 2003 | Graphic Design I: Visual Symbolism | 3 |
| ART 2026 | Photography: Digital | 3 |
| Choose one (1) course from the following: |  |  |
| ART 2006 | Drawing 2: Advanced Practices | 3 |


| ART 2010 | Painting: Color and Technique |  |
| :---: | :---: | :---: |
| ART 2022 | Sculpture: Materials and Fabrication |  |
| ART 2023 | Printmaking I |  |
| Upper-Division Requirements |  |  |
| ART 3003 | Graphic Design II: Typography | 3 |
| ART 3004 or ART 3005 | Modern Art History 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 unit required) | 1 |
| ART 4071 | Graphic Design Portfolio Review | 3 |
| Choose one (1) course from the following: |  | 3 |
| ART 3010 | Painting II |  |
| ART 3021 | Photography: Alternative Processes |  |
| ART 3022 | Sculpture II: Objects and Installation |  |
| ART 3023 | Printmaking II |  |
| ART 3026 | Photography II: Contemporary Images |  |
| ART 3031 | Illustration II |  |
| Total Units |  | 52 |

## Marketing Concentration

| Code | Title | Units |
| :--- | :--- | ---: |
| Lower-Division | Requirements |  |
| ART 1003 | Two-Dimensional Design | 3 |
| ART 1004 | Three-Dimensional Design: Composition and <br>  <br> Space | 3 |
| ART 1015 | Drawing I | 3 |
| ART 2000 | History of Art I (FE) | 3 |
| or ART 2001 | History of Art II (FE) |  |
| ART 2002 | Introduction to Computer Graphics | 3 |
| ART 2003 | Graphic Design I: Visual Symbolism | 3 |


| Upper-Division Requirements |  |
| :--- | :--- |
| ART 3003 | Graphic Design II: Typography |

ART 3004 Modern Art History 3

| or ART 3005 | Contemporary Art History |
| ---: | :--- | ---: |
| ART 3015 | Introduction to Interactive Web Design |

ART 3033 Graphic Design III: Branding and Identity Programs 3

| ART 3035 | Design History: Industrial Revolution to <br> Contemporary Design | 3 |
| :--- | :--- | :--- |
| ART 4050 | Interactive Web Design | 3 |


| ART 4068 | Graphic Design Portfolio Preparation | 3 |
| :--- | :--- | :--- |
| ART 4070 | Internship (1 unit required) | 1 |
| ART 4071 | Graphic Design Portfolio Review | 3 |
| MKT 3032 | Principles of Marketing | 3 |
| Choose three (3) courses from the following: | 9 |  |


| MKT 3033 | Consumer and Organizational Buying Behavior |
| :--- | :--- |
| MKT 3036 | Integrated Marketing and Sales Communication |
| MKT 3050 | Digital Marketing Essentials |

MGT 3082
Applied Entrepreneurship
Total Units
55

## Visual Arts, B.A. <br> Program Learning Outcomes

Students who complete the program in Visual Arts 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 of Visual Arts with concentrations in Painting, Drawing, and Printmaking, Photography, and Sculpture and Installation will be able to:

1. Apply the art elements and design principles to two-and/or threedimensional 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 Arts 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 timebased media.

## Computer Requirements

All Visual Arts majors are strongly encouraged to own a personal Mac OS operated laptop capable of supporting and operating Adobe Creative Suite.

## Concentrations

## - Art History (p. 30)

- Drawing/Painting/Printmaking (p. 30)
- Photography (p. 30)
- Sculpture and Installation (p. 30)
- Video, Performance, and Interactive Media (p. 31)

Art History Concentration

| Code | Title | Units |
| :---: | :---: | :---: |
| 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 (FE) | 3 |
| ART 2001 | History of Art II (FE) | 3 |
| HIS 2070 | Doing History | 4 |

Lower-Division Electives
Choose one (1) course from the following: 3

| ART 2006 | Drawing 2: Advanced Practices |  |
| :---: | :--- | :--- |
| ART 2010 | Painting: Color and Technique |  |
| ART 2022 | Sculpture: Materials and Fabrication |  |
| ART 2023 | Printmaking I |  |
| ART 2024 | Ceramics: Foundations in Clay | 3 |
| Upper-Division Requirements | 3 |  |
| 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 | 3 |
| ART 4020 | Contemporary Design | Contemporary Studio Seminar |
| ART 4066 | Senior Studio Exhibition or Research Preparation | 3 |
| ART 4070 | Internship (1 unit required) | 1 |
| ART 4072 | Exhibition or Research Project | 3 |

Upper-Division Electives
Choose one (1) four unit upper-division history course
Choose two (2) courses from the following: 6

| COM 3000 | Narrative and Documentary Film |
| :--- | :--- |
| HIS 3075 | African Cultures and Histories |
| PHL 3041 | Philosophy and Art |
| Upper-division | transfer courses in Art History |

Total Units
Drawing/Painting/Printmaking Concentration

| Code | Title | Units |
| :--- | :--- | :--- |
| Lower-Division Requirements |  |  |
| ART 1003 | Two-Dimensional Design | 3 |
| ART 1004 | Three-Dimensional Design: Composition and | 3 |
|  | Space | 3 |
| ART 1015 | Drawing I | 3 |
| ART 2000 | History of Art I (FE) | 3 |
| ART 2001 | History of Art II (FE) | 3 |
| ART 2002 | Introduction to Computer Graphics | 3 |
| ART 2006 | Drawing 2: Advanced Practices | 3 |
| ART 2010 | Painting: Color and Technique | 3 |
| ART 2023 | Printmaking I |  |

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 |  |
| :--- | :--- | ---: |
| 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 |
| ART 4072 | Exhibition or Research Project | 3 |
| Complete one additional upper-division Art course | $\mathbf{2 - 3}$ |  |
| Total Units |  | $\mathbf{5 4 - 5 5}$ |

## Photography Concentration

Code Title Units

Lower-Division Requirements

| ART 1003 | Two-Dimensional Design | 3 |
| :--- | :--- | :--- |
| ART 1004 | Three-Dimensional Design: Composition and | 3 |
|  | Space | 3 |
| ART 1015 | Drawing I | 3 |
| ART 2000 | History of Art I (FE) | 3 |
| ART 2001 | History of Art II (FE) | 3 |
| ART 2002 | Introduction to Computer Graphics | 3 |
| ART 2006 | Drawing 2: Advanced Practices | 3 |
| ART 2021 | Photography: Darkroom and Film | 3 |

Lower-Division Electives
Choose one (1) course from the following: 3

| ART 2003 | Graphic Design I: Visual Symbolism |
| :--- | :--- |
| ART 2010 | Painting: Color and Technique |
| ART 2022 | Sculpture: Materials and Fabrication |
| ART 2023 | Printmaking I |
| ART 2026 | Photography: Digital |

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 |
| ART 4072 | Exhibition or Research Project | 3 |
| Complete one additional upper-division Art course | $\mathbf{2 - 3}$ |  |
| Total Units |  | $\mathbf{5 4 - 5 5}$ |

Sculpture and Installation Concentration

| Code | Title | Units |
| :--- | :--- | :---: |
| Lower-Division Requirements |  |  |
| ART 1003 | Two-Dimensional Design | 3 |
| ART 1004 | Three-Dimensional Design: Composition and | 3 |
|  | Space | 3 |
| ART 1015 | Drawing I | 3 |
| ART 2000 | History of Art I (FE) | 3 |
| ART 2001 | History of Art II (FE) | 3 |
| ART 2002 | Introduction to Computer Graphics | 3 |
| ART 2006 | Drawing 2: Advanced Practices |  |



## Video, Performance, and Interactive Media Concentration

Code Title
Units

| Lower-Division Requirements |  |  |
| :--- | :--- | :--- |
| ART 1003 | Two-Dimensional Design | 3 |
| or ART 1004 | Three-Dimensional Design: Composition and Space |  |
| ART 1015 | Drawing I | 3 |
| ART 2000 | History of Art I (FE) | 3 |
| ART 2001 | History of Art II (FE) | 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 |

## 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 unit required) | 1 |


| ART 4072 | Exhibition or Research Project | 3 |
| :--- | :--- | ---: |
| Total Units | $\mathbf{5 4}$ |  |

## Recommended Electives

| Code | Title | Units |
| :--- | :--- | ---: |
| TRE 2070 | Acting | 3 |
| TRE 3054 | Movement | 3 |

## Art History Minor

## 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.

| Code | Title | Units |
| :--- | :--- | ---: |
| Lower-Division Requirements |  |  |
| ART 2000 | History of Art I (FE) | 3 |
| ART 2001 | History of Art II (FE) | 3 |
| Upper-Division | Requirements | 3 |
| 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 | 3 |
|  | Contemporary Design |  |

Total Units

## Graphic Design Minor

Code Title Units

Lower-Division Requirements
ART 1003 Two-Dimensional Design 3
ART 2002 Introduction to Computer Graphics 3

Upper-Division Requirements
Choose one (1) of the following Art History courses: 3

| ART 3004 | Modern Art History |
| :--- | :--- |
| ART 3005 | Contemporary Art History |
| ART 3035 | Design History: Industrial Revolution to <br> Contemporary Design |

## Upper-Division Electives

Choose nine (9) units from the following electives: 9
ART 3003 Graphic Design II: Typography
ART 3015 Introduction to Interactive Web Design
ART 3021 Photography: Alternative Processes
ART 3023 Printmaking II
ART 3026 Photography II: Contemporary Images
ART 3030 Illustration I
ART 3031 Illustration II
ART 3033 Graphic Design III: Branding and Identity Programs
ART 4050 Interactive Web Design

Total Units
Note(s): It is highly recommended that Art minors take either ART 2000 or ART 2001 to fulfill the Foundational Explorations requirement in the Fine Arts.

## Visual Art Minor



Total Units

Note(s): It is highly recommended that Art minors take either ART 2000 or ART 2001 to fulfill the Foundational Explorations 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 communicationcentered 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 studentmanaged, 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

Co-Chairs - Skip Rutledge, Ph.D. and Melissa Newman, Ph.D.
Bob Brower, Ph.D.
University of Kansas
Jeffrey Birdsell, Ph.D.
The University of Texas at Austin
Melissa Newman, Ph.D.
Regent University
Lisa Raser, Ph.D.
Southern Illinois University
Skip Rutledge, Ph.D.
Regent University
James Wicks, Ph.D.
University of California, San Diego
Walter Williams, Ph.D.
Regent University
To view requirements for majors, minors, and certificates, see the Degree Program Information (p. 244) page.

- Communication Studies, B.A. (p. 36)
- Media Communication, B.A. (p. 37)
- Organizational Communication, B.A. (p. 39)
- Cinema Studies Minor (p. 40)
- Communication Minor (p. 40)
- Media Communication Minor (p. 40)
- Public Relations Minor (p. 40)
- Theatre Minor (p. 41)


## Communication

COM 1000 Principles of Human Communication (FE) (3 Units)
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 Units) 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 Units)

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 Units)

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 Units)

Requirements vary according to the activity developed in consultation with the instructor.
May be repeated up to a total of eight (8) units. Credit/No Credit.
COM 2020 Small Group Communication (3 Units)
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 (FE) (3 Units)
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 Units)

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 Units)
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 Units)
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 Units)

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 Units)

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 Units)

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 Units)
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 Units)
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): COM 2043 and JRN 2050
Pre or Corequisite(s): JRN 3012
Corequisite(s): COM 3013 and JRN 3012 are corequisites and must be taken in the same semester.

## COM 3015 Oral Interpretation (3 Units)

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 Units)

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 Units)

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 Units)
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 Units)

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 Units)
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 Units)
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 Units)

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 4000 Sundance Film Festival (1 Unit)

Students critically analyze the aesthetics and themes presented in Sundance Film Festival films while attending the festival in Park City, Utah. Participants pay a course fee on top of block tuition, attend film screenings and forums, and complete course assignments including a final project.

## COM 4005 Public Relations Cases and Campaigns (3 Units)

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 Units)
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 Units)
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 Units)
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 up to a total of eight (8) units. 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 Units)
Participation in an internship supervised by departmental faculty.
May be repeated up to a total of six (6) units. Credit/No Credit.
Prerequisite(s): Junior or Senior standing.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.
COM 4022 Portfolio Construction (1 Unit)
Completion of a portfolio and supporting documentation for assessment and preparation for employment.
Credit/No Credit.
Prerequisite(s): Consent of instructor.
COM 4025 Advanced Television Workshop (1-3 Units)
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 for upper-division students working as staff for the Point TV leaders. May be repeated up to a total of six (6) units.
Prerequisite(s): COM 2043
COM 4035 Advanced Audio Production (1 Unit)
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 (4) units.
Prerequisite(s): COM 2075
COM 4042 Field Television Production (3 Units)
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 Units)
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 Units)
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 Unit) 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 Units)
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 Units)
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 Units)
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 Units)
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 (6) units.
Prerequisite(s): Consent of instructor.
COM 4092 Independent Study (1-3 Units)
Independent investigation, under the direct supervision of a faculty member, of a specific issue relevant to the study of communication.

## Los Angeles Film Studies Center

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 fulltime 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 Units)
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 Units) 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 Units)
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 Units) 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 Units) 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 Units) 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 Units) 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.
## Theatre

TRE 1001 Introduction to Theatre (FE) (2 Units)
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 Units)
Requirements vary according to the activity developed in consultation with the instructor.

May be repeated up to a total of three (3) units. Credit/No Credit.
TRE 2050 Voice and Diction (2 Units)
Practical training in developing the speaking voice, articulation, and pronunciation through a variety of applications including stage, film, and broadcasting.

TRE 2070 Acting (3 Units)
Development of basic acting techniques and vocabulary through exercises, character analysis, monologues, and scene work.

TRE 3050 Musical Theatre (3 Units)
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 Units)

Introduction to the Laban "effort shaping" method. Essential for the study of mime, mask, and advanced stage movement techniques.

## TRE 3071 Playwriting (3 Units)

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 Units)
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 Units)
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 up to a total of eight (8) units. Credit/No Credit.

TRE 4021 Internship in Theatre (3 Units)
Participation in an internship supervised by departmental faculty.
May be repeated up to a total of six (6) units. Credit/No Credit.
Prerequisite(s): Senior standing or consent of instructor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.

TRE 4052 Improvisation and Devising (3 Units)
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 Units)
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 (6) units.
Prerequisite(s): Consent of instructor.

## 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.

Code
Title
Units
Lower-Division Core Requirements
COM 1090 Interpersonal Communication

| COM 2020 | Small Group Communication | 3 |
| :---: | :---: | :---: |
| COM 2031 | Argumentation and Debate (FE) | 3 |
| COM 2050 | Intercultural Communication | 3 |
| COM 2065 | Introduction to Research in Communication | 3 |
| Lower-Division Electives |  |  |
| Choose three (3) units from the following: |  | 3 |
| COM 2010 | Communication Practicum I |  |
| JRN 2050 | Introduction to Journalism |  |
| TRE 2070 | Acting |  |
| Upper-Division Core Requirements |  |  |
| COM 3010 | Nonverbal Communication | 3 |
| COM 3030 | Persuasion | 3 |
| COM 4022 | Portfolio Construction | 1 |
| COM 4060 | Rhetorical Theories and Models | 3 |
| COM 4085 | Communication, Values, and Society | 2 |
| Upper-Division Electives |  |  |
| Choose 18 units from the following: |  | 18 |
| COM 3012 | Gender and Communication |  |
| COM 3015 | Oral Interpretation |  |
| COM 3060 | Professional Speaking for Career Settings |  |
| COM 3090 | Introduction to Public Relations |  |
| COM 3095 | Media Literacy |  |
| COM 4020 | Communication Practicum II |  |
| COM 4021 | Internship in Communication |  |
| COM 4065 | Communication Theories and Research |  |
| COM 4090 | Special Studies in Communication (3 units required) |  |
| PSY 3020 | Social Psychology |  |
| WRI 3065 | Professional Writing |  |

Total Units

## Media Communication, B.A. <br> 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.

## Concentrations

- Film Studies (p. 37)
- Multimedia (p. 38)
- Production (p. 38)
- Screen Performance (p. 38)

| Film Studies Concentration ${ }^{1}$ |  |  |
| :---: | :---: | :---: |
| Code | Title | Units |
| 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 |
| Choose one (1) course from the following: |  | 1 |
| JRN 2015 | Newspaper Workshop |  |
| JRN 2017 | Yearbook Workshop |  |
| JRN 2018 | Multimedia Workshop |  |
| WRI 2016 | Literary Magazine Workshop |  |
| Upper-Division Core Requirements |  |  |
| COM 3095 | Media Literacy | 3 |
| COM 4022 | Portfolio Construction | 1 |
| COM 4085 | Communication, Values, and Society | 2 |
| Upper-Division Electives |  |  |
| Choose nine (9) units from the following: |  | 9 |
| COM 3000 | Narrative and Documentary Film |  |
| COM 3040 | Organizational Communication |  |
| COM 3050 | Electronic Media in Communication |  |
| COM 3090 | Introduction to Public Relations |  |
| COM 4000 | Sundance Film Festival |  |
| COM 4042 | Field Television Production |  |
| COM 4043 | Studio Television Production |  |
| COM 4065 | Communication Theories and Research |  |
| COM 4090 | Special Studies in Communication |  |
| JRN 3040 | Media Law and Ethics |  |

## Writing Electives

Choose one (1) course from the following:
JRN 2050 Introduction to Journalism
WRI 2020 Introduction to Creative Writing
WRI 3022 Creative Writing: Fiction
WRI 3023 Creative Writing: Creative Nonfiction
Concentration Courses

| COM 4070 | Hollywood Production Workshop (offered for the <br> Film Studies concentration @ the Los Angeles Film | 4 |
| :--- | :--- | :--- | :--- |
|  | Studies Center - LAFSC) |  |
| COM 4071 | Faith and Artistic Development in Film (offered for <br> the Film Studies concentration @ the Los Angeles | 3 |
|  | Film Studies Center - LAFSC) |  |
| COM 4072 | Internship: Inside Hollywood (offered for the Film <br> Studies concentration @ the Los Angeles Film | 6 |
|  | Studies Center - LAFSC) |  |

Choose one (1) course from the following: 3
COM 3071 Professional Acting for the Camera (offered for the Film Studies concentration @ the Los Angeles Film Studies Center-LAFSC)
COM 4073 Narrative Storytelling (offered for the Film Studies concentration @ the Los Angeles Film Studies Center - LAFSC)

| COM 4074 | Professional Screenwriting (offered for the Film <br> Studies concentration @ the Los Angeles Film <br> Studies Center - LAFSC) |
| :---: | :--- |
| COM 4080 | Independent Study (offered for the Film Studies <br> concentration @ the Los Angeles Film Studies <br> Center - LAFSC) |

## Total Units

${ }^{1}$ Student must be accepted into the LAFSC program in order to complete this concentration.

## Multimedia Concentration

| Code | Title | Units |
| :--- | :--- | :--- |
| 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 |
| Choose one (1) course from the following: | 1 |  |
| JRN 2015 | Newspaper Workshop |  |
| JRN 2017 | Yearbook Workshop |  |
| JRN 2018 | Multimedia Workshop |  |
| WRI 2016 | Literary Magazine Workshop | 3 |
| Upper-Division | Core Requirements | 3 |
| COM 3095 | Media Literacy | 1 |
| COM 4021 | Internship in Communication | 2 |
| COM 4022 | Portfolio Construction |  |
| COM 4085 | Communication, Values, and Society |  |


| Upper-Division Electives |  |  |
| :---: | :---: | :---: |
| Choose nine (9) units from the following: |  | 9 |
| COM 3000 | Narrative and Documentary Film |  |
| COM 3040 | Organizational Communication |  |
| COM 3050 | Electronic Media in Communication |  |
| COM 3090 | Introduction to Public Relations |  |
| COM 4000 | Sundance Film Festival |  |
| COM 4065 | Communication Theories and Research |  |
| COM 4090 | Special Studies in Communication |  |
| JRN 3040 | Media Law and Ethics |  |

## Writing Electives

Choose one (1) course from the following:
JRN 2050 Introduction to Journalism

WRI 2020 Introduction to Creative Writing
WRI 3022 Creative Writing: Fiction
WRI 3023 Creative Writing: Creative Nonfiction
Concentration Courses

| 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 Units |  | 48 |

## Production Concentration

| Code | Title | Units |
| :--- | :--- | :---: |
| 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 |
| Choose one (1) course from the following: | 1 |  |


| JRN 2015 | Newspaper Workshop |
| :--- | :--- |
| JRN 2017 | Yearbook Workshop |
| JRN 2018 | Multimedia Workshop |
| WRI 2016 | Literary Magazine Workshop |


| Upper-Division Core Requirements |  |  |
| :--- | :--- | :--- |
| COM 3095 | Media Literacy | 3 |
| COM 4021 | Internship in Communication | 3 |
| COM 4022 | Portfolio Construction | 1 |
| COM 4085 | Communication, Values, and Society | 2 |
| Upper-Division Electives | 9 |  |


| COM 3000 | Narrative and Documentary Film |
| :--- | :--- |
| COM 3040 | Organizational Communication |
| COM 3050 | Electronic Media in Communication |
| COM 3090 | Introduction to Public Relations |
| COM 4000 | Sundance Film Festival |
| COM 4065 | Communication Theories and Research |
| COM 4090 | Special Studies in Communication |
| JRN 3040 | Media Law and Ethics |

## Writing Electives

Choose one (1) course from the following: 3

JRN 2050 Introduction to Journalism
WRI 2020 Introduction to Creative Writing
WRI 3022 Creative Writing: Fiction
WRI 3023 Creative Writing: Creative Nonfiction
Concentration Courses
Choose eight (8) units from the following: 8

COM 3013 Television News Production
COM 4020 Communication Practicum II
COM 4025 Advanced Television Workshop
COM 4035 Advanced Audio Production
COM 4042 Field Television Production
COM 4043 Studio Television Production
Total Units
44

## Screen Performance Concentration

| Code | Title | Units |
| :--- | :--- | :---: |
| 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 |


| Choose one (1) course from the following: | 1 |  |
| :--- | :--- | :--- |
| JRN 2015 | Newspaper Workshop |  |
| JRN 2017 | Yearbook Workshop |  |
| JRN 2018 | Multimedia Workshop |  |
| WRI 2016 | Literary Magazine Workshop |  |
| Upper-Division Core Requirements | 3 |  |
| COM 3095 | Media Literacy | 3 |
| COM 4021 | Internship in Communication | 1 |
| COM 4022 | Portfolio Construction | 2 |
| COM 4085 | Communication, Values, and Society |  |


| Upper-Division Electives |  |
| :--- | :--- |
| Choose nine (9) | units from the following: |
| COM 3000 | Narrative and Documentary Film |
| COM 3040 | Organizational Communication |
| COM 3050 | Electronic Media in Communication |
| COM 3090 | Introduction to Public Relations |
| COM 4000 | Sundance Film Festival |
| COM 4065 | Communication Theories and Research |
| COM 4090 | Special Studies in Communication |
| JRN 3040 | Media Law and Ethics |

## Writing Electives

| Choose one (1) course from the following: |  |
| :--- | :--- |
| JRN 2050 | Introduction to Journalism |
| WRI 2020 | Introduction to Creative Writing |
| WRI 3022 | Creative Writing: Fiction |
| WRI 3023 | Creative Writing: Creative Nonfiction |



Total Units

## 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.

| Code | Title Un | Units |
| :---: | :---: | :---: |
| Lower-Division Core Requirements |  |  |
| ACC 2000 | Principles of Accounting for Non-Business Majors | s 3 |
| COM 1090 | Interpersonal Communication | 3 |
| COM 2020 | Small Group Communication | 3 |
| COM 2065 | Introduction to Research in Communication | 3 |
| Choose one (1) course from the following: |  | 3 |
| ECO 1000 | Survey of Economics (FE) |  |
| ECO 1001 | Principles of Macroeconomics (FE) |  |
| ECO 1002 | Principles of Microeconomics (FE) |  |
| Upper-Division Core Requirements |  |  |
| COM 3030 | Persuasion | 3 |
| COM 3040 | Organizational Communication | 3 |
| COM 3045 | Leadership Communication | 3 |
| COM 3060 or WRI 3065 | Professional Speaking for Career Settings Professional Writing | 3 |
| $\begin{aligned} & \text { COM } 3090 \\ & \text { or COM } 4050 \end{aligned}$ | Introduction to Public Relations <br> Communication Training and Development | 2-3 |
| 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 |
| Choose six (6) units from upper-division courses with the following prefixes: ACC, BUS, COM, ECO, FIN, HON, MGT, MKT at the 3000 or 4000-level ${ }^{1}$ |  | 6 |

Total Units
${ }^{1}$ Selections must include at least 2 different courses and 6 units total.

## Note(s):

- All majors take COM 1000 (https://catalog.pointloma.edu/ preview_program.php?catoid=58\&poid=4546\#tt3638) or COM 2031 (https://catalog.pointloma.edu/preview_program.php? catoid=58\&poid=4546\#tt9688) as an additional Foundational Explorations requirement.
- 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.


## 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.

| Code | Title | Units |
| :---: | :---: | :---: |
| Core Courses |  |  |
| COM 2043 | Introduction to TV and Film Production | 3 |
| COM 3000 | Narrative and Documentary Film | 3 |
| LIT 2000 | Literature and Culture (FE) ${ }^{1}$ | 2 |
| Elective Courses |  |  |
| Choose nine (9) elective units taken from three (3) separate disciplines: |  | 9-12 |
| Communication: |  |  |
| COM 4020 | Communication Practicum II |  |
| COM 4042 | Field Television Production |  |
| COM 4043 | Studio Television Production |  |
| COM 4090 | Special Studies in Communication |  |
| History: |  |  |
| HIS 3068 | Modern China Through Film |  |
| HIS 4090 | Special Studies in History |  |
| Literature, Journalism, Writing, and Languages: |  |  |
| LIT 3051 | Diverse Voices of Cinema (FE) |  |
| LIT 4090 | Special Studies in Literature |  |
| SPA 3080 | Genre/Period Studies in Hispanic Literatu |  |
| SPA 4090 | Special Studies in Spanish |  |
| Theology and Christian Ministry: |  |  |
| PHL 3080 | Alienation, Transformation, and Reconcilia Film |  |

## Total Units

17-20

[^0]Note(s): COM 1075 is recommended, but cannot be substituted for required or elective course for this minor.

## Communication Minor

| Code | Title | Units |
| :--- | :--- | ---: |
| Lower-Division Requirements |  |  |
| Choose two (2) courses from the following: | 6 |  |
| COM 1090 | Interpersonal Communication |  |
| COM 2020 | Small Group Communication |  |
| COM 2031 | Argumentation and Debate (FE) |  |
| Upper-Division Requirements |  |  |
| Choose four (4) courses from the following: |  |  |
| COM 3010 | Nonverbal Communication | 12 |
| COM 3012 | Gender and Communication |  |
| COM 3015 | Oral Interpretation |  |
| COM 3040 | Organizational Communication |  |
| COM 3045 | Leadership Communication |  |
| COM 3060 | Professional Speaking for Career Settings |  |

Total Units

## Media Communication Minor

| Code | Title | Units |
| :--- | :--- | ---: |
| 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 |
| Upper-Division Requirements |  |  |
| Choose twelve (12) units from the following: | 12 |  |
| COM 3000 | Narrative and Documentary Film |  |
| COM 3050 | Electronic Media in Communication |  |
| COM 4020 | Communication Practicum II |  |
| COM 4025 | Advanced Television Workshop |  |
| COM 4035 | Advanced Audio Production |  |
| COM 4042 | Field Television Production |  |
| COM 4043 | Studio Television Production |  |
| COM 4090 | Special Studies in Communication (3 units <br> required) |  |

Total 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.

| Code | Title | Units |
| :--- | :--- | :---: |
| Required Courses |  | 3 |
| 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 |  |


| JRN 3055 | Public Relations Writing | 3 |
| :--- | :--- | ---: |
| MKT 3032 | Principles of Marketing | 3 |
| Total Units |  | $\mathbf{2 1}$ |

## Theatre Minor

| Code | Title | Units |
| :--- | :--- | ---: |
| Required Courses |  |  |
| TRE 2070 | Acting | 3 |
| TRE 3054 | Movement | 3 |
| TRE 3071 | Playwriting | 2 |
| TRE 3085 | Directing | 6 |
| Elective Courses |  |  |
| Choose six (6) units from the following courses: |  |  |
| TRE 2010 | Theatre Practicum I (up to 3 units toward minor) |  |
| TRE 3050 | Musical Theatre |  |
| TRE 4020 | Theatre Practicum II (up to 3 units toward minor) |  |
| TRE 4052 | Improvisation and Devising |  |

## Total 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 <br> Chair - Kelli McCoy, Ph.D. <br> Linda Beail, Ph.D. <br> University of Iowa

Rick Kennedy, Ph.D.
University of California, Santa Barbara
Jaeyoon Kim, Ph.D.
University of Oregon
Lindsey Lupo, Ph.D.
University of California, Irvine
Kelli McCoy, Ph.D.
University of California, San Diego
Rosco Williamson, Ph.D.
University of California, San Diego
William Wood, Ph.D.
Indiana University
To view requirements for majors, minors, and certificates, see the Degree Program Information (p. 244) page.

- History, B.A. (p. 45)
- International Studies, B.A. (p. 47)
- Political Science, B.A. (p. 51)
- History Minor (p. 52)
- Women's Studies Minor (p. 52)


## History

HIS 1010 World Civilizations I (FE) (3 Units)
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 (FE) (3 Units)
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 Units)

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 Units)

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 Units)

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 Units)

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 Units) 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 Units)
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 SpanishAmerican wars as the nation hurtled toward world power status after World War I.

## HIS 3035 History of Surfing and Surf Culture (2 Units)

This course introduces students to the history of surfing and surf culture from early modern times to the present. It explores the origin and evolution of wave riding as it developed in the Pacific Rim, eventually expanding to become a global athletic and ethical tradition. Key participants in surfing culture, as well as political, economic, environmental, and spiritual aspects of surfing will be analyzed.

## HIS 3040 Russia to 1900 (4 Units)

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 Units) 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 Units)
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 Units)

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 Units)

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 Wilderness in the American Mind (3 Units)
Wilderness in the American Mind studies influential ways people in American history have thought about creation. Traditions within Christianity, romanticism, pragmatism, and scientism are woven throughout. We read the great writers on the subject from the seventeenth through the twenty-first centuries. We learn the history of the most influential conservation organizations. We also study public policy as it develops: the creation of parks, the defining of terms such as "nature," "ecology," and "wilderness," and the issues caused by tourism, pollution, and population growth. As a history class, we emphasize people, situations, and events in the hope of gaining wisdom that will apply today in our world.

## HIS 3065 Modern Japan and Korea (4 Units)

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 Units)

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 Units)
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 Units)

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 Units)

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 Units)
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 Units)

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 3085 World War II Through Film (2 Units)

We will seek to better understand the main causes and events of the Second World War, while also exploring the relationship between war, history, and cinema. Film is both a primary source and secondary source, and provides us with ample opportunity to discuss the relationship between the two and the role of perspective in shaping sources. Along with discussing the role of cinema during and after the war, we'll also be learning about the major theatres of the war, the Holocaust, the treatment of POWs and civilians, the internment of Japanese Americans, and life on the home front.

HIS 3090 Off-Campus Cooperative Programs (3-15 Units)
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 Units)

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 Units)
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 Units)

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 Units)

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 Units) 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 Units)
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 Units)

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.
Repeatable for up to four (4) units.
Prerequisite(s): Consent of instructor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.

## HIS 4070 Senior Seminar in History (4 Units)

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 Units)

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 Units)
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 Units)

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 Units)
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 Units)

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 Units)

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, Eusibius, and Tacitus.

## HIS 4090 Special Studies in History (1-4 Units)

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 (8) units.
Prerequisite(s): Consent of instructor.

## Political Science

## POL 1001 Understanding the Political World (FE) (3 Units)

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 U.S. Democracy (FE) (4 Units)

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 (FE) (WS) (4 Units) 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 Units)
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 Units)

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 Units)

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 Units)

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 Units)
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 Units)

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 Units)
Foundations of democratic theory and the development of political thought in the American experience, from its Enlightenment roots to postmodern challenges.

POL 3030 The Development of Feminist Thought (WS) (4 Units) 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 Units)
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 Units)

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 Units)

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 Units)
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 indepth country analysis of eight specific countries.
POL 3080 Congress and the Presidency (4 Units)
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 Units)
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 Units)

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 Units)

An examination of women's role in political life. The content includes analysis of gender as a legitimate category of political inquiry, genderbased social movements, women's political participation, and the impact of political systems and public policy on women.

## POL 4020 United States Foreign Policy (4 Units)

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 Units)

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 (3 Units)
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.
Also offered as ECO 4010.
Prerequisite(s): ECO 1001 and ECO 1002 or consent of instructor.
POL 4038 International Law (4 Units)
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 Units)

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 Units)

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 Units)
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 Units)
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 Units) 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 (1-4 Units)

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.
May be repeated up to a total of four (4) units.
Prerequisite(s): Consent of instructor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.

POL 4073 Senior Seminar in Political Science and International Studies (3 Units)
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(s): POL 2070 or equivalent and Senior standing.
POL 4090 Special Studies in Political Science (1-4 Units)
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 (8) units.
Prerequisite(s): Consent of instructor.

## 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.

| Code | Title | Units |
| :--- | :--- | ---: |
| Lower-Division Requirements |  |  |
| HIS 1010 | World Civilizations I (FE) | 3 |
| HIS 1011 | World Civilizations II (FE) | 3 |
| HIS 2070 | Doing History | 4 |
| Upper-Division Requirements |  |  |
| HIS 4060 | Internship in History (2 units required) | 2 |
| HIS 4070 | Senior Seminar in History | 4 |
| Global Electives |  |  |


| Choose two | rses from the following: | 8 |
| :---: | :---: | :---: |
| HIS 3008 | Early Modern Europe |  |
| HIS 3011 | European Intellectual History |  |
| HIS 3040 | Russia to 1900 |  |
| HIS 3042 | Twentieth-Century Russia and the Soviet Union |  |
| HIS 3050 | Islamic Civilization |  |
| HIS 3055 | Modern Middle East |  |
| HIS 3056 | Early East Asia |  |
| HIS 3065 | Modern Japan and Korea |  |
| HIS 3068 | Modern China Through Film |  |
| HIS 3069 | China in Revolution |  |
| HIS 4013 | Nineteenth-Century Europe |  |
| HIS 4014 | Twentieth-Century Europe |  |
| HIS 4015 | Europe and the World |  |
| U.S. Electives |  |  |
| Choose two (2) | urses from the following: | 8 |
| HIS 3016 | Colonial and Revolutionary America |  |
| HIS 3020 | United States History, 1815-1914 |  |
| HIS 3070 | California History |  |
| HIS 3080 | America in the 1960's |  |
| HIS 4025 | United States Since 1914 |  |
| HIS 4035 | Asian-American History: 1800 to the Present |  |
| HIS 4036 | America in East Asia: 1800 to the Present |  |
| HIS 4077 | Gender and Law in the U.S. |  |
| HIS 4080 | San Diego Urban History |  |

## Additional Upper-Division Electives

Choose 18 units from any of the courses listed above, below, or from 18 an approved study abroad program:

| HIS 3035 | History of Surfing and Surf Culture |
| :--- | :--- |
| HIS 3060 | Wilderness in the American Mind |
| HIS 3072 | Two Years Before the Mast and the History of <br> Coastal California |
| HIS 3075 | African Cultures and Histories |
| HIS 3085 | World War II Through Film |
| HIS 4060 | Internship in History ${ }^{1}$ |
| HIS 4075 | Topics in Women's History |
| HIS 4084 | Ancient and Medieval Christianity |
| HIS 4086 | Modern Christianity |
| HIS 4087 | The Ancient Historians |
| HIS 4090 | Special Studies in History |

## Total Units

${ }^{1}$ 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 additional units maximum in the Additional Upper-Division Electives requirement.

## Total Non-FE Units for Major: 44

Note(s): Accepting Associate Degree for Transfer (ADT) (p. 227)

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. (p. 25) (Single Subject Art California Teaching Credential)
- Biology, B.A. (p. 109) (Single Subject Science California Teaching Credential)
- Health and Human Performance, B.A. (p. 99) (Single Subject Physical Education California Teaching Credential)
- French, B.A. (p. 66) (Single Subject World Languages: French California Teaching Credential)
- History, B.A. (p. 45) (Single Subject Social Sciences Teaching Credential)
- Literature-English Education, B.A. (p. 67) (Single Subject English Teaching Credential)
- Mathematics, B.S. (p. 137) (Single Subject Mathematics Teaching Credential)
- Music Education, B.A. (p. 88) (Single Subject Music California Teaching Credential)
- Spanish, B.A. (p. 69) (Single Subject World Languages: Spanish California Teaching Credential)

For the 4 -year credential track, the following 3000 or 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 3rd credential course, meeting all program, university and state requirements for classroom observations and tests required prior to student teaching. Students will be vetted through a screening process, which may include a faculty interview, prior to being placed in student teaching. Candidates major in the academic discipline of their choice (e.g. Kinesiology) 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

| Code | Title | Units |
| :--- | :--- | ---: |
| EDU 3002 | Foundations of Education and Learning Theory ${ }^{1}$ | 3 |
| EDU 3006 | Principles of Language Acquisition ${ }^{1}$ | 3 |


| EDU 4004 | Foundations of Special Education ${ }^{1}$ | 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 ${ }^{1}$ | 3 |
| EDU 4021 | General Methods for Secondary Teachers ${ }^{1}$ | 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 |
| Choose one (1) course from the following based on major. |  | 3 |
| EDU 4033 | Methods for Teaching Secondary Mathematics (Mathematics Majors) |  |
| EDU 4034 | Methods of Teaching Secondary Science (Biology Major) ${ }^{2}$ |  |
| EDU 4035 | Methods of Teaching Secondary Social Science (History Majors) |  |
| EDU 4036 | Methods for Teaching Secondary Foreign Language (French/Spanish Majors) |  |
| EDU 4037 | Methods for Teaching Secondary Visual Arts (Art Education Majors) ${ }^{3}$ |  |
| EDU 4038 | Methods for Teaching Secondary Physical Education (Exercise and Sports Science Majors) |  |
| EDU 4039 | Content-Specific Pedagogy for Secondary Teachers (Music Education Majors) ${ }^{4}$ |  |

## Total Units

${ }^{1}$ Requires 20 hours of supervised field experience working with students in a classroom setting.
${ }^{2}$ BIO 4063 also satisfies this credential requirement.
3 ART 4055 also satisfies this credential requirement.
${ }^{4}$ 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.

The International Studies, B.A. consists of 47 core units that are the same across all concentrations plus 8 concentration-specific units.

## Concentrations ${ }^{1}$

- Africa (p. 47)
- Asia (p. 48)
- Europe (p. 48)
- Latin America (p. 49)
- Middle East (p. 49)
- Peace Studies (p. 50)
- Russia and the Former Soviet Union (p. 50)

1 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.

## Africa Concentration

Code Title Units

Lower-Division Core Requirements

| ECO 1001 | Principles of Macroeconomics (FE) | 3 |
| :--- | :--- | :--- |
| POL 2030 | Introduction to International Relations | 4 |
| POL 2070 | Scope and Methods of Political Science | 4 |
| POL 2090 | World Regional Geography | 3 |

Upper-Division Core Requirements

| HIS 4015 | Europe and the World | 4 |
| :--- | :--- | :--- |
| POL 3070 | Comparative Politics | 4 |
| POL 4015 | Women and Politics | 4 |
| POL 4035 | Global Governance | 4 |
| POL 4050 | Issues of Global Human Rights | 2 |
| POL 4060 | Internship in Political Science (3 units required) | 3 |
| POL 4073 | Senior Seminar in Political Science and | 3 |
|  | International Studies |  |

Off-Campus Cooperative Program (OCP)
Choose a minimum of three (3) units of an approved Off-Campus 3
Cooperative Program ${ }^{2}$

## Electives

Choose a minimum of six (6) units from the following (not counted 6 toward concentration): ${ }^{3}$

| ECO 3015 | Theories of Economic Development |
| :--- | :--- |
| HIS 3040 | Russia to 1900 |
| HIS 3042 | Twentieth-Century Russia and the Soviet Union |
| HIS 3050 | Islamic Civilization |
| HIS 3055 | Modern Middle East |
| HIS 3056 | Early East Asia |
| HIS 3065 | Modern Japan and Korea |
| HIS 3069 | China in Revolution |
| HIS 3075 | African Cultures and Histories |
| HIS 4014 | Twentieth-Century Europe |
| POL 3001 | Transitions to Democracy |
| POL 3051 | War and Peace Studies |
| POL 4020 | United States Foreign Policy |
| POL 4038 | International Law |
| POL 4042 | Contemporary Issues in World Politics |
| POL 4044 | Contemporary Political Ideologies |
| POL 4055 | Protest and Social Movements in World Politics |
| SOC 3050 | Urban Sociology |


| SOC 4020 | Social Change $^{4}$ |  |
| :--- | :--- | :--- |
| SWF $3015 \quad$ Health and Well-Being (FE) |  |  |
| Concentration Courses |  |  |

## Total Units

2 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.
${ }^{3}$ Other Upper-Division units pertaining to International Studies may be substituted upon approval by the academic advisor.
4 These courses have prerequisites and may increase the total number of units needed for the major.

## Asia Concentration

Code Title Units

| Lower-Division Core Requirements |  |  |
| :--- | :--- | :--- |
| ECO 1001 | Principles of Macroeconomics (FE) | 3 |
| POL 2030 | Introduction to International Relations | 4 |
| POL 2070 | Scope and Methods of Political Science | 4 |
| POL 2090 | World Regional Geography | 3 |


| Upper-Division Core Requirements |  |  |
| :--- | :--- | :--- |
| HIS 4015 | Europe and the World | 4 |
| POL 3070 | Comparative Politics | 4 |
| POL 4015 | Women and Politics | 4 |
| POL 4035 | Global Governance | 4 |
| POL 4050 | Issues of Global Human Rights | 2 |
| POL 4060 | Internship in Political Science (3 units required) | 3 |
| POL 4073 | Senior Seminar in Political Science and <br>  <br> Off-Campus Cooperative Program (OCP) | 3 |

Choose a minimum of three (3) units of an approved Off-Campus 3 Cooperative Program ${ }^{2}$

## Electives

Choose a minimum of six (6) units from the following (not counted 6 toward concentration): ${ }^{3}$

| ECO 3015 | Theories of Economic Development |
| :--- | :--- |
| HIS 3040 | Russia to 1900 |
| HIS 3042 | Twentieth-Century Russia and the Soviet Union |
| HIS 3050 | Islamic Civilization |
| HIS 3055 | Modern Middle East |
| HIS 3056 | Early East Asia |
| HIS 3065 | Modern Japan and Korea |
| HIS 3069 | China in Revolution |
| HIS 3075 | African Cultures and Histories |
| HIS 4014 | Twentieth-Century Europe |
| POL 3001 | Transitions to Democracy |
| POL 3051 | War and Peace Studies |
| POL 4020 | United States Foreign Policy |
| POL 4038 | International Law |
| POL 4042 | Contemporary Issues in World Politics |


| POL 4044 | Contemporary Political Ideologies |  |
| :--- | :--- | :--- |
| POL 4055 | Protest and Social Movements in World Politics |  |
| SOC 3050 | Urban Sociology $^{4}$ |  |
| SOC 4020 | Social Change $^{4}$ |  |
| SWF 3015 | Health and Well-Being (FE) |  |
| Concentration Courses | 4 |  |
| HIS 3065 | Modern Japan and Korea | $\mathbf{4}$ |
| HIS 3069 | China in Revolution | $\mathbf{5 5}$ |
| Total Units |  |  |

2 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.
${ }^{3}$ Other Upper-Division units pertaining to International Studies may be substituted upon approval by the academic advisor.
4 These courses have prerequisites and may increase the total number of units needed for the major.

## Europe Concentration

Code Title Units

| Lower-Division Core Requirements |  |  |
| :--- | :--- | :--- |
| ECO 1001 | Principles of Macroeconomics (FE) | 3 |
| POL 2030 | Introduction to International Relations | 4 |
| POL 2070 | Scope and Methods of Political Science | 4 |
| POL 2090 | World Regional Geography | 3 |
| Upper-Division Core Requirements |  |  |
| HIS 4015 | Europe and the World | 4 |
| POL 3070 | Comparative Politics | 4 |
| POL 4015 | Women and Politics | 4 |
| POL 4035 | Global Governance | 4 |
| POL 4050 | Issues of Global Human Rights | 2 |
| POL 4060 | Internship in Political Science (3 units required) | 3 |
| POL 4073 | Senior Seminar in Political Science and | 3 |

## Off-Campus Cooperative Program (OCP)

Choose a minimum of three (3) units of an approved Off-Campus 3
Cooperative Program ${ }^{2}$

## Electives

Choose a minimum of six (6) units from the following (not counted 6 toward concentration): ${ }^{3}$

| ECO 3015 | Theories of Economic Development |
| :--- | :--- |
| HIS 3040 | Russia to 1900 |
| HIS 3042 | Twentieth-Century Russia and the Soviet Union |
| HIS 3050 | Islamic Civilization |
| HIS 3055 | Modern Middle East |
| HIS 3056 | Early East Asia |
| HIS 3065 | Modern Japan and Korea |
| HIS 3069 | China in Revolution |
| HIS 3075 | African Cultures and Histories |
| HIS 4014 | Twentieth-Century Europe |
| POL 3001 | Transitions to Democracy |
| POL 3051 | War and Peace Studies |


| POL 4020 | United States Foreign Policy |
| :--- | :--- |
| POL 4038 | International Law |
| POL 4042 | Contemporary Issues in World Politics |
| POL 4044 | Contemporary Political Ideologies |
| POL 4055 | Protest and Social Movements in World Politics |
| SOC 3050 | Urban Sociology $^{4}$ |
| SOC 4020 | Social Change $^{4}$ |
| SWF 3015 | Health and Well-Being (FE) |
| Concentration Courses | 4 |
| HIS 4013 | Nineteenth-Century Europe |
| HIS 4014 | Twentieth-Century Europe |
| Total Units |  |

${ }^{2}$ 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.
${ }^{3}$ Other Upper-Division units pertaining to International Studies may be substituted upon approval by the academic advisor.
${ }^{4}$ These courses have prerequisites and may increase the total number of units needed for the major.

## Latin America Concentration

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Core Requirements |  |  |
| ECO 1001 | Principles of Macroeconomics (FE) | 3 |
| POL 2030 | Introduction to International Relations | 4 |
| POL 2070 | Scope and Methods of Political Science | 4 |
| POL 2090 | World Regional Geography | 3 |
| Upper-Division Core Requirements |  |  |
| HIS 4015 | Europe and the World | 4 |
| POL 3070 | Comparative Politics | 4 |
| POL 4015 | Women and Politics | 4 |
| POL 4035 | Global Governance | 4 |
| POL 4050 | Issues of Global Human Rights | 2 |
| POL 4060 | Internship in Political Science (3 units required) | 3 |
| POL 4073 | Senior Seminar in Political Science and International Studies | 3 |
| Off-Campus Cooperative Program (OCP) |  |  |
| Choose a min Cooperative P | m of three (3) units of an approved Off-Campus ram ${ }^{2}$ | 3 |
| Electives |  |  |
| Choose a minimum of six (6) units from the following (not counted toward concentration): ${ }^{3}$ |  | 6 |
| ECO 3015 | Theories of Economic Development |  |
| HIS 3040 | Russia to 1900 |  |
| HIS 3042 | Twentieth-Century Russia and the Soviet Union |  |
| HIS 3050 | Islamic Civilization |  |
| HIS 3055 | Modern Middle East |  |
| HIS 3056 | Early East Asia |  |
| HIS 3065 | Modern Japan and Korea |  |
| HIS 3069 | China in Revolution |  |
| HIS 3075 | African Cultures and Histories |  |


| HIS 4014 | Twentieth-Century Europe |  |
| :--- | :--- | :--- |
| POL 3001 | Transitions to Democracy |  |
| POL 3051 | War and Peace Studies |  |
| POL 4020 | United States Foreign Policy |  |
| POL 4038 | International Law |  |
| POL 4042 | Contemporary Issues in World Politics |  |
| POL 4044 | Contemporary Political Ideologies |  |
| POL 4055 | Protest and Social Movements in World Politics |  |
| SOC 3050 | Urban Sociology ${ }^{4}$ |  |
| SOC 4020 | Social Change ${ }^{4}$ |  |
| SWF 3015 | Health and Well-Being (FE) |  |
| Concentration Courses |  |  |
| Coursework for concentration available through Off-Campus <br> Cooperative Programs. | 8 |  |
| Total Units | $\mathbf{8 5}$ |  |

${ }^{2}$ 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.
${ }^{3}$ Other Upper-Division units pertaining to International Studies may be substituted upon approval of the academic advisor.
${ }^{4}$ These courses have prerequisites and may increase the total number of units needed for the major.

## Middle East Concentration

| Code | Title | Units |
| :--- | :--- | ---: |
| Lower-Division Core Requirements |  |  |
| ECO 1001 | Principles of Macroeconomics (FE) | 3 |
| POL 2030 | Introduction to International Relations | 4 |
| POL 2070 | Scope and Methods of Political Science | 4 |
| POL 2090 | World Regional Geography | 3 |
| Upper-Division Core Requirements |  |  |
| HIS 4015 | Europe and the World | 4 |
| POL 3070 | Comparative Politics | 4 |
| POL 4015 | Women and Politics | 4 |
| POL 4035 | Global Governance | 4 |
| POL 4050 | Issues of Global Human Rights | 2 |
| POL 4060 | Internship in Political Science (3 units required) | 3 |
| POL 4073 | Senior Seminar in Political Science and | 3 | International Studies

## Off-Campus Cooperative Program (OCP)

Choose a minimum of three (3) units of an approved Off-Campus 3 Cooperative Program ${ }^{2}$

## Electives

Choose a minimum of six (6) units from the following (not counted 6 toward concentration): ${ }^{3}$

| ECO 3015 | Theories of Economic Development |
| :--- | :--- |
| HIS 3040 | Russia to 1900 |
| HIS 3042 | Twentieth-Century Russia and the Soviet Union |
| HIS 3050 | Islamic Civilization |
| HIS 3055 | Modern Middle East |
| HIS 3056 | Early East Asia |


| HIS 3065 | Modern Japan and Korea |
| :--- | :--- |
| HIS 3069 | China in Revolution |
| HIS 3075 | African Cultures and Histories |
| HIS 4014 | Twentieth-Century Europe |
| POL 3001 | Transitions to Democracy |
| POL 3051 | War and Peace Studies |
| POL 4020 | United States Foreign Policy |
| POL 4038 | International Law |
| POL 4042 | Contemporary Issues in World Politics |
| POL 4044 | Contemporary Political Ideologies |
| POL 4055 | Protest and Social Movements in World Politics |
| SOC 3050 | Urban Sociology ${ }^{4}$ |
| SOC 4020 | Social Change ${ }^{4}$ |
| Concentration Courses |  |
| HIS 3050 | Islamic Civilization |
| HIS 3055 | Modern Middle East |
| Total Units |  |

${ }^{2}$ 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.
${ }^{3}$ Other Upper-Division units pertaining to International Studies may be substituted upon approval by the academic advisor.
${ }^{4}$ These courses have prerequisites and may increase the total number of units needed for the major.

Peace Studies Concentration
Code Title Units
Lower-Division Core Requirements

| ECO 1001 | Principles of Macroeconomics (FE) | 3 |
| :--- | :--- | :--- |
| POL 2030 | Introduction to International Relations | 4 |
| POL 2070 | Scope and Methods of Political Science | 4 |
| POL 2090 | World Regional Geography | 3 |

Upper-Division Core Requirements
HIS $4015 \quad$ Europe and the World
POL 3070 Comparative Politics 4

POL $4015 \quad$ Women and Politics 4
POL 4035 Global Governance 4
POL 4050 Issues of Global Human Rights 2
POL $4060 \quad$ Internship in Political Science (3 units required) 3
POL 4073 Senior Seminar in Political Science and 3 International Studies
Off-Campus Cooperative Program (OCP)
Choose a minimum of three (3) units of an approved Off-Campus Cooperative Program. ${ }^{2}$

## Electives

Choose a minimum of six (6) units from the following (not counted 6 toward concentration): ${ }^{3}$

| ECO 3015 | Theories of Economic Development |
| :--- | :--- |
| HIS 3040 | Russia to 1900 |
| HIS 3042 | Twentieth-Century Russia and the Soviet Union |
| HIS 3050 | Islamic Civilization |


| HIS 3055 | Modern Middle East |  |
| :--- | :--- | :--- |
| HIS 3056 | Early East Asia |  |
| HIS 3065 | Modern Japan and Korea |  |
| HIS 3069 | China in Revolution |  |
| HIS 3075 | African Cultures and Histories |  |
| HIS 4014 | Twentieth-Century Europe |  |
| POL 3001 | Transitions to Democracy |  |
| POL 3051 | War and Peace Studies |  |
| POL 4020 | United States Foreign Policy |  |
| POL 4038 | International Law |  |
| POL 4042 | Contemporary Issues in World Politics |  |
| POL 4044 | Contemporary Political Ideologies |  |
| POL 4055 | Protest and Social Movements in World Politics |  |
| SOC 3050 | Urban Sociology ${ }^{\text {4 }}$ |  |
| SOC 4020 | Social Change ${ }^{4}$ |  |
| SWF 3015 | Health and Well-Being (FE) |  |
| Concentration Courses |  |  |
| POL 3051 | War and Peace Studies |  |
| POL 4055 | Protest and Social Movements in World Politics | 4 |
| Total Units |  | 55 |

${ }^{2}$ 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.
${ }^{3}$ Other Upper-Division units pertaining to International Studies may be substituted upon approval by the academic advisor.
${ }^{4}$ These courses have prerequisites and may increase the total number of units needed for the major.

## Russia and the Former Soviet Union Concentration

Code Title Units

Lower-Division Core Requirements
ECO 1001 Principles of Macroeconomics (FE) 3

POL 2030 Introduction to International Relations 4
POL 2070 Scope and Methods of Political Science 4
POL 2090 World Regional Geography 3
Upper-Division Core Requirements
HIS 4015 Europe and the World 4
POL 3070 Comparative Politics 4
POL 4015 Women and Politics 4
POL 4035 Global Governance 4
POL 4050 Issues of Global Human Rights 2
POL 4060 Internship in Political Science (3 units required) 3
POL 4073 Senior Seminar in Political Science and 3
International Studies

## Off-Campus Cooperative Program (OCP)

Choose a minimum of three (3) units of an approved Off-Campus 3
Cooperative Program. ${ }^{2}$

## Electives

Choose a minimum of six (6) units from the following (not counted 6 toward concentration): ${ }^{3}$

ECO 3015 Theories of Economic Development

| HIS 3040 | Russia to 1900 |
| :---: | :---: |
| HIS 3042 | Twentieth-Century Russia and the Soviet Union |
| HIS 3050 | Islamic Civilization |
| HIS 3055 | Modern Middle East |
| HIS 3056 | Early East Asia |
| HIS 3065 | Modern Japan and Korea |
| HIS 3069 | China in Revolution |
| HIS 3075 | African Cultures and Histories |
| HIS 4014 | Twentieth-Century Europe |
| POL 3001 | Transitions to Democracy |
| POL 3051 | War and Peace Studies |
| POL 4020 | United States Foreign Policy |
| POL 4038 | International Law |
| POL 4042 | Contemporary Issues in World Politics |
| POL 4044 | Contemporary Political Ideologies |
| POL 4055 | Protest and Social Movements in World Politics |
| SOC 3050 | Urban Sociology ${ }^{4}$ |
| SOC 4020 | Social Change ${ }^{4}$ |
| SWF 3015 | Health and Well-Being (FE) |
| Concentration Courses |  |
| HIS 3040 | Russia to 1900 |
| HIS 3042 | Twentieth-Century Russia and the Soviet Union |
| Total Units |  |

${ }^{2}$ 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.
${ }^{3}$ Other Upper-Division units pertaining to International Studies may be substituted upon approval by the academic advisor.
${ }^{4}$ These courses have prerequisites and may increase the total number of units needed for the major.

## 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.

## Code

Title
Units
Lower-Division Requirements
POL 1001 Understanding the Political World (FE)

| POL 1065 | U.S. Democracy (FE) | 4 |
| :--- | :--- | :--- |
| POL 2030 | Introduction to International Relations | 4 |
| POL 2070 | Scope and Methods of Political Science | 4 |

Upper-Division Requirements
American Government:
Choose four (4) units from the following: 4

| POL 3041 | Campaigns and Elections |
| :--- | :--- |
| POL 3080 | Congress and the Presidency |
| POL 4041 | Issues in Public Policy |

Global Politics:
POL $4020 \quad 4$
or POL 4035 Global Governance
Comparative Government:
POL $3070 \quad$ Comparative Politics 4

| Political Theory: |  |  |
| :--- | :--- | :--- |
| POL 3021 | 4 |  |

Senior Seminar:
POL 4073 Senior Seminar in Political Science and 3

Off-Campus Political Studies Program:

| POL 3091 | Off-Campus Political Studies Program (6 units <br> required) ${ }^{1}$ | 6 |
| :--- | :--- | :---: |
| Internship: |  | Internship in Political Science (4 units required) $^{1}$ |
| POL 4060 |  | 4 |
| Electives | 8 |  |


| POL 3001 | Transitions to Democracy |
| :--- | :--- |
| POL 3020 | U.S. Constitution and Civil Liberties Law |
| POL 3025 | American Political Thought |
| POL 3030 | The Development of Feminist Thought |
| POL 3041 | Campaigns and Elections |
| POL 3051 | War and Peace Studies |
| POL 3060 | Urban Politics |
| POL 3080 | Congress and the Presidency |
| POL 3091 | Off-Campus Political Studies Program |
| POL 4015 | Women and Politics |
| POL 4020 | United States Foreign Policy |
| POL 4035 | Global Governance |
| POL 4037 | International Economics ${ }^{1}$ |
| POL 4038 | International Law |
| POL 4041 | Issues in Public Policy |
| POL 4042 | Contemporary Issues in World Politics |
| POL 4044 | Contemporary Political Ideologies |
| POL 4050 | Issues of Global Human Rights |
| POL 4055 | Protest and Social Movements in World Politics |
| POL 4090 | Special Studies in Political Science |

Total Units
52
1 Required prerequisite for this course increases the number of units in the major.

Note(s): Accepting Associate Degree for Transfer (ADT) (p. 227)

## 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:

| Code | Title | Units |
| :---: | :---: | :---: |
| Required Courses |  |  |
| HIS 1010 | World Civilizations I (FE) | 3 |
| HIS 1011 | World Civilizations II (FE) | 3 |
| Global Electi |  | 4 |
| Choose one (1) course from the following: |  |  |
| HIS 3008 | Early Modern Europe |  |
| HIS 3011 | European Intellectual History |  |
| HIS 3040 | Russia to 1900 |  |
| HIS 3042 | Twentieth-Century Russia and the Soviet Union |  |
| HIS 3050 | Islamic Civilization |  |
| HIS 3055 | Modern Middle East |  |
| HIS 3056 | Early East Asia |  |
| HIS 3065 | Modern Japan and Korea |  |
| HIS 3068 | Modern China Through Film |  |
| HIS 3069 | China in Revolution |  |
| HIS 4013 | Nineteenth-Century Europe |  |
| HIS 4014 | Twentieth-Century Europe |  |
| HIS 4015 | Europe and the World |  |
| U.S. Elective |  | 4 |
| Choose one (1) course from the following: |  |  |
| HIS 3016 | Colonial and Revolutionary America |  |
| HIS 3020 | United States History, 1815-1914 |  |
| HIS 3070 | California History |  |
| HIS 3080 | America in the 1960's |  |
| HIS 4025 | United States Since 1914 |  |
| HIS 4035 | Asian-American History: 1800 to the Present |  |
| HIS 4036 | America in East Asia: 1800 to the Present |  |
| HIS 4077 | Gender and Law in the U.S. |  |
| HIS 4080 | San Diego Urban History |  |
| Additional Upper-Division Electives |  |  |
| Choose four (4) units from any of the courses listed above, below, or from an approved study abroad program: |  |  |
| HIS 3035 | History of Surfing and Surf Culture |  |
| HIS 3060 | Wilderness in the American Mind |  |
| HIS 3072 | Two Years Before the Mast and the History of Coastal California |  |
| HIS 3075 | African Cultures and Histories |  |
| HIS 3085 | World War II Through Film |  |
| HIS 4060 | Internship in History ${ }^{1}$ |  |
| HIS 4075 | Topics in Women's History |  |
| HIS 4084 | Ancient and Medieval Christianity |  |
| HIS 4086 | Modern Christianity |  |
| HIS 4087 | The Ancient Historians |  |
| HIS 4090 | Special Studies in History |  |
| Total Units 18 |  |  |

${ }^{1}$ HIS 4060 may be completed for up to a total of four (4) 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 lowerdivision and upper-division courses:

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| POL 1090 | The Politics of Race, Class, and Gender (FE) | 4 |
| Upper-Division Requirements |  |  |
| POL 3030 | The Development of Feminist Thought | 4 |
| Choose a minimum of nine (9) units from the following: |  | 9 |
| CHU 3040 | Women in the Christian Tradition (FE) |  |
| COM 3012 | Gender and Communication |  |
| ECO 4040 | The Economics of Race, Class, and Gender |  |
| HIS 4077 | Gender and Law in the U.S. |  |
| LIT 3053 | Diverse Voices of Women Writers (FE) |  |
| NUT 3040 | Nutrition in Women's Wellbeing |  |
| POL 4015 | Women and Politics |  |
| PSY 3060 | Human Sexuality |  |
| Total Units |  | 17 |

## 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 nonwestern 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 leterkunde, 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, and Christian Feminism Today. 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, 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.

## 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 environmental stewardship at over 50 participating Christian colleges and universities. Courses are offered during a 3-week May term and two 5-week summer sessions from May to early August. May term students take one course (4 units) at the

Great Lakes or Costa Rica campus; Summer Session students take 2 courses (8 units) at the Great Lakes campus (summer session I and II) or Pacific Rim campus (summer session II). All courses transfer in as upperdivision electives for the Environmental Science B.S., Biology B.S./B.A., and Environmental Studies (Biology emphasis) B.A. majors, and for the Environmental Biology and Sustainability Studies minors. [An off-campus field-based program like Au Sable is a requirement for Environmental Science majors.] Financial aid is available through Au Sable. Point Loma Nazarene University is a Sustaining Partner with Au Sable, which means that PLNU students are eligible for additional financial aid and access to high-demand courses. Interested students should contact both the Study Abroad Office and the Au Sable campus rep (Dr. Mike Mooring) for further information and to start your application. To see the course offerings, go to www.ausable.org/college (http://www.ausable.org/college/).

## Faculty

Co-Chairs - Paula Cronovich, Ph.D. and Jacqueline Mitchell, M.A.
Scott Bennett, Ph.D.
University of California, Santa Barbara
Paula Cronovich, Ph.D.
University of California, Los Angeles
Nathan Gibbs, M.F.A.
Rensselaer Polytechnic 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
Jacqueline Mitchell, M.A.
University of California, Los Angeles
Dean Nelson, Ph.D.
Ohio University
Bettina Tate Pedersen, Ph.D.
University of Illinois, Urbana-Champaign
Margarita Pintado, Ph.D.
Emory University
Holland Prior, Ph.D.
University of Tennessee, Knoxville
To view requirements for majors, minors, and certificates, see the Degree Program Information (p. 244) page.

- Environmental Studies, B.A. (p. 61)
- French, B.A. (p. 66)
- Literature, B.A. (p. 67)
- Multimedia Journalism, B.A. (p. 68)
- Spanish, B.A. (p. 69)
- Writing, B.A. (p. 70)
- Cinema Studies Minor - Literature, Journalism, Writing, and Languages (p. 71)
- French Minor (p. 72)
- Literature Minor (p. 72)
- Multimedia Journalism Minor (p. 72)
- Public Relations Minor (p. 73)
- Spanish Minor (p. 73)
- Sustainability Studies Minor (p. 73)
- Women's Studies Minor (p. 73)
- Writing Minor (p. 74)
- French Language Certificate (p. 74)
- Spanish Language Certificate (p. 74)


## Chinese

CHN 1001 Elementary Chinese (Mandarin) I (FE) (4 Units) 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 (FE) (4 Units)
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.

## Environmental Studies

ESI 2050 Introduction to Environmental Studies (3 Units)
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 Units)

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 Units)
A supervised experience in which the student works off campus in an established program, public service, or business that connects to environmental concerns.
May be repeated up to a total of four (4) units.
Concurrent: ESI 2050 or consent of instructor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.

## French

## FRE 1001 Elementary French I (FE) (4 Units)

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 (FE) (4 Units)

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 Units)
Intensive practical use of the language designed to bring the student to a high level of proficiency in communicative skills through firsthand 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 Units)
Intensive practical use of the language designed to bring the student to a high level of proficiency in communicative skills through firsthand 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 Units)
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 Units)
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 Units)
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 Units)
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
FRE 4020 Studies in French Literature (3 Units)
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 Units)
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 (6) units.
Prerequisite(s): Consent of instructor and department chair.
FRE 4095 Literary Theory Capstone (3 Units)
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.

## Learning Experiences for Academic Progress (LEAP)

## FST 1000 Freshman Studies Seminar I (1 Unit)

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 Units)
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.

## German

GER 1001 Elementary German I (FE) (4 Units)
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 (FE) (4 Units)
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 Units)
Intensive practical use of the language designed to bring the student to a high level of proficiency in communicative skills through firsthand 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 Units)
Intensive practical use of the language designed to bring the student to a high level of proficiency in communicative skills through firsthand 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 Units)
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 (6) units.
Prerequisite(s): Consent of instructor and department chair.

## Journalism

## JRN 2015 Newspaper Workshop (1 Unit)

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. COM 2075, JRN 2015,
JRN 2017, JRN 2018, and WRI 2016 may be repeated up to a combined total of eight (8) units.
Prerequisite(s): Fulfillment of the College Composition requirement.
JRN 2017 Yearbook Workshop (1 Unit)
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. COM 2075, JRN 2015,
JRN 2017, JRN 2018, and WRI 2016 may be repeated up to a combined total of eight (8) units.
Prerequisite(s): Fulfillment of the College Composition requirement.
JRN 2018 Multimedia Workshop (1 Unit)
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.
COM 2075, JRN 2015, JRN 2017, JRN 2018, and WRI 2016 may be repeated up to a combined total of eight (8) units.
Prerequisite(s): Fulfillment of the College Composition requirement.

## JRN 2050 Introduction to Journalism (3 Units)

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 Units)
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 Units)

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): COM 2043 and JRN 2050
Corequisite(s): COM 3013 or JRN 3014

JRN 3013 Television News Production (3 Units)
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.
Also offered as COM 3013.
Corequisite(s): JRN 3012 and COM 3013 or JRN3013 are co-requisites and must be taken in the same semester.

## JRN 3014 Computer-Assisted Reporting (3 Units)

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 Units)
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 Units)
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 Units)

Focuses on current aspects of journalism with a different concentration each time it is offered.
May be repeated up to six (6) units as long as the content is different.
Prerequisite(s): JRN 2050
JRN 3055 Public Relations Writing (3 Units)
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 Units)
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.
Also offered as COM 4013.
Prerequisite(s): COM 3013 or JRN 3014 and JRN 3012
JRN 4014 Long-Form Broadcast News (3 Units)
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.
Also offered as COM 4014.
Prerequisite(s): COM 3013 or JRN 3014 and JRN 3012

JRN 4025 Advanced Television Workshop (1 Unit)
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 (6) units.
Also offered as COM 4025.
Prerequisite(s): COM 2043
JRN 4030 Multimedia Journalism (3 Units)
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 Units)
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 Units)
A supervised experience in which the student works off campus in an established media business or public service media company.
May be repeated for a total of four (4) units.
Prerequisite(s): JRN 2050, JRN 3040, and JRN 3050, or consent of instructor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.
JRN 4095 Senior Seminar in Multimedia Journalism (3 Units)
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.

## Language

LAN 1001 Elementary Foreign Language I (FE) (4 Units)
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.

## LAN 1002 Elementary Foreign Language II (FE) (4 Units)

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.

## Linguistics

LIN 3012 Introduction to Linguistics (3 Units)
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 Units)

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 Units)

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 (6) units.
Prerequisite(s): Consent of instructor and department chair.

## Literature

LIT 2000 Literature and Culture (FE) (2 Units)
A study of representative works of literature and cultural contexts.
LIT 2052 World Literatures: Ancient and Medieval Literatures (3 Units) 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 Units)
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 Units)
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 Units)
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 Units)
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 Units)
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 Units)
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 Diverse Voices of World Literature (FE) (3 Units)

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 Diverse Voices of Cinema (FE) (3 Units)
An advanced study of representative works of 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 of American Literature (FE) (3 Units)

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 Diverse Voices of Women Writers (FE) (3 Units)
An advanced study of selected works written by women; themes and genres studied may vary. The course focuses on intersecting questions of gender, class, race, ability, and identity.
Prerequisite(s): Fulfillment of the College Composition requirement, LIT 2000, and Junior or Senior standing.
LIT 4000 American Literature to 1900 (3 Units)
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 Units)
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 Units)
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 Units)
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 Units)

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 Units)
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 Units)
An advanced study of selected post-colonial literature and post-colonial theory from the turn of the 19th century through 21 st 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 Units)
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 Units)
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 Foundational Explorations literature requirement and LIT 3000.

## LIT 4090 Special Studies in Literature (1-3 Units)

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 (6) units.
Prerequisite(s): Consent of instructor and department chair.
LIT 4095 Literary Theory and Scholarship (3 Units)
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 Units)
Independent research under the guidance of a faculty member.
Prerequisite(s): Senior standing; consent of instructor and department chair.

LIT 5000 American Literature to 1900 (3 Units)
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.
Also offered as LIT 4000
Prerequisite(s): Consent of instructor.
LIT 5020 American Literature Since 1900 (3 Units)
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.
Also offered as LIT 4020
Prerequisite(s): Consent of instructor.
LIT 5044 Medieval Literature (3 Units)
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.
Also offered as LIT 4044.
Prerequisite(s): Consent of instructor.
LIT 5045 17th Century English Literature (3 Units)
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
Also offered as LIT 4045.
Prerequisite(s): Consent of instructor.

## LIT 5046 Romantic Literature (3 Units)

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.
Also offered as LIT 4046.
Prerequisite(s): Consent of instructor.
LIT 5047 Victorian Literature (3 Units)
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. Also offered as LIT 4047.
Prerequisite(s): Consent of instructor.
LIT 5048 Postcolonial Classics and Theory (3 Units)
An advanced study of selected post-colonial literature and post-colonial theory from the turn of the 19th century through 21 st century. Class inquiry focuses on the effects of empire, colonization, neocolonialism, and globalization presented in these texts.
Also offered as LIT 4048
Prerequisite(s): Consent of instructor.
LIT 5050 The Novel (3 Units)
An advanced study of representative examples of the novel. Selected novels may include both novels written in English and novels translated into English.
Also offered as LIT 4050
Prerequisite(s): Consent of instructor.

## LIT 5061 Shakespeare (3 Units)

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.
Also offered as LIT 4061.
Prerequisite(s): Consent of instructor.
LIT 5090 Seminar in Literature (3 Units)
An advanced literature course: period and topic of study selected by the faculty member.
May be repeated for credit three times with different course content each time and content that is different than undergrad literature credits taken for undergraduate degree at PLNU.
Also offered as LIT 6090.

## Spanish

## SPA 1001 Elementary Spanish I (FE) (4 Units)

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 (FE) (4 Units)
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 Units) 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 Units)
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 Units)
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 Units)
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 Units)
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 Units)
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 Units)
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 3000 and SPA 3002 or consent of instructor.
SPA 3080 Genre/Period Studies in Hispanic Literature or Film (3 Units) A study of a literary genre or period of Hispanic literature or film. Conducted in Spanish.
Prerequisite(s): SPA 3000 and SPA 3002 (SPA 3000 may be concurrent).
SPA 3090 Current Spanish Linguistics (3 Units)
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 Units)
Analysis and discussion of representative works from the medieval era to the 18th century. Conducted in Spanish.
Prerequisite(s): SPA 3000 and SPA 3002 or consent of instructor.

## SPA 4002 Peninsular Literature Since 1800 (3 Units)

Analysis and discussion of representative works from the 19th century to the present. Conducted in Spanish.
Prerequisite(s): SPA 3000 and SPA 3002 or consent of instructor.
SPA 4037 Latin American Literature Before 1910 (3 Units)
A study of the development of literary genres featuring representative works from Mexican, Central, and South American writers from the preColumbian period to the Mexican revolution. Conducted in Spanish.
Prerequisite(s): SPA 3000 and SPA 3002 or consent of instructor.
SPA 4039 Latin American Literature Since 1910 (3 Units)
A study of the Latin American narrative from the Mexican revolution to the present day. Conducted in Spanish.
Prerequisite(s): SPA 3000 and SPA 3002 or consent of instructor.
SPA 4085 Senior Seminar in Spanish (3 Units)
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 3000, SPA 3002, and Senior standing.
SPA 4090 Special Studies in Spanish (1-3 Units)
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 (6) units.
Prerequisite(s): Consent of instructor and department chair.
SPA 4099 Research in Spanish (1-3 Units)
Independent research under the guidance of a faculty member.
Prerequisite(s): Consent of instructor and department chair and Senior standing.

SPA 5000 Peninsular Literature Before 1800 (3 Units)
Analysis and discussion of representative works from the medieval era to the 18th century. Conducted in Spanish.
Also offered as SPA 4000.
Prerequisite(s): Consent of instructor.
SPA 5002 Peninsular Literature Since 1800 (3 Units)
Analysis and discussion of representative works from the 19th century to the present. Conducted in Spanish.
Also offered as SPA 4002.
Prerequisite(s): Consent of instructor.
SPA 5020 Mexican American Literature and Culture (3 Units)
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.
Also offered as SPA 3020.
Prerequisite(s): Consent of instructor.
SPA 5037 Latin American Literature Before 1910 (3 Units)
A study of the development of literary genres featuring representative works from Mexican, Central, and South American writers from the preColumbian period to the Mexican revolution. Conducted in Spanish. Also offered as SPA 4037.
Prerequisite(s): Consent of instructor.
SPA 5039 Latin American Literature Since 1910 (3 Units)
A study of the Latin American narrative from the Mexican revolution to the present day. Conducted in Spanish.
Also offered as SPA 4039.
Prerequisite(s): Consent of instructor.
SPA 5080 Genre/Period Studies in Hispanic Literature or Film (3 Units)
A study of a literary genre or period of Hispanic literature or film.
Conducted in Spanish.
Also offered as SPA 3080.
Prerequisite(s): Consent of instructor.

## Writing

Students are placed in introductory writing courses according to SAT and ACT exam scores and a writing assessment administered during the first week of classes.

## WRI 0097 Writing Skills Tutorial (0 Units)

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.
Fee: Includes a laboratory fee.
WRI 1001 Writing Across the University (3 Units)
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 (FE) (4 Units)
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: Essay - First Year Experience (FE) (2

 Units)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.
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.
Must take WRI 1016 to complete the required composition sequence.
WRI 1016 College Composition: Research - First Year Experience (FE) (2 Units)
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 Unit)

Hands-on production of PLNU's literary magazine, from theme to finished product. Open to all students.
COM 2075, JRN 2015, JRN 2017, JRN 2018 and WRI2016 may be repeated up to a combined total of eight (8) units.
Prerequisite(s): Fulfillment of the College Composition requirement.

## WRI 2020 Introduction to Creative Writing (3 Units)

A general introduction and overview of creative writing (including practice in poetry, fiction, drama, and creative nonfiction) that serves majors, potential majors, and other interested students. Attention will be given to methodology in teaching creative writing.
Prerequisite(s): Fulfillment of the College Composition requirement. Non-majors are strongly encouraged to complete Writing 2020 before taking WRI 3021, WRI 3022 or WRI 3023.

## WRI 3021 Creative Writing: Poetry (3 Units)

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 consent of instructor.
Prerequisite(s): Fulfillment of the College Composition requirement.

## WRI 3022 Creative Writing: Fiction (3 Units)

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 consent of instructor.
Prerequisite(s): Fulfillment of the College Composition requirement.

WRI 3023 Creative Writing: Creative Nonfiction (3 Units)
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 consent of instructor.
Prerequisite(s): Fulfillment of the College Composition requirement.
WRI 3065 Professional Writing (3 Units)
Strategies for success in professional writing. Students will produce a portfolio of professional writing geared toward success in starting their career path beyond graduation.
Prerequisite(s): Fulfillment of the College Composition requirement. Junior or Senior standing required.
WRI 3070 Writing Theory and Pedagogy (2 Units)
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 4000 Writing for the Community (3 Units)

A hands-on study of writing in the service of the literary community as well as for other communities in which students find themselves interested.
Prerequisite(s): Fulfillment of the College Composition requirement. Junior or Senior standing required.
WRI 4020 Advanced Writing Workshop (3 Units)
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 consent of instructor.
Prerequisite(s): WRI 3021, WRI 3022, or WRI 3023
WRI 4070 Internship in Writing (2 Units)
A supervised experience in which the student works off campus in an established media business or public service media company.
May be repeated up to a total of four (4) units.
Prerequisite(s): JRN 2050, JRN 3010, and JRN 3040, or consent of instructor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.

## WRI 4090 Special Studies in Writing/Journalism (1-3 Units)

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 (6) units.
Prerequisite(s): Consent of instructor and department chair.
WRI 4099 Research in Writing/Journalism (1-3 Units)
Independent research under the guidance of a faculty member.
Prerequisite(s): Consent of instructor and department chair and Senior standing.

## WRI 5020 Writing Across the Genres (3 Units)

An advanced introduction and overview of creative writing (including practice in writing and workshopping poetry, fiction, and nonfiction). Also offered as WRI 6020.

## WRI 5021 Poetry Workshop (3 Units)

Advanced instruction and guided workshop in writing poetry. Attention is also given to methodology in teaching poetry writing and to finding publication.
Also offered as WRI 6021.
Prerequisite(s): WRI 5020
WRI 5022 Fiction Workshop (3 Units)
Advanced instruction and guided workshop in writing fiction. Attention is also given to methodology in teaching fiction writing and to finding publication.
Also offered as WRI 6022.
Prerequisite(s): WRI 5020

## WRI 5023 Nonfiction Workshop (3 Units)

Advanced instruction and guided workshop in nonfiction writing.
Attention is also given to methodology in teaching nonfiction writing and to finding publication.
Also offered as WRI 6023.
Prerequisite(s): WRI 5020

## WRI 5024 Scriptwriting Workshop (3 Units)

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.
Also offered as WRI 6024.
Prerequisite(s): WRI 5020

## WRI 5025 Special Topic in Writing (3 Units)

Advanced instruction and guided workshop in a special topic in writing. Topics might include comics, bookmaking, publishing, and experimental forms, among others. Attention is also given to methodology in teaching writing and to finding publication.
Also offered as WRI 6025.
Prerequisite(s): WRI 5020

## 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. Synthesize scientific and humanistic studies through practical environmental application
2. Locate, evaluate, and effectively use information to address environmental concerns
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.
5. Identify and secure post-graduate studies or careers in environmental fields.

## Concentrations

Choose one of the following required concentrations:

- Biology (p. 62)
- Cultural Studies (p. 63)
- Design (p. 63)
- Social Impact (p. 64)
- Writing and Communication (p. 65)


## Biology Concentration

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.

| Code | Title |  |
| :--- | :--- | ---: |
| Lower-Division Requirements | Units |  |
| BIO 1002 | Environment and People (FE) | 4 |
| BIO 2011 <br> and BIO 2011L | Ecological and Evolutionary Systems (FE) <br> and Ecological and Evolutionary Systems <br> Laboratory (FE) | 4 |
| CHE 1001 | Chemistry and Society (FE) | 4 |
| ESI 2050 | Introduction to Environmental Studies | 3 |
| LIT 2000 | Literature and Culture (FE) |  |


| Upper-Division Requirements |  |  |
| :---: | :---: | :---: |
| BIO 3063 <br> and BIO 3063L | Conservation Ecology and Conservation Ecology Laboratory | 4 |
| 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 (FE) | 3 |
| Choose one (1) course from each group: |  | 10-12 |
| Social Justice: |  |  |
| SOC 4035 | Environmental Sociology |  |
| SOC 4044 | Globalization and Culture |  |
| THE 4090 | Special Studies in Theology |  |
| Writing: |  |  |
| WRI 3021 | Creative Writing: Poetry |  |
| WRI 3022 | Creative Writing: Fiction |  |
| WRI 3023 | Creative Writing: Creative Nonfiction |  |
| WRI 3065 | Professional Writing |  |
| WRI 4000 | Writing for the Community |  |
| Cultural Studies: |  |  |
| HIS 3060 | Wilderness in the American Mind |  |
| LIT 4046 | Romantic Literature |  |
| LIT 4048 | Postcolonial Classics and Theory |  |
| Language: |  |  |
| FRE 2050 | Intermediate French I |  |
| FRE 2051 | Intermediate French II |  |
| FRE 3003 | French Conversation |  |
| SPA 2050 | Intermediate Spanish Conversation I |  |
| SPA 2051 | Intermediate Spanish Conversation II |  |
| SPA 3000 | Civic Engagement: Conversation, Culture, and Community |  |
| Approved immersion experience in another language |  |  |
| Elective Courses |  |  |
| Choose nine (9) units from the following: ${ }^{2}$ |  | 9 |
| BIO 3012 Applied Plant Biology |  |  |
| BIO 3023 Introduction to Oceanography and BIO 3023L and Introduction to Oceanography Laboratory |  |  |
| BIO 3033 Marine Biology and BIO 3033L and Marine Biology Laboratory |  |  |
| BIO 3040 | Field Biology: Neotropical Ecology |  |
| BIO 4010 Vertebrate Biology and BIO 4010L and Vertebrate Biology Laboratory |  |  |
| BIO 4030 Animal Behavior and BIO 4030L and Animal Behavior Laboratory |  |  |
| BIO 4073 Experimental Marine Ecology and BIO 4073L and Experimental Marine Ecology Laboratory |  |  |
| BIO 4083 | Introduction to Geographic Information Syste (GIS) |  |
| Choose one (1) course from the following: |  |  |
| ACC 2000 | Principles of Accounting for Non-Business Majo |  |
| MTH 2003 | Introduction to Statistics |  |
| MTH 3063 | Calculus Based Statistics with R |  |
| Total Units |  | 64-67 |

${ }^{1}$ Select the course section for "Nature Writing."
${ }^{2}$ Courses and their corresponding lab (if applicable) must be taken concurrently.

## Cultural Studies Concentration

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.

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| BIO 1002 | Environment and People (FE) | 4 |
| CHE 1001 | Chemistry and Society (FE) | 4 |
| ESI 2050 | Introduction to Environmental Studies | 3 |
| LIT 2000 | Literature and Culture (FE) ${ }^{1}$ | 2 |
| PHL 2011 | Ethics (FE) | 3 |
| Choose one (1) course from each group: |  | 7-8 |
| Biology: |  |  |
| BIO 1005 Ecology and Conservation (FE) and BIO 1005L and Ecology and Conservation Laboratory (FE) |  |  |
| BIO 2011 Ecological and Evolutionary Systems (FE) and BIO 2011L and Ecological and Evolutionary Systems Laboratory (FE) |  |  |
| Social Impact: |  |  |
| POL 1090 | The Politics of Race, Class, and Gender (FE) |  |
| SOC 2001 | Cultural Anthropology (FE) |  |
| SWF 1000 | Living Justly in Contemporary Society (FE) |  |
| Upper-Division Requirements |  |  |
| BUS 4075 | Sustainability in Action | 3 |
| ESI 4020 | Advanced Environmental Studies | 3 |
| ESI 4070 | Internship in Environmental Studies | 2 |
| HIS 3060 | Wilderness in the American Mind | 3 |
| HIS 3070 | California History | 4 |
| LIT 3000 | Literary Analysis | 3 |
| LIT 4046 | Romantic Literature | 3 |
| POL 4035 | Global Governance | 4 |
| THE 3005 | Christian Faith and the Natural Sciences (FE) | 3 |
| Choose one (1) course from each group: |  | 10-12 |
| Social Justice: |  |  |


| Social Justice: |  |
| :--- | :--- |
| SOC 4035 | Environmental Sociology |
| SOC 4044 | Globalization and Culture |
| THE 4090 | Special Studies in Theology |
| Writing: |  |
| WRI 3021 | Creative Writing: Poetry |
| WRI 3022 | Creative Writing: Fiction |
| WRI 3023 | Creative Writing: Creative Nonfiction |
| WRI 3065 | Professional Writing |
| WRI 4000 | Writing for the Community |
| Language: |  |


| FRE 2051 | Intermediate French II |
| :--- | :--- |
| FRE 3003 | French Conversation |
| SPA 2050 | Intermediate Spanish Conversation I |
| SPA 2051 | Intermediate Spanish Conversation II |
| SPA 3000 | Civic Engagement: Conversation, Culture, and <br> Community |

Approved immersion experience in another language

## Elective Courses

Choose two (2) courses from the following or three (3) if a $305 \mathrm{x} \quad 8-11$ course is chosen:

| HIS 3011 | European Intellectual History |
| :---: | :---: |
| HIS 3068 | Modern China Through Film |
| HIS 3072 | Two Years Before the Mast and the History of Coastal California |
| HIS 4013 | Nineteenth-Century Europe |
| HIS 4014 | Twentieth-Century Europe |
| HIS 4015 | Europe and the World |
| HIS 4025 | United States Since 1914 |
| HIS 4035 | Asian-American History: 1800 to the Present |
| HIS 4036 | America in East Asia: 1800 to the Present |
| LIT 2052 | World Literatures: Ancient and Medieval Literatures |
| LIT 3050 | Diverse Voices of World Literature (FE) |
| LIT 3051 | Diverse Voices of Cinema (FE) |
| LIT 3052 | Diverse Voices of American Literature (FE) |
| LIT 3053 | Diverse Voices of Women Writers (FE) |
| LIT 4000 | American Literature to 1900 |
| LIT 4045 | 17th Century English Literature |
| LIT 4061 | Shakespeare |
| SPA 3010 | Latin American Culture and Civilization |
| SPA 3020 | Mexican American Literature and Culture |
| SPA 3080 | Genre/Period Studies in Hispanic Literature or Film |
| Total Units | 69-75 |
| ${ }^{1}$ Select the course section for "Nature Writing." |  |
| Design Co | ntration |

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.

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| ART 1003 | Two-Dimensional Design | 3 |
| ART 2003 | Graphic Design I: Visual Symbolism | 3 |
| BIO 1002 | Environment and People (FE) | 4 |
| CHE 1001 | Chemistry and Society (FE) | 4 |
| ESI 2050 | Introduction to Environmental Studies | 3 |
| LIT 2000 | Literature and Culture (FE) ${ }^{1}$ | 2 |
| PHL 2011 | Ethics (FE) | 3 |
| Choose one (1) course from each group: |  | 7-8 |

Biology:

| BIO 1005 Ecology and Conservation (FE) <br> and BIO 1005L  <br> and Ecology and Conservation Laboratory (FE)  |  |
| :--- | :--- |
| BIO 2011 Ecological and Evolutionary Systems (FE) <br> and BIO 2011L  <br> and Ecological and Evolutionary Systems  <br> Laboratory (FE)  |  |
| Social Impact: |  |
| POL 1090 | The Politics of Race, Class, and Gender (FE) |
| SOC 2001 | Cultural Anthropology (FE) |
| SWF 1000 | Living Justly in Contemporary Society (FE) |
| Upper-Division Requirements |  |


| ART 3015 | Introduction to Interactive Web Design | 3 |
| :--- | :--- | ---: |
| 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 (FE) | 3 |
| Choose one (1) course from each group: | $10-12$ |  |

Social Justice:

| SOC 4035 | Environmental Sociology |
| :--- | :--- |
| SOC 4044 | Globalization and Culture |
| THE 4090 | Special Studies in Theology |
| Writing: |  |
| WRI 3021 | Creative Writing: Poetry |
| WRI 3022 | Creative Writing: Fiction |
| WRI 3023 | Creative Writing: Creative Nonfiction |
| WRI 3065 | Professional Writing |
| WRI 4000 | Writing for the Community |
| Cultural Studies: |  |
| HIS 3060 | Wilderness in the American Mind |
| LIT 4046 | Romantic Literature |
| LIT 4048 | Postcolonial Classics and Theory |
| Language: |  |
| FRE 2050 | Intermediate French I |
| FRE 2051 | Intermediate French II |
| FRE 3003 | French Conversation |
| SPA 2050 | Intermediate Spanish Conversation I |
| SPA 2051 | Intermediate Spanish Conversation II |
| SPA 3000 | Civic Engagement: Conversation, Culture, and |
| Approved immersion experience in another language |  |

Approved immersion experience in another language

## Elective Courses

Choose six (6) units from the following: 6

| ART 1015 | Drawing I |
| :--- | :--- |
| ART 2002 | Introduction to Computer Graphics |
| ART 2026 | Photography: Digital |
| ART 3003 | Graphic Design II: Typography |
| ART 3030 | Illustration I |
| ART 3031 | Illustration II |
| ART 3033 | Graphic Design III: Branding and Identity Programs |
| ART 4050 | Interactive Web Design |

## Total Units

${ }^{1}$ Select the course section for "Nature Writing."

## Social Impact Concentration

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.

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| BIO 1002 | Environment and People (FE) | 4 |
| CHE 1001 | Chemistry and Society (FE) | 4 |
| COM 2031 | Argumentation and Debate (FE) | 3 |
| ESI 2050 | Introduction to Environmental Studies | 3 |
| LIT 2000 | Literature and Culture (FE) ${ }^{1}$ | 2 |
| PHL 2011 | Ethics (FE) | 3 |
| SOC 2001 | Cultural Anthropology (FE) | 3 |
| SWF 1000 | Living Justly in Contemporary Society (FE) | 3 |
| Choose one (1) sequence from the following: |  |  |
| BIO 1005 and BIO 1005L | Ecology and Conservation (FE) and Ecology and Conservation Laboratory (FE) |  |
| BIO 2011 and BIO 2011L | Ecological and Evolutionary Systems (FE) and Ecological and Evolutionary Systems Laboratory (FE) |  |

Upper-Division 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
SOC 4035 Environmental Sociology 3
THE $3005 \quad$ Christian Faith and the Natural Sciences (FE) 3
THE 4090 Special Studies in Theology 1-3
Choose one (1) course from each group: 9
Writing:
WRI 3021 Creative Writing: Poetry
WRI 3022 Creative Writing: Fiction
WRI 3023 Creative Writing: Creative Nonfiction
WRI 3065 Professional Writing
WRI $4000 \quad$ Writing for the Community
Cultural Studies:

| HIS 3060 | Wilderness in the American Mind |
| :--- | :--- |
| LIT 4046 | Romantic Literature |
| LIT 4048 | Postcolonial Classics and Theory |
| Language: |  |

FRE 2050 Intermediate French I
FRE 2051 Intermediate French II
FRE 3003 French Conversation
SPA 2050 Intermediate Spanish Conversation I
SPA 2051 Intermediate Spanish Conversation II
SPA 3000 Civic Engagement: Conversation, Culture, and
Community
Approved immersion experience in another language
Elective Courses
Choose six (6) units from the following:
COM 3030
COM 3040
Persuasion

COM 3090 | Inganizational Communication |
| :--- |
| COM 3095 | Media Literacy $\quad 6$

Total Units
59-61
${ }^{1}$ Select the course section for "Nature Writing."

## Writing and Communication Concentration

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.

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| BIO 1002 | Environment and People (FE) | 4 |
| CHE 1001 | Chemistry and Society (FE) | 4 |
| ESI 2050 | Introduction to Environmental Studies | 3 |
| JRN 2050 | Introduction to Journalism | 3 |
| LIT 2000 | Literature and Culture (FE) ${ }^{1}$ | 2 |
| PHL 2011 | Ethics (FE) | 3 |
| WRI 2020 | Introduction to Creative Writing | 3 |
| Choose one (1) cour | urse from each group: | 7-8 |
| Biology: |  |  |
| BIO 1005 and BIO 1005L | Ecology and Conservation (FE) and Ecology and Conservation Laboratory (FE) |  |
| BIO 2011 and BIO 2011L | Ecological and Evolutionary Systems (FE) and Ecological and Evolutionary Systems Laboratory (FE) |  |
| Social Impact: |  |  |
| POL 1090 | The Politics of Race, Class, and Gender (FE) |  |
| SOC 2001 | Cultural Anthropology (FE) |  |
| SWF 1000 | Living Justly in Contemporary Society (FE) |  |

## Upper-Division 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 (FE) | 3 |
| WRI 3065 | Professional Writing | 3 |
| WRI 4000 | Writing for the Community | 3 |
| Choose one (1) course from each group: | $7-9$ |  |

Social Justice:

| SOC 4035 | Environmental Sociology |
| :--- | :--- |
| SOC 4044 | Globalization and Culture |
| THE 4090 | Special Studies in Theology |

THE 4090 Special Studies in Theology
Cultural Studies:

| HIS 3060 | Wilderness in the American Mind |
| :--- | :--- |
| LIT 4046 | Romantic Literature |
| LIT 4048 | Postcolonial Classics and Theory |
| Language: |  |
| FRE 2050 | Intermediate French I |
| FRE 2051 | Intermediate French II |
| FRE 3003 | French Conversation |
| SPA 2050 | Intermediate Spanish Conversation I |
| SPA 2051 | Intermediate Spanish Conversation II |
| SPA 3000 | Civic Engagement: Conversation, Culture, and |

Approved immersion experience in another language

## Elective Courses

Choose six (6) units from the following: 6

| COM 2031 | Argumentation and Debate (FE) |
| :--- | :--- |
| COM 3000 | Narrative and Documentary Film |
| COM 3030 | Persuasion |
| COM 3050 | Electronic Media in Communication |
| COM 3090 | Introduction to Public Relations |
| COM 3095 | Media Literacy |
| COM 4005 | Public Relations Cases and Campaigns |
| JRN 3010 | Advanced Reporting |
| JRN 3012 | Television News Writing |
| JRN 3013 | Television News Production |
| JRN 3014 | Computer-Assisted Reporting |
| JRN 3040 | Media Law and Ethics |
| JRN 3045 | Editing |
| JRN 3050 | Special Topics in Journalism |
| JRN 3055 | Public Relations Writing |
| JRN 4013 | Advanced Television News Production |
| JRN 4030 | Multimedia Journalism |
| JRN 4040 | Magazine Editing and Concepts |
| WRI 3021 | Creative Writing: Poetry |
| WRI 3022 | Creative Writing: Fiction |
| WRI 3023 | Creative Writing: Creative Nonfiction |
| WRI 4020 | Advanced Writing Workshop |
| Total Units |  |

${ }^{1}$ Select the course section for "Nature Writing."

## Possible Minors

- Biology: Environmental Biology Minor (p. 113)
- French Minor (p. 72)
- History Minor (p. 52)
- International Development Minor (p. 186)
- Literature Minor (p. 72)
- Media Communication Minor (p. 40)
- Multimedia Journalism Minor (p. 72)
- Nonprofit Organization Management Minor (p. 187)
- Public Relations Minor (p. 187)
- Spanish Minor (p. 73)
- Sustainability Studies Minor (p. 73)
- Writing Minor (p. 74)


## Possible Double Majors

- International Studies, B.A. (p. 47)
- Literature, B.A. (p. 67)
- Multimedia Journalism, B.A. (p. 68)
- Writing, B.A. (p. 70)


## 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.

| Code | Title | Units |
| :--- | :--- | :--- |
| Lower-Division Requirements |  |  |
| FRE 1001 | Elementary French I (FE) | 4 |
| FRE 1002 | Elementary French II (FE) | 4 |
| FRE 2050 | Intermediate French I | 3 |
| FRE 2051 | Intermediate French II | 3 |
| 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 |
| FRE 4020 | Studies in French Literature | 3 |


| FRE $4095 \quad$ Literary Theory Capstone | 3 |
| :--- | ---: |
| Two (2) additional FRE courses taken abroad ${ }^{1}$ 6-9 |  |
| Total Units |  |
| Note(s): |  |
| 1 <br> Taken in France or a Francophone country (6 units) or 9 units of which <br> 3 could be equivalent to one PLNU course. Subject to Department <br> approval. |  |

## Note(s):

Taken in France or a Francophone country ( 6 units) or 9 units of which approval.

## 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. (p. 25) (Single Subject Art California Teaching Credential)
- Biology, B.A. (p. 109) (Single Subject Science California Teaching Credential)
- Health and Human Performance, B.A. (p. 99) (Single Subject Physical Education California Teaching Credential)
- French, B.A. (p. 66) (Single Subject World Languages: French California Teaching Credential)
- History, B.A. (p. 45) (Single Subject Social Sciences Teaching Credential)
- Literature-English Education, B.A. (p. 67) (Single Subject English Teaching Credential)
- Mathematics, B.S. (p. 137) (Single Subject Mathematics Teaching Credential)
- Music Education, B.A. (p. 88) (Single Subject Music California Teaching Credential)
- Spanish, B.A. (p. 69) (Single Subject World Languages: Spanish California Teaching Credential)

For the 4 -year credential track, the following 3000 or 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 3rd credential course, meeting all program, university and state requirements for classroom observations and tests required prior to student teaching. Students will be vetted through a screening process, which may include a faculty interview, prior to being placed in student teaching. Candidates major in the academic discipline of their choice (e.g. Kinesiology) 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

| Code | Title | Units |
| :---: | :---: | :---: |
| EDU 3002 | Foundations of Education and Learning Theory ${ }^{1}$ | 3 |
| EDU 3006 | Principles of Language Acquisition ${ }^{1}$ | 3 |
| EDU 4004 | Foundations of Special Education ${ }^{1}$ | 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 ${ }^{1}$ | 3 |
| EDU 4021 | General Methods for Secondary Teachers ${ }^{1}$ | 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 |
| Choose one (1) course from the following based on major: |  | 3 |
| EDU 4033 | Methods for Teaching Secondary Mathematics (Mathematics Majors) |  |
| EDU 4034 | Methods of Teaching Secondary Science (Biology Major) ${ }^{2}$ |  |
| EDU 4035 | Methods of Teaching Secondary Social Science (History Majors) |  |
| EDU 4036 | Methods for Teaching Secondary Foreign Language (French/Spanish Majors) |  |
| EDU 4037 | Methods for Teaching Secondary Visual Arts (Art Education Majors) ${ }^{3}$ |  |
| EDU 4038 | Methods for Teaching Secondary Physical Education (Exercise and Sports Science Majors) |  |
| EDU 4039 | Content-Specific Pedagogy for Secondary Teachers (Music Education Majors) ${ }^{4}$ |  |

## Total Units

${ }^{1}$ Requires 20 hours of supervised field experience working with students in a classroom setting.
${ }^{2}$ BIO 4063 also satisfies this credential requirement.
${ }^{3}$ ART 4055 also satisfies this credential requirement.
${ }^{4}$ MUE 4054 also satisfies this credential requirement.

## Literature, B.A.

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 (p. 67)
- English Education (p. 67)


## Literature Concentration

| Code | Title | Units |
| :--- | :--- | ---: |
| Lower-Division Requirements |  |  |
| LIT 2052 | World Literatures: Ancient and Medieval <br> 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 |

Upper-Division Requirements
LIN 3012 Introduction to Linguistics 3

| or LIN 3065 | English Grammar and Usage |  |
| :--- | :--- | :--- |
| LIT 3000 | Literary Analysis | 3 |

LIT 3050 Diverse Voices of World Literature (FE) 3
or LIT 3051 Diverse Voices of Cinema (FE)
LIT 3052 Diverse Voices of American Literature (FE) 3
or LIT 3053 Diverse Voices of Women Writers (FE)

| LIT 4000 | American Literature to 1900 | 3 |
| :--- | :--- | :--- |
| LIT 4020 | American Literature |  |

LIT 4020 American Literature Since 1900

| or SPA 3020 | Mexican American Literature and Culture |  |
| :--- | :--- | :--- |
| LIT 4048 | Postcolonial Classics and Theory | 3 |

LIT 4050 The Novel 3
LIT 4061 Shakespeare 3
LIT 4095 Literary Theory and Scholarship 3
Choose three (3) courses from the following: 9

| LIT 4044 | Medieval Literature |
| :--- | :--- |
| LIT 4045 | 17th Century English Literature |
| LIT 4046 | Romantic Literature |
| LIT 4047 | Victorian Literature |

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## English Education Concentration

| Code | Title | Units |
| :--- | :--- | :--- |
| Lower-Division Requirements |  |  |
| COM 2031 | Argumentation and Debate (FE) | 3 |
| JRN 2050 | Introduction to Journalism | 3 |
| LIT 2052 | World Literatures: Ancient and Medieval | 3 |
|  | 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 | 2 |


| Upper-Division Requirements |  |  |
| :---: | :---: | :---: |
| LIT 3000 | Literary Analysis | 3 |
| LIN 3012 | Introduction to Linguistics | 3 |
| LIT 3051 | Diverse Voices of Cinema (FE) | 3 |
| LIN 3065 | English Grammar and Usage | 3 |
| LIT 4044 <br> or LIT 4045 | Medieval Literature <br> 17th Century English Literature | 3 |
| $\begin{aligned} & \text { LIT } 4046 \\ & \text { or LIT } 4047 \end{aligned}$ | Romantic Literature <br> Victorian Literature | 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 3070 | Writing Theory and Pedagogy | 2 |
| WRI 4000 | Writing for the Community | 3 |
| Choose one (1) course from the following: |  | 3 |
| LIT 4000 | American Literature to 1900 |  |
| LIT 4020 | American Literature Since 1900 |  |
| SPA 3020 | Mexican American Literature and Culture |  |
| Total Units |  | 61 |

## 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) (p. 227)

## 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.

## Concentrations

- Visual Storytelling (p. 68)
- Writing (p. 68)

| Visual Storytelling Concentration |  |  |
| :---: | :---: | :---: |
| Code | Title | Units |
| Lower-Division Requirements |  |  |
| COM 1050 | Introduction to Media Communication | 3 |
| COM 2043 | Introduction to TV and Film Production | 3 |
| JRN 2015 | Newspaper Workshop (3 units required) ${ }^{1}$ | 3 |
| JRN 2050 | Introduction to Journalism | 3 |
| Choose one (1) course from the following: |  |  |
| LIT 2052 | World Literatures: Ancient and Medieval Literatures |  |
| LIT 2054 | British Writers I |  |
| LIT 2055 | British Writers II |  |
| LIT 2056 | American Writers I |  |
| LIT 2057 | American Writers II |  |


| 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 |
| Choose one (1) additional upper-division literature course beyond FE | 3 |  |
| 2 |  | 3 |
| Concentration Courses | 3 |  |
| 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 | 1 |
| JRN 4025 | Advanced Television Workshop | 48 |
| Total Units |  | 3 |

1 COM 2075, JRN 2017, JRN 2018, or WRI 2016 may substitute for two (2) of these units.
${ }^{2}$ Eligible courses are listed under French, Literature, or Spanish.

## Writing Concentration

Code Title Units

Lower-Division Requirements

| COM 1050 | Introduction to Media Communication | 3 |
| :--- | :--- | :--- |
| COM 2043 | Introduction to TV and Film Production | 3 |
| JRN 2015 | Newspaper Workshop (3 units required) |  |
| JRN 2050 | Introduction to Journalism | 3 |
| Choose one (1) course from the following: | 3 |  |


| LIT 2052 | World Literatures: Ancient and Medieval <br> Literatures |
| :--- | :--- |
| LIT 2054 | British Writers I |
| LIT 2055 | British Writers II |
| LIT 2056 | American Writers I |
| LIT 2057 | American Writers II |


| 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 |
| Choose one (1) additional upper-division literature course beyond FE 2 |  | 3 |
| Concentration Courses |  |  |
| JRN 3010 | Advanced Reporting | 3 |
| JRN 3045 | Editing | 3 |
| JRN 4040 | Magazine Editing and Concepts | 3 |
| Choose one (1) course from the following: |  | 3 |
| WRI 3021 | Creative Writing: Poetry |  |
| WRI 3022 | Creative Writing: Fiction |  |
| WRI 3023 | Creative Writing: Creative Nonfiction |  |
| WRI 4000 | Writing for the Community |  |

Total Units
47
${ }^{1}$ COM 2075, JRN 2017, JRN 2018, or WRI 2016 may substitute for two (2) of these units.

2 Eligible courses are listed under French, Literature, or Spanish.

## Multimedia Journalism Major with a Minor in Spanish

The Department offers a Multimedia Journalism major with a Spanish Minor (p. 73). 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) (p. 227)

## 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.

| Code | Title | Units |
| :--- | :--- | ---: |
| Lower-Division Requirements |  |  |
| SPA 1001 | Elementary Spanish I (FE) | 4 |
| SPA 1002 | Elementary Spanish II (FE) | 4 |
| SPA 2050 | Intermediate Spanish Conversation I | 3 |
| SPA 2051 | Intermediate Spanish Conversation II |  |
| Upper-Division Requirements | 3 |  |
| SPA 3000 | Civic Engagement: Conversation, Culture, and <br>  <br> Community | 3 |
| SPA 3002 | Advanced Grammar and Reading |  |
| 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 4000 | Peninsular Literature Before 1800 | 3 |
| or SPA 4002 | Peninsular Literature Since 1800 | 3 |
| SPA 4037 | Latin American Literature Before 1910 | 3 |
| or SPA 4039 | Latin American Literature Since 1910 | 3 |
| SPA 4085 | Senior Seminar in Spanish | 44 |

Note(s): Take six upper-division study-abroad units approved by the Department and Dean of the College of Arts and Humanities (p. 22). Study abroad courses can substitute for or complement courses required in the major.

## 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. (p. 25) (Single Subject Art California Teaching Credential)
- Biology, B.A. (p. 109) (Single Subject Science California Teaching Credential)
- Health and Human Performance, B.A. (p. 99) (Single Subject Physical Education California Teaching Credential)
- French, B.A. (p. 66) (Single Subject World Languages: French California Teaching Credential)
- History, B.A. (p. 45) (Single Subject Social Sciences Teaching Credential)
- Literature-English Education, B.A. (p. 67) (Single Subject English Teaching Credential)
- Mathematics, B.S. (p. 137) (Single Subject Mathematics Teaching Credential)
- Music Education, B.A. (p. 88) (Single Subject Music California Teaching Credential)
- Spanish, B.A. (p. 69) (Single Subject World Languages: Spanish California Teaching Credential)

For the 4 -year credential track, the following 3000 or 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 3rd credential course, meeting all program, university and state requirements for classroom observations and tests required prior to student teaching. Students will be vetted through a screening process, which may include a faculty interview, prior to being placed in student teaching. Candidates major in the academic discipline of their choice (e.g. Kinesiology) 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 $6000-\mathrm{level}$ 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

| Code | Title | Units |
| :---: | :---: | :---: |
| EDU 3002 | Foundations of Education and Learning Theory ${ }^{1}$ | 3 |
| EDU 3006 | Principles of Language Acquisition ${ }^{1}$ | 3 |
| EDU 4004 | Foundations of Special Education ${ }^{1}$ | 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 ${ }^{1}$ | 3 |
| EDU 4021 | General Methods for Secondary Teachers ${ }^{1}$ | 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 |
| Choose one | use from the following based on major: | 3 |
| EDU 4033 | Methods for Teaching Secondary Mathematics (Mathematics Majors) |  |
| EDU 4034 | Methods of Teaching Secondary Science (Biology Major) ${ }^{2}$ |  |
| EDU 4035 | Methods of Teaching Secondary Social Science (History Majors) |  |
| EDU 4036 | Methods for Teaching Secondary Foreign Language (French/Spanish Majors) |  |
| EDU 4037 | Methods for Teaching Secondary Visual Arts (Art Education Majors) ${ }^{3}$ |  |
| EDU 4038 | Methods for Teaching Secondary Physical Education (Exercise and Sports Science Majors) |  |

EDU 4039 Content-Specific Pedagogy for Secondary Teachers (Music Education Majors) ${ }^{4}$

## Total Units

${ }^{1}$ Requires 20 hours of supervised field experience working with students in a classroom setting.
${ }^{2}$ BIO 4063 also satisfies this credential requirement.
${ }^{3}$ ART 4055 also satisfies this credential requirement.
${ }^{4}$ 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.

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| JRN 2050 | Introduction to Journalism | 3 |
| WRI 2020 | Introduction to Creative Writing | 3 |
| Choose one (1) course from the following: |  | 3 |
| LIT 2054 | British Writers I |  |
| LIT 2055 | British Writers II |  |
| LIT 2056 | American Writers I |  |
| LIT 2057 | American Writers II |  |
| Choose four (4) units from the following: |  | 4 |
| JRN 2015 | Newspaper Workshop ${ }^{1}$ |  |
| JRN 2017 | Yearbook Workshop ${ }^{1}$ |  |
| WRI 2016 | Literary Magazine Workshop ${ }^{1}$ |  |
| Choose two (2) courses from the following: |  | 6 |
| WRI 3021 | Creative Writing: Poetry ${ }^{2}$ |  |
| WRI 3022 | Creative Writing: Fiction ${ }^{2}$ |  |
| WRI 3023 | Creative Writing: Creative Nonfiction ${ }^{2}$ |  |
| Upper-Division Requirements |  |  |
| JRN 3045 or JRN 4040 | Editing <br> Magazine Editing and Concepts | 3 |
| LIN 3012 or LIN 3065 | Introduction to Linguistics English Grammar and Usage | 3 |
| LIT 3000 | Literary Analysis | 3 |
| WRI 3065 | Professional Writing | 3 |
| WRI 4000 | Writing for the Community | 3 |
| WRI 4020 | Advanced Writing Workshop | 3 |
| WRI 4070 | Internship in Writing | 2 |
| Choose one (1) course from the following not already taken: |  | 2-3 |


| JRN 4030 | Multimedia Journalism |
| :--- | :--- |
| JRN 4040 | Magazine Editing and Concepts |


| WRI 3070 | Writing Theory and Pedagogy |
| :---: | :---: |
| Upper-Division Literature Course |  |
| Choose one 3 | itional upper-division literature course beyond FE |
| Total Units |  |
| ${ }^{1}$ Each may be taken more than once (may substitute JRN 3014 for two <br> (2) units of JRN 2015/WRI 2016/JRN 2017). <br> ${ }^{2}$ May be repeated once for credit with instructor's consent. <br> ${ }^{3}$ Eligible courses are listed under French, Literature, or Spanish. |  |
| 4+1 Master of Arts in Writing |  |
| PLNU undergraduate students can apply to enter the $4+1$ MA in Writing program at the end of their sophomore year. Once accepted into the $4+1$ program, students can take undergrad/graduate cross-listed courses for up to 15 units of graduate level courses to account for their undergraduate degree, and receive graduate credit up to the first year of their MA in Writing degree ( 15 units of the 30 required for the degree). These 15 units will account for WRI 5020/WRI 6020 - Writing |  |

## 4+1 MA in Writing Admissions Requirements

1. Students must have completed WRI 2020.
2. Students must have taken a minimum of two additional writing courses between WRI 3021, WRI 3022, and WRI 3023.
3. Students must have a minimum GPA of 3.000 in those three writing courses.
4. Students' readiness for graduate study must be confirmed by the writing faculty (assessed by writing sample and interview with program lead).

## 4+1 MA in Writing Courses

Students in the 4+1 MA in Writing program may take up to 15 units of the following during their baccalaureate degree:

| Code | Title | Units |
| :---: | :---: | :---: |
| WRI 5020 | Writing Across the Genres | 3 |
| Choose two (2) | erature courses from the following: | 6 |
| LIT 5000 | American Literature to 1900 |  |
| LIT 5020 | American Literature Since 1900 |  |
| LIT 5044 | Medieval Literature |  |
| LIT 5045 | 17th Century English Literature |  |
| LIT 5046 | Romantic Literature |  |
| LIT 5047 | Victorian Literature |  |
| LIT 5048 | Postcolonial Classics and Theory |  |
| LIT 5050 | The Novel |  |
| LIT 5061 | Shakespeare |  |
| LIT 5090 | Seminar in Literature |  |
| SPA 5000 | Peninsular Literature Before 1800 |  |
| SPA 5002 | Peninsular Literature Since 1800 |  |
| SPA 5020 | Mexican American Literature and Culture |  |


| SPA 5037 | Latin American Literature Before 1910 |  |
| :---: | :--- | :--- |
| SPA 5039 | Latin American Literature Since 1910 |  |
| SPA 5080 | Genre/Period Studies in Hispanic Literature or Film |  |
| Choose two (2) | Writing Genre courses from the following: | 6 |
| WRI 5021 | Poetry Workshop |  |
| WRI 5022 | Fiction Workshop |  |
| WRI 5023 | Nonfiction Workshop |  |
| WRI 5024 | Scriptwriting Workshop |  |
| WRI 5025 | Special Topic in Writing | 3 |
| Post-Baccalaureate Finishing Courses | 3 |  |
| WRI 6060 | Literary Editing and Publishing | 3 |
| WRI 6400 | Advanced Workshop | 6 |
| WRI 6500 | Masters Thesis | $\mathbf{3 0}$ |
| Six (6) additional | 6000-level units from Literature or Writing Genres | 6 |
| Total Units |  |  |

## Note(s):

- 5000-level courses listed above can be taken for dual undergrad/ graduate credit as a part of the Master's in Writing 4+1 track if the student applies and is accepted into the MA in Writing 4+1 program at the end of their sophomore year.
- 4+1 students cannot enroll in the Pedagogy Concentration courses WRI 6001 and WRI 6002. These courses are only for Graduate TAs enrolled in the MA in Writing program.


## 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.

| Code | Title | Units |
| :--- | :--- | ---: |
| Core Courses |  |  |
| COM 2043 | Introduction to TV and Film Production | 3 |
| COM 3000 | Narrative and Documentary Film | 3 |
| LIT 2000 | Literature and Culture (FE) $^{1}$ | 2 |

Elective Courses

| Choose nine (9) units taken from three (3) separate disciplines: |
| :--- |
| Communication: |
| COM 4020 |
| COM 4042 Communication Practicum II <br> COM 4043 Field Television Production <br> COM 4090 Special Studies in Communication <br> History:  <br> HIS 3068 Modern China Through Film <br> HIS 4090 Special Studies in History <br> Literature, Journalism, Writing, and Languages:  <br> LIT 3051 Diverse Voices of Cinema (FE) <br> LIT 4090 Special Studies in Literature <br> SPA 3080 Genre/Period Studies in Hispanic Literature or Film <br> SPA 4090 Special Studies in Spanish <br> Theology and Christian Ministry:  <br> PHL 3080 Alienation, Transformation, and Reconciliation in <br> Total Units Film |

1 Course subtitle must be "Film Adaptation."

Note(s): COM 1075 is recommended, but cannot be substituted for a required or elective course for this minor.

## 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 nine (9) upper-division units in residence.
- Successfully complete the following courses:

| Code | Title | Units |
| :--- | :--- | ---: |
| Lower-Division Requirements |  |  |
| FRE 1001 | Elementary French I (FE) | 4 |
| FRE 1002 | Elementary French II (FE) | 4 |
| FRE 2050 | Intermediate French I | 3 |
| FRE 2051 | Intermediate French II (or equivalent) | 3 |
| 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 Units |  | $\mathbf{2 6}$ |

## Literature Minor

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| LIT 2000 | Literature and Culture (FE) | 2 |
| LIT 3000 | Literary Analysis | 3 |
| Upper-Division Requirements |  |  |
| LIT 4061 | Shakespeare | 3 |
| Choose one (1) course from the following: |  | 3 |
| LIT 3050 | Diverse Voices of World Literature (FE) |  |
| LIT 3051 | Diverse Voices of Cinema (FE) |  |
| LIT 3052 | Diverse Voices of American Literature (FE) |  |
| LIT 3053 | Diverse Voices of Women Writers (FE) |  |
| Two (2) Additional Non-FE Upper-Division LIT courses |  | 6 |
| 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.

| Code | Title | Units |
| :---: | :---: | :---: |
| 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 |
| Choose one (1) course from the following: |  | 3 |
| JRN 3014 | Computer-Assisted Reporting |  |
| JRN 3050 | Special Topics in Journalism |  |
| JRN 4030 | Multimedia Journalism |  |
| Choose one (1) course from the following: |  | 3 |
| JRN 3010 | Advanced Reporting |  |
| JRN 3045 | Editing |  |
| JRN 4040 | Magazine Editing and Concepts |  |
| Choose one (1) course from the following: |  | 3 |
| JRN 3012 | Television News Writing |  |
| JRN 3013 | Television News Production |  |

## 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.

| Code | Title | Units |
| :--- | :--- | ---: |
| Required Courses |  |  |
| 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 | $\mathbf{3}$ |
| Total Units |  | $\mathbf{2 1}$ |

## 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.

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| SPA 1001 | Elementary Spanish I (FE) | 4 |
| SPA 1002 | Elementary Spanish II (FE) | 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 |
| Choose two | urses from two (2) different categories below: | 6 |
| Literature: |  |  |
| SPA 3020 | Mexican American Literature and Culture |  |
| SPA 3080 | Genre/Period Studies in Hispanic Literature or |  |
| SPA 4000 | Peninsular Literature Before 1800 |  |
| SPA 4002 | Peninsular Literature Since 1800 |  |
| SPA 4037 | Latin American Literature Before 1910 |  |
| SPA 4039 | Latin American Literature Since 1910 |  |
| Culture: |  |  |
| SPA 3010 | Latin American Culture and Civilization |  |
| SPA 3015 | Culture and Civilization of Spain |  |
| Linguistics: |  |  |
| SPA 3090 | Current Spanish Linguistics |  |

Total Units
Note(s):

- 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 and collectively addressing those challenges. As an interdisciplinary minor, Sustainability Studies, connects expertise in the sciences, humanities, theology, and business as well as requires 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.

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| $\begin{aligned} & \text { ESI } 2050 \\ & \text { or SOC } 2001 \end{aligned}$ | Introduction to Environmental Studies Cultural Anthropology (FE) | 3 |
| Choose one (1) course from the following: 4 |  |  |
| BIO 1002 | Environment and People (FE) |  |
| BIO 1005 and BIO 1005 | Ecology and Conservation (FE) and Ecology and Conservation Laborat |  |


| Upper-Division Requirements |  |  |
| :---: | :---: | :---: |
| BUS 4075 | Sustainability in Action | 3 |
| THE 3005 or THE 3070 | Christian Faith and the Natural Sciences (FE) Global Christianity (FE) | 3 |
| Choose two (2) co | urses from the following: | 6-7 |
| ECO 3015 | Theories of Economic Development |  |
| ESI 4020 | Advanced Environmental Studies |  |
| HIS 3060 | Wilderness in the American Mind |  |
| LIT 4046 | Romantic Literature |  |
| LIT 4048 | Postcolonial Classics and Theory |  |
| MGT 4070 | Nonprofit Organization Management |  |
| POL 4035 | Global Governance |  |
| SOC 4035 | Environmental Sociology |  |
| SOC 4044 | Globalization and Culture |  |
| WRI 3065 | Professional Writing |  |
| Internship, Practicum, or Research Project |  |  |
| An Internship, Pra sustainability ${ }^{1,2}$ | cticum, or Research Project addressing | 0-4 |

## Total Units

19-24
${ }^{1}$ Minimum of 40 hours work requirement; may be taken for credit.
2 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 forcredit course drawn from any major's internship, research project or practicum courses.

## 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 lowerdivision and upper-division courses:

| Code | Title | Units |
| :--- | :--- | ---: |
| Lower-Division Requirements |  |  |
| POL 1090 The Politics of Race, Class, and Gender (FE) 4 <br> Upper-Division Requirements   <br> POL 3030 The Development of Feminist Thought 4 <br> Choose a minimum of nine (9) units from the following: 9  <br> CHU 3040 Women in the Christian Tradition (FE)  <br> COM 3012 Gender and Communication  <br> ECO 4040 The Economics of Race, Class, and Gender  <br> HIS 4077 Gender and Law in the U.S.  <br> LIT 3053 Diverse Voices of Women Writers (FE)  <br> NUT 3040 Nutrition in Women's Wellbeing  <br> POL 4015 Women and Politics 17 <br> PSY 3060 Human Sexuality  <br> Total 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.

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| Choose one (1) course from the following: |  | 3 |
| COM 1075 | Scriptwriting for Television and Film |  |
| JRN 2050 | Introduction to Journalism |  |
| WRI 2020 | Introduction to Creative Writing |  |
| Upper-Division Requirements |  |  |
| WRI 3065 | Professional Writing | 3 |
| Choose three (3) courses from the following: |  | 8-9 |
| COM 4014 | Long-Form Broadcast News ${ }^{1}$ |  |
| JRN 3012 | Television News Writing ${ }^{1}$ |  |
| JRN 3014 | Computer-Assisted Reporting ${ }^{1}$ |  |
| JRN 3045 | Editing ${ }^{1}$ |  |
| JRN 3055 | Public Relations Writing ${ }^{1}$ |  |
| JRN 4040 | Magazine Editing and Concepts ${ }^{1}$ |  |
| LIN 3012 | Introduction to Linguistics |  |
| LIN 3065 | English Grammar and Usage |  |
| TRE 4090 | Special Studies in Theatre (with playwriting content) |  |
| WRI 3021 | Creative Writing: Poetry |  |
| WRI 3022 | Creative Writing: Fiction |  |
| WRI 3023 | Creative Writing: Creative Nonfiction |  |


| WRI 3070 | Writing Theory and Pedagogy ${ }^{1}$ |  |
| :---: | :---: | :---: |
| WRI 4000 | Writing for the Community |  |
| WRI 4020 | Advanced Writing Workshop ${ }^{1}$ |  |
| WRI 4090 | Special Studies in Writing/Journalism ${ }^{1}$ |  |
| Choose two (2) units from the following: |  | 2 |
| JRN 2015 | Newspaper Workshop ${ }^{2}$ |  |
| JRN 2017 | Yearbook Workshop ${ }^{2}$ |  |
| WRI 2016 | Literary Magazine Workshop ${ }^{2}$ |  |
| Total Units |  |  |

Course carries a prerequisite.
2 Each may be taken more than once (may substitute WRI 4070 for two units of JRN 2015/WRI 2016/JRN 2017).

## French Language Certificate

A French Language Certificate is for students interested in improving their conversational skills but who cannot complete the minor.
$\left.\begin{array}{llr}\text { Code } & \text { Title } & \text { Units } \\ \text { Required Courses } & \\ \hline \text { FRE 2050 } & \text { Intermediate French I }^{1} & 3 \\ \hline \text { FRE 2051 } & \text { Intermediate French II }^{\text {FRE 3003 }} & \text { French Conversation }\end{array}\right] 3$
${ }^{1}$ FRE 1001 and FRE 1002 are pre-requisites to FRE 2050

## Spanish Language Certificate

A Spanish Language Certificate is for students interested in improving their conversational skills but who cannot complete the minor.

| Code | Title | Units |
| :--- | :--- | ---: |
| Required Courses |  |  |
| SPA 2050 | Intermediate Spanish Conversation I |  |

Total Units
${ }^{1}$ SPA 1001 and SPA 1002 are prerequisites to SPA 2050.

## 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
- 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 (see 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 MUA 1055C is private instruction in voice emphasizing pop and commercial technique.

| Code | Title | Units |
| :--- | :--- | :---: |
| Private Voice |  |  |
| MUA 1055 | Private Voice (1 st Year) | $1-2$ |
| MUA 2055 | Private Voice (2nd Year) | $1-2$ |
| MUA 3055 | Private Voice (3rd Year) | $1-2$ |
| MUA 4055 | Private Voice (4th Year) | $1-2$ |

## Faculty

Chair - Daniel Jackson, D.W.S.
Charles Celaya, M.M.
University of Miami
William Clemmons, Ph.D.
City University of New York
Daniel Jackson, D.W.S.
Institute for Worship Studies
Victor Labenske, D.M.A.
University of Southern California
Bruce Mansfield, D.M.A.
Arizona State University
Keith Pedersen, D.M.A.
University of Illinois
Philip Tyler, D.Mus.
Florida State University
To view requirements for majors, minors, and certificates, see the Degree Program Information (p. 244) page.

- Commercial Music, B.A. (p. 85)
- Composition, Bachelor of Music (p. 86)
- Music, B.A. (p. 90)
- Music and Worship, B.A. (p. 87)
- Music Education, B.A. (p. 88)
- Performance, Bachelor of Music (p. 91)
- Music Minor (p. 92)


## Church Music

CMU 3014 Music and Worship (3 Units)
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 Units) 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 Units)
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 Units)
Supervised internship in a church situation.
Prerequisite(s): Consent of instructor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships

CMU 4090 Special Studies in Church Music (1-2 Units)
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 Units)
Provides for special courses offered as an adjunct to the curricula. Seminar title, content, and units to be announced in class schedule.

## Commercial Music

## MCM 1000 Introduction to Commercial Composition (1 Unit)

An introduction to modern composition processes through lead sheet writing including harmonic progression, melodic development, form, style, and notation.

## MCM 3024 Songwriting (2 Units)

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 Units)

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 four (4) units
Prerequisite(s): MUT 1020

## MCM 3035 Arranging I (2 Units)

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 3036 The Business of Music (2 Units)
This course is a study of the major functional areas of the music business. Attention is given to copyright, publishing, revenue streams, contracts, marketing, promotion, professional partnerships, and current best practices.

MCM 4035 Arranging II (2 Units)
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 Unit)
A public performance, approximately forty-five minutes in length, given in the student's major performing area
Prerequisite(s): Senior standing.

## Music Technology

MTC 1000 Introduction to Music Technology (1 Unit)
This course is an introduction to the fundamental technologies involved in professional music production, performance, and analysis. Primary areas of focus include the terminology of technology, signal flow, history of audio technology, the digital audio workstation, and digital music notation.

MTC 3027 Digital Audio I (2 Units)
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 Units)
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 4095 Production and Recording Techniques (3 Units)
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.

## Music Applied Instruction

MUA 1001 Recital Attendance - 4 semesters (0 Units)
All Music majors are required to attend 12 department-sponsored or approved concerts/recitals each semester
Credit/No Credit.
MUA 1031 Class Voice (1 Unit)
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
May be repeated.

## MUA 1041 Class Piano I (1 Unit)

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 Unit)

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 Unit)
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 two (2) units.
Prerequisite(s): MUA 1042 or consent of instructor.

## MUA 1055 Private Voice (1-2 Units)

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 Units)

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 Units)

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 Units)

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 Units)
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 Units)

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 Units)
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 Units)
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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)
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 Units)

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 Units)

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 Units)

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 2002 Guitar Proficiency Exam (0 Units)
Music Education majors are required to pass a proficiency examination in guitar 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 Units)
Introduction to basic conducting techniques, such as score reading, metric patterns, cues and cutoffs.

## MUA 2052 Diction for Singers (3 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)
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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 3014 Advanced Conducting (3 Units)

Providing an extension to techniques and principles learned in MUA 2012, students will focus on score study and the development of expressive conducting techniques. Skills in error detection interpretation, conducting nuance, and general rehearsal techniques will be explored.
Prerequisite(s): MUA 2012 and MUT 2020
MUA 3031 Acting For Singers (1 Unit)
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 two (2) units.
MUA 3032 Musical Theater Production (1-2 Units)
Performance experience in musical theatre, open to all students by audition.

## MUA 3055 Private Voice (1-2 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)
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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)
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 Units)
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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)
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 3077 Solo Recital for Music Education (0 Units)
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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)
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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 (O Units)

A public solo recital, approximately one hour in length, given in the student's major performing area.
Prerequisite(s): MUA 3076

## Music Composition

MUC 2052 Private Composition (1-2 Units)
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 four (4) units.
"C" Designation is for Commercial Music.
MUC 3052 Private Composition (1-2 Units)
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 four (4) units.
Prerequisite(s): MUC 2052
"C" Designation is for Commercial Music.
MUC 4052 Private Composition (1-2 Units)
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 four (4) units.
Prerequisite(s): MUC 3052
" C " Designation is for Commercial Music.
MUC 4077 Senior Recital in Composition (O Units)
A public recital of original compositions, forty-five minutes in length. Prerequisite(s): MUC 4052
MUC 4095 Seminar in Composition (1-2 Units)
Provides for special courses offered as an adjunct to the curricula.

## Music Education

MUE 2000 Introduction to Music Teaching and Learning (2 Units) This course provides an orientation to the fundamental principles, theories, and practices of music teaching and learning. This course will survey the history of school music education in America and highlight broader contexts beyond TK-12 education. Course activities include observations and hands-on experiences with formal school music programs, informal music making, and community music contexts.

## MUE 2001 Woodwind Methods (1 Unit)

A laboratory class in playing the woodwind instruments with emphasis on teaching and basic repair techniques.

## MUE 2002 Brass Methods (1 Unit)

A laboratory class in playing brass instruments with emphasis on teaching and basic repair techniques.
MUE 2003 Percussion Methods (1 Unit)
A laboratory class in playing the percussion instruments with emphasis on teaching and basic repair techniques.
MUE 2004 String Methods (1 Unit)
A laboratory class in playing the string instruments (violin, viola, cello, bass) with emphasis on teaching and basic repair techniques.
MUE 3004 Choral Music Methods (3 Units)
Designed to help prepare students to become effective choral music educators. Students focus on vocal production and technique, repertoire selection, effective rehearsal strategies, and program development.
MUE 3010 Vocal Pedagogy (2 Units)
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 Teaching (2 Units)
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 3012 Teaching Instrumental Lessons (3 Units)

A survey of the methods and materials used in teaching private instrumental lessons with special emphasis upon teaching elementary students and the adult beginner. Includes observation of private studio teaching.
MUE 3041 Music Skills for the Elementary Classroom Teacher (3 Units) 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 Music Methods (3 Units)

Methods of teaching public school music in the elementary grades.

## Prerequisite(s): MUT 1021

MUE 4051 Internship in Music (1-2 Units)
Supervised internship in the student's major concentration.
May be repeated up to a total of four (4) units.
Prerequisite(s): Consent of instructor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.
MUE 4054 Instrumental Music Methods (3 Units)
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 4060 Music Education Practicum (1 Unit)
This course offers a capstone experience for music education majors by providing hands-on opportunities for students to apply concepts and strategies learned through their MUE coursework. Students are placed with a mentor teacher at a local TK-12 school site.

## MUE 4090 Special Studies in Music Education (1-2 Units)

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 Units)
Provides for special courses offered as an adjunct to the curricula. Seminar title, content, and units to be announced in class schedule. May be repeated for up to a total of eight (8) units; once per semester.

## Music History

MUH 1000 Introduction to Music (FE) (2 Units)
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 (FE) (2 Units)

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 Units)
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 Units)
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 3034 World Music (2 Units)
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 Units)
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 3040 History of Western Music I (3 Units)
Study of Western art music, from Medieval to the Baroque, approximately 500-1750 A.D., with an emphasis on literature, development, and an introduction to musicological principles.

MUH 3041 History of Western Music II (3 Units)
Study of Western art music, focusing on the principal trends from the Classical to the Modern periods, approximately 1750 A.D. to the present day, with an emphasis on literature, analysis, and music research.

## MUH 4031 Faith, Life, and Music (2 Units)

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 Units)
Provides for special courses offered as an adjunct to the curricula.
Seminar title, content, and units to be announced in the class schedule.

## Music Ensembles

MUP 3032 Chamber Orchestra (1 Unit)
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 Unit)

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 (0.5 Units)

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 (0.5-1 Units)

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 schedules.
May be repeated each semester.

## MUP 3037 Concert Choir (1 Unit)

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 Unit)
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 (0.5 Units)

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 Ensemble (0.5 Units)

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 (0.5 Units)
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 (0.5 Units)

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 (0.5 Units)
A small vocal ensemble (membership by audition) focusing on jazz literature.
May be repeated each semester.

## Music Theory

MUT 1000 Basic Music Theory (2 Units)
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 Units)
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 Units)
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 Units)
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 3002 Analysis of Form and Texture in Music (3 Units)
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 Units)
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 Units)
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 Units)
Intensive study of a selected problem, under the direction of a department faculty advisor.
Prerequisite(s): Consent of department chair.

## Commercial Music, B.A. <br> 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.

## Concentrations

- Performance (p. 85)
- Production (p. 86)


## Performance Concentration

| Code | Title | Units |
| :---: | :---: | :---: |
| Core Curriculum ${ }^{1}$ |  |  |
| Applied Music and Ensembles: |  |  |
| MUA 1001 | Recital Attendance-4 semesters | 0 |
| MUA 2001 | Piano Proficiency Exam | 0 |
| MUA 2012 | Beginning Conducting | 2 |
| Four (4) semesters MUA at 1000-2000 level ${ }^{2}$ |  | 4 |
| One-unit Ensembles |  | 4 |
| Music History: |  |  |
| MUH 1001 | Introduction to Listening (FE) | 2 |
| MUH 3034 | World Music | 2 |
| MUH 3041 | History of Western Music II | 3 |
| MUH 4031 | Faith, Life, and Music | 2 |
| Music Technology: |  |  |
| MTC 1000 | Introduction to Music Technology | 1 |
| Music Theory: |  |  |
| MUT 1020 | Music Theory I | 4 |
| MUT 1021 | Music Theory II | 4 |
| MUT 2020 | Music Theory III | 3 |
| Concentration Courses |  |  |
| Applied Music and Ensembles: |  |  |
| Four (4) semesters MUA at 3000-4000 level ${ }^{3}$ |  | 4 |
| MUP 3040 | Commercial Music Ensemble (4 semesters) | 2 |
| Commercial Music: |  |  |
| MCM 1000 | Introduction to Commercial Composition | 1 |
| MCM 3024 | Songwriting | 2 |
| MCM 3025 | Style and Improvisation (2 semesters) | 4 |
| MCM 3036 | The Business of Music | 2 |
| MCM 4076 | Senior Project | 1 |
| Entrepreneurship: |  |  |
| MGT 3081 | Creativity and Innovation | 3 |
| Music History: |  |  |
| MUH 3035 | History of Popular Music | 3 |
| Music Technology: |  |  |
| MTC 3027 | Digital Audio I | 2 |
| MTC 3028 | Digital Audio II | 2 |
| MTC 4095 | Production and Recording Techniques | 3 |
| Total Units |  | 60 |

${ }^{1}$ Required of all Music majors.
${ }^{2}$ Applied Music in major performing area; must advance to the 2000level.
${ }^{3}$ Applied lessons in commercial music performing area.

## Production Concentration

| Code | Title | Units |
| :---: | :---: | :---: |
| Core Curriculum ${ }^{1}$ |  |  |
| Applied Music and Ensembles: |  |  |
| MUA 1001 | Recital Attendance - 4 semesters | 0 |
| MUA 2001 | Piano Proficiency Exam | 0 |
| MUA 2012 | Beginning Conducting | 2 |
| Four (4) semesters MUA at 1000-2000 level ${ }^{2}$ |  | 4 |
| One-unit Ensembles |  | 4 |
| Music History: |  |  |
| MUH 1001 | Introduction to Listening (FE) | 2 |
| MUH 3034 | World Music | 2 |
| MUH 3041 | History of Western Music II | 3 |
| MUH 4031 | Faith, Life, and Music | 2 |
| Music Technology: |  |  |
| MTC 1000 | Introduction to Music Technology | 1 |
| Music Theory: |  |  |
| MUT 1020 | Music Theory I | 4 |
| MUT 1021 | Music Theory II | 4 |
| MUT 2020 | Music Theory III | 3 |
| Concentration Courses |  |  |
| Applied Music and Ensembles: |  |  |
| Four (4) semesters MUC at 3000-4000 level ${ }^{3}$ |  | 4 |
| MUP 3040 | Commercial Music Ensemble (4 semesters) | 2 |
| Commercial Music: |  |  |
| MCM 1000 | Introduction to Commercial Composition | 1 |
| MCM 3024 | Songwriting | 2 |
| MCM 3035 | Arranging I | 2 |
| MCM 3036 | The Business of Music | 2 |
| MCM 4035 | Arranging II | 2 |
| MCM 4076 | Senior Project | 1 |
| Entrepreneurship: |  |  |
| MGT 3081 | Creativity and Innovation | 3 |
| Music History: |  |  |
| MUH 3035 | History of Popular Music | 3 |
| Music Technology. |  |  |
| MTC 3027 | Digital Audio I | 2 |
| MTC 3028 | Digital Audio II | 2 |
| MTC 4095 | Production and Recording Techniques | 3 |
| Total Units |  | 60 |

${ }^{1}$ Required of all Music majors.
${ }^{2}$ Applied Music in major performing area; must advance to the 2000level.
${ }^{3}$ Applied commercial composition lessons.

Note(s):

- Transfer students and PLNU students changing their major to Commercial Music must complete one ensemble and one unit of applied music each semester.
- A minor from the following list is recommended:
- Accounting (p. 185)
- Business Administration (p. 185)
- Graphic Design (p. 31)
- Marketing (p. 187)
- Media Communication (p. 40)
- Theatre (p. 41)


## Total Degree (with FE): 119 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, keyboard musicianship, and music technology.
2. Show applied music skills in one primary performance area.
3. Recount the essential outlines of music history, music literature and an awareness of significant non-western musical styles.
4. Articulate a clear application of the concepts of calling, role, path, and purpose as they apply to the student's 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.

| Code | Title | Units |
| :---: | :---: | :---: |
| Core Curriculum ${ }^{1}$ |  |  |
| Applied Music and Ensembles: |  |  |
| MUA 1001 | Recital Attendance - 4 semesters | 0 |
| MUA 2001 | Piano Proficiency Exam | 0 |
| MUA 2012 | Beginning Conducting | 2 |
| Four (4) semesters MUA at 1000-2000 level ${ }^{2}$ |  | 4 |
| One-unit Ensembles |  | 4 |
| Music History: |  |  |
| MUH 1001 | Introduction to Listening (FE) | 2 |
| MUH 3034 | World Music | 2 |
| MUH 3041 | History of Western Music II | 3 |
| MUH 4031 | Faith, Life, and Music | 2 |
| Music Technology: |  |  |
| MTC 1000 | Introduction to Music Technology | 1 |
| Music Theory: |  |  |
| MUT 1020 | Music Theory I | 4 |
| MUT 1021 | Music Theory II | 4 |
| MUT 2020 | Music Theory III | 3 |
| Required Courses |  |  |
| MUA 1001 | Recital Attendance - 4 semesters | 0 |
| MUA 3014 | Advanced Conducting | 3 |


| MUC 2052 | Private Composition (2 units required) | 2 |
| :--- | :--- | :--- |
| MUC 3052 | Private Composition (4 units required) | 4 |
| MUC 4052 | Private Composition (4 units required) | 4 |
| MUC 4077 | Senior Recital in Composition | 0 |
| MUE 2001 | Woodwind Methods | 1 |
| MUE 2002 | Brass Methods | 1 |
| MUE 2003 | Percussion Methods | 1 |
| MUE 2004 | String Methods | 1 |
| MUH 3040 | History of Western Music I | 3 |
| MUT 3002 | Analysis of Form and Texture in Music | 3 |
| MUT 4010 | Post-Tonal Theory | 3 |
| MUT 4032 | Orchestration | 3 |
| One-unit Ensembles | 4 |  |
| Choose one (1) unit from the following: | 1 |  |


| MUA 1031 | Class Voice |
| :--- | :--- |
| MUA 1055 | Private Voice |
| MUP 3034 | Choral Union |
| MUP 3036 | Chorale |
| MUP 3037 | Concert Choir |
| MUP 3038 | Point Loma Singers |
| Choose eight (8) | units from the following: |
| MCM 3024 | Songwriting |
| MCM 3035 | Arranging I |
| MCM 4035 | Arranging II |
| MTC 3027 | Digital Audio I |
| MTC 3028 | Digital Audio II |

Total Units
1 Required of all Music majors.
${ }^{2}$ Applied Music in major performing area; must advance to the 2000level.

## Total Degree (with FE): 132 Units

## Special Requirements

1. A solo Junior Recital of at least 30 minutes given during the junior year is required of Music majors selecting a major in Performance. Music Education majors are required to give a Solo Recital for Music Education of at least 30 minutes during the junior or senior year.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 4000level of proficiency and give a solo Senior Recital 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.

## Note(s):

- LIT 2000 (Poetry) is a recommended FE course.
- Transfer students and PLNU students changing their major to Music in the BMUS degree must complete one unit of ensemble and two units of applied music each semester.


## Music and Worship, B.A. <br> Program Learning Outcomes

## Students who complete the program in Music and Worship 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.

## Emphases

- Worship Arts (p. )
- Worship Studies (p. )


## Emphasis in Worship Arts

| Code | Title | Units |
| :---: | :---: | :---: |
| Core Curriculum ${ }^{1}$ |  |  |
| Applied Music and Ensembles: |  |  |
| MUA 1001 | Recital Attendance - 4 semesters | 0 |
| MUA 2001 | Piano Proficiency Exam | 0 |
| MUA 2012 | Beginning Conducting | 2 |
| Four (4) semesters MUA at 1000-2000 level ${ }^{2}$ |  | 4 |
| One-unit Ensembles |  | 4 |
| Music History: |  |  |
| MUH 1001 | Introduction to Listening (FE) | 2 |
| MUH 3034 | World Music | 2 |
| MUH 3041 | History of Western Music II | 3 |
| MUH 4031 | Faith, Life, and Music | 2 |
| Music Technology: |  |  |
| MTC 1000 | Introduction to Music Technology | 1 |
| Music Theory: |  |  |
| MUT 1020 | Music Theory I | 4 |
| MUT 1021 | Music Theory II | 4 |


| MUT 2020 | Music Theory III | 3 |
| :--- | :--- | :--- |
| Required Course |  | 3 |
| CMU 3014 | Music and Worship | 2 |
| CMU 3015 | Church Music Administration and Materials | 3 |
| CMU 4033 | Hymnology | 2 |
| CMU 4051 | Internship in Church Music | 2 |
| MCM 3024 | Songwriting | 2 |
| MCM 3025 | Style and Improvisation | 2 |
| MCM 3035 | Arranging I | 2 |
| MCM 4035 | Arranging II | 2 |
| MTC 3027 | Digital Audio I | 2 |
| MTC 3028 | Digital Audio II | 3 |
| MTC 4095 | Production and Recording Techniques | 3 |
| MUH 3040 | History of Western Music I | 6 |
| Private Composition (up to 6 semesters): |  |  |
| MUC 2052 | Private Composition |  |
| MUC 3052 | Private Composition |  |
| MUC 4052 | Private Composition |  |

Total Units
1 Required of all Music majors.
2 Applied Music in major performing area; must advance to the 2000level.

## Emphasis in Worship Studies

| Code | Title | Units |
| :---: | :---: | :---: |
| Core Curriculum ${ }^{1}$ |  |  |
| Applied Music and Ensembles: |  |  |
| MUA 1001 | Recital Attendance - 4 semesters | 0 |
| MUA 2001 | Piano Proficiency Exam | 0 |
| MUA 2012 | Beginning Conducting | 2 |
| Four (4) semesters MUA at 1000-2000 level ${ }^{2}$ |  |  |
| One-unit Ensembles |  |  |
| Music History: |  |  |
| MUH 1001 | Introduction to Listening (FE) | 2 |
| MUH 3034 | World Music | 2 |
| MUH 3041 | History of Western Music II | 3 |
| MUH 4031 | Faith, Life, and Music | 2 |

## Music Technology:

MTC 1000 Introduction to Music Technology 1

Music Theory:

| MUT 1020 | Music Theory I | 4 |
| :--- | :--- | :--- |
| MUT 1021 | Music Theory II | 4 |
| MUT 2020 | Music Theory III | 3 |

Required Courses

| CMI 1055 | Christian Formation and Ministry ${ }^{3}$ | 3 |
| :--- | :--- | :--- |
| 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 |
| MCM 3024 | Songwriting | 2 |
| MTC 3027 | Digital Audio I | 2 |



## Recommended Minor

- Christian Ministries

Note(s): Transfer students in the BA degree must complete one ensemble and one unit of applied music each semester.

## Total Degree (with FE): 119 Units

## 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, keyboard musicianship, and music technology.
2. Show advanced applied music skills in one primary performance area.
3. Recount the essential outlines of music history, music literature, and an awareness of significant non-western musical styles.
4. Articulate a clear application of the concepts of calling, role, path, and purpose as they apply to the music discipline.
5. Demonstrate a broad conceptual understanding of pedagogical methods and strategies for teaching and learning music at various levels.
6. Demonstrate a comprehensive set of strategies used to facilitate music-making in a variety of settings.
7. Articulate a convincing rationale for the importance of music education.

| Code | Title | Units |
| :---: | :---: | :---: |
| Core Curriculum ${ }^{1}$ |  |  |
| Applied Music and Ensembles: |  |  |
| MUA 1001 | Recital Attendance - 4 semesters | 0 |
| MUA 2001 | Piano Proficiency Exam | 0 |
| MUA 2012 | Beginning Conducting | 2 |
| Four (4) semesters MUA at 1000-2000 level ${ }^{2}$ |  | 4 |
| One-unit Ensembles |  | 4 |
| Music History: |  |  |
| MUH 1001 | Introduction to Listening (FE) | 2 |
| MUH 3034 | World Music | 2 |
| MUH 3041 | History of Western Music II | 3 |
| MUH 4031 | Faith, Life, and Music | 2 |
| Music Technology: |  |  |
| MTC 1000 | Introduction to Music Technology | 1 |
| Music Theory: |  |  |
| MUT 1020 | Music Theory I | 4 |
| MUT 1021 | Music Theory II | 4 |
| MUT 2020 | Music Theory III | 3 |

## Required Courses

Music Education:

| MUE 2000 | Introduction to Music Teaching and Learning ${ }^{3}$ | 2 |
| :--- | :--- | :--- |
| MUE 2001 | Woodwind Methods | 1 |
| MUE 2002 | Brass Methods | 1 |
| MUE 2003 | Percussion Methods | 1 |
| MUE 2004 | String Methods | 1 |
| MUE 3004 | Choral Music Methods $^{3}$ | 3 |
| MUE 4041 | Elementary Music Methods $^{3}$ | 3 |
| MUE 4054 | Instrumental Music Methods $^{3}$ | 3 |
| MUE 4060 | Music Education Practicum ${ }^{3}$ | 1 |
| Performance: |  | 0 |
| MUA 1001 | Recital Attendance - 4 semesters | 0 |
| MUA 2002 | Guitar Proficiency Exam | 3 |
| MUA 3014 | Advanced Conducting | 0 |
| MUA 3077 | Solo Recital for Music Education | 4 |
| Applied Music in major performing area ${ }^{4}$ | 4 |  |
| One-unit Ensembles |  |  |

## 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. (p. 25) (Single Subject Art California Teaching Credential)
- Biology, B.A. (p. 109) (Single Subject Science California Teaching Credential)
- Health and Human Performance, B.A. (p. 99) (Single Subject Physical Education California Teaching Credential)
- French, B.A. (p. 66) (Single Subject World Languages: French California Teaching Credential)
- History, B.A. (p. 45) (Single Subject Social Sciences Teaching Credential)
- Literature-English Education, B.A. (p. 67) (Single Subject English Teaching Credential)
- Mathematics, B.S. (p. 137) (Single Subject Mathematics Teaching Credential)
- Music Education, B.A. (p. 88) (Single Subject Music California Teaching Credential)
- Spanish, B.A. (p. 69) (Single Subject World Languages: Spanish California Teaching Credential)

For the 4 -year credential track, the following 3000 or 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 3rd credential course, meeting all program, university and state requirements for classroom observations and tests required prior to student teaching. Students will be vetted
through a screening process, which may include a faculty interview, prior to being placed in student teaching. Candidates major in the academic discipline of their choice (e.g. Kinesiology) 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

| Code | Title | Units |
| :--- | :--- | ---: |
| EDU 3002 | Foundations of Education and Learning Theory ${ }^{1}$ | 3 |
| EDU 3006 | Principles of Language Acquisition ${ }^{1}$ | 3 |
| EDU 4004 | Foundations of Special Education ${ }^{1}$ | 3 |
| EDU 4009 | Classroom Assessment and Research Practices | 3 |
| EDU 4017 | Teaching and Learning Capstone: Contemporary | 2 |
|  | Issues in the Vocation of Education |  |
| EDU 4020 | Literacy Instruction for Secondary Teachers ${ }^{1}$ | 3 |
| EDU 4021 | General Methods for Secondary Teachers ${ }^{1}$ | 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 |
| Choose one (1) course from the following based on major: | 3 |  |


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

## Total Units

${ }^{1}$ Requires 20 hours of supervised field experience working with students in a classroom setting.
${ }^{2}$ BIO 4063 also satisfies this credential requirement.
${ }^{3}$ ART 4055 also satisfies this credential requirement.
${ }^{4}$ MUE 4054 also satisfies this credential requirement.

## 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, keyboard musicianship, and music technology.
2. Develop advanced 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. Articulate a clear application of the concepts of calling, role, path and purpose as they apply to the field of music.

| Code | Title | Units |
| :---: | :---: | :---: |
| Core Curriculum ${ }^{1}$ |  |  |
| Applied Music and Ensembles: |  |  |
| MUA 1001 | Recital Attendance - 4 semesters | 0 |
| MUA 2001 | Piano Proficiency Exam | 0 |
| MUA 2012 | Beginning Conducting | 2 |
| Four (4) semesters MUA at 1000-2000 level ${ }^{2}$ |  | 4 |
| One-unit Ensembles |  | 4 |
| Music History: |  |  |
| MUH 1001 | Introduction to Listening (FE) | 2 |
| MUH 3034 | World Music | 2 |
| MUH 3041 | History of Western Music II | 3 |
| MUH 4031 | Faith, Life, and Music | 2 |
| Music Technology: |  |  |
| MTC 1000 | Introduction to Music Technology | 1 |
| Music Theory: |  |  |
| MUT 1020 | Music Theory I | 4 |
| MUT 1021 | Music Theory II | 4 |
| MUT 2020 | Music Theory III | 3 |

## Required Courses

Music Education and Pedagogy:
Choose three (3) units from the following: 3

| MUE 2000 | Introduction to Music Teaching and Learning |
| :--- | :--- |
| MUE 2001 | Woodwind Methods |
| MUE 2002 | Brass Methods |
| MUE 2003 | Percussion Methods |
| MUE 2004 | String Methods |
| MUE 3004 | Choral Music Methods |
| MUE 3010 | Vocal Pedagogy |
| MUE 3012 | Teaching Instrumental Lessons |
| MUE 4041 | Elementary Music Methods |
| MUE 4054 | Instrumental Music Methods |
| Music History: |  |
| Choose three (3) units from the following: |  |


| MUH 3009 | Vocal Literature I |
| :---: | :--- |
| MUH 3011 | Piano Literature |
| MUH 3040 | History of Western Music I |
| Music Theory: |  |
| Three (3) units of Upper-Division MUT |  |

Music Electives:
Choose three (3) additional units from the above MUE, MUH, MUT 3 and/or the following:

| CMU 3014 | Music and Worship |
| :--- | :--- |
| CMU 4033 | Hymnology |
| MUA 2052 | Diction for Singers |
| MUA 3014 | Advanced Conducting |
| MUH 3035 | History of Popular Music |

Total Units
${ }^{1}$ Required of all Music majors.
2 Applied Music in major performing area; must advance to the 2000level.

## Notes(s):

- Transfer students and PLNU students changing to the BA in Music program must complete one ensemble and one unit of applied music each semester.
- Accepting Associate Degree for Transfer (ADT) (p. 227)

Total Degree (with FE): 102 Units

## Performance, Bachelor of Music <br> Program Learning Outcomes

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

1. Demonstrate essential competencies in musicianship skills in written theory, aural skills, keyboard musicianship, and music technology.
2. Show advanced applied music skills in one primary performance area in both solo and ensemble settings.
3. Recount the essential outlines of music history, music literature, and an awareness of significant non-western musical styles.
4. Articulate a clear application of the concepts of calling, role, path, and purpose as they apply to the student's music discipline.
5. Convey essential knowledge of literature and pedagogy norms in the student's principal performing area.

## Concentrations

- Instrumental (p. 91)
- Piano (p. 91)
- Vocal (p. 92)


## Instrumental Concentration

| Code | Title | Units |
| :---: | :---: | :---: |
| Core Curriculum ${ }^{1}$ |  |  |
| Applied Music and Ensembles: |  |  |
| MUA 1001 | Recital Attendance - 4 semesters | 0 |
| MUA 2001 | Piano Proficiency Exam | 0 |
| MUA 2012 | Beginning Conducting | 2 |
| Four (4) semesters MUA at 1000-2000 level ${ }^{2}$ |  | 4 |
| One-unit Ensembles |  | 4 |
| Music History: |  |  |
| MUH 1001 | Introduction to Listening (FE) | 2 |
| MUH 3034 | World Music | 2 |


| MUH 3041 | History of Western Music II | 3 |
| :---: | :---: | :---: |
| MUH 4031 | Faith, Life, and Music | 2 |
| Music Technology: |  |  |
| MTC 1000 | Introduction to Music Technology | 1 |
| Music Theory: |  |  |
| MUT 1020 | Music Theory I | 4 |
| MUT 1021 | Music Theory II | 4 |
| MUT 2020 | Music Theory III | 3 |
| Required Courses |  |  |
| MUA 1001 | Recital Attendance - 4 semesters | 0 |
| Applied Music in | Major Performance Area: ${ }^{3}$ | 12 |
| MUA 3076 | Junior Recital | 0 |
| MUA 4076 | Senior Recital | 0 |
| MUE 4051 | Internship in Music | 1 |
| MUH 3040 | History of Western Music I | 3 |
| One-unit Ensemble ${ }^{4}$ - 4 |  |  |
| Upper-Division Th | eory ${ }^{5}$ | 6 |
| Concentration Courses |  |  |
| MUA 3014 | Advanced Conducting | 3 |
| MUE 3012 | Teaching Instrumental Lessons | 3 |
| MUH 4095 | Music History Seminar | 1-2 |
| MUP 3039 | Small Ensemble (4 semesters required) | 2 |
| Music Electives |  | 7 |
| Total Units |  | 73-74 |
| ${ }^{1}$ Required of all Music majors. <br> ${ }^{2}$ Applied Music in major performing area; must level. <br> ${ }^{3}$ MUA 1000-4000 level <br> ${ }^{4}$ MUP 3000-level <br> ${ }^{5}$ MUT 3000, 4000-level |  |  |
| Piano Concentration |  |  |
| Core Curriculum ${ }^{1}$ |  |  |
| Applied Music and Ensembles: |  |  |
| MUA 1001 | Recital Attendance-4 semesters | 0 |
| MUA 2001 | Piano Proficiency Exam | 0 |
| MUA 2012 | Beginning Conducting | 2 |
| Four (4) semesters MUA at 1000-2000 level ${ }^{2}$ |  | 4 |
| One-unit Ensembles |  | 4 |
| Music History: |  |  |
| MUH 1001 | Introduction to Listening (FE) | 2 |
| MUH 3034 | World Music | 2 |
| MUH 3041 | History of Western Music II | 3 |
| MUH 4031 | Faith, Life, and Music | 2 |
| Music Technology: |  |  |
| MTC 1000 | Introduction to Music Technology | 1 |
| Music Theory: |  |  |
| MUT 1020 | Music Theory I | 4 |
| MUT 1021 | Music Theory II | 4 |
| MUT 2020 | Music Theory III | 3 |
| Required Courses |  |  |


| MUA 1001 | Recital Attendance - 4 semesters | 0 |
| :---: | :---: | :---: |
| Applied Music in Major Performance Area: ${ }^{3}$ |  | 12 |
| MUA 3076 | Junior Recital | 0 |
| MUA 4076 | Senior Recital | 0 |
| MUE 4051 | Internship in Music | 1 |
| MUH 3040 | History of Western Music I | 3 |
| One-unit Ensemble ${ }^{4}$ |  | 4 |
| Upper-Division Theory ${ }^{5}$ |  | 6 |
| Concentration Courses |  |  |
| MUA 10xx - Voice (class or private) |  | 2 |
| MUA 3014 | Advanced Conducting | 3 |
| MUE 3011 | Piano Teaching | 2 |
| MUH 3011 | Piano Literature | 3 |
| MUP 3039 | Small Ensemble (4 semesters required) | 2 |
| Music Electives |  | 3 |
| Total Units |  | 72 |

${ }^{1}$ Required of all Music majors.
${ }^{2}$ Applied Music in major performing area; must advance to the 2000level.
${ }^{3}$ MUA 1000-4000 level
${ }^{4}$ MUP 3000-level
${ }^{5}$ MUT 3000, 4000-level

## Vocal Concentration ${ }^{6}$

| code | Title | Units |
| :---: | :---: | :---: |
| Core Curriculum ${ }^{1}$ |  |  |
| Applied Music and Ensembles: |  |  |
| MUA 1001 | Recital Attendance - 4 semesters | 0 |
| MUA 2001 | Piano Proficiency Exam | 0 |
| MUA 2012 | Beginning Conducting | 2 |
| Four (4) semesters MUA at 1000-2000 level ${ }^{2}$ |  | 4 |
| One-unit Ensembles |  | 4 |
| Music History: |  |  |
| MUH 1001 | Introduction to Listening (FE) | 2 |
| MUH 3034 | World Music | 2 |
| MUH 3041 | History of Western Music II | 3 |
| MUH 4031 | Faith, Life, and Music | 2 |
| Music Technology. |  |  |
| MTC 1000 | Introduction to Music Technology | 1 |
| Music Theory: |  |  |
| MUT 1020 | Music Theory I | 4 |
| MUT 1021 | Music Theory II | 4 |
| MUT 2020 | Music Theory III | 3 |
| Required Courses |  |  |
| MUA 1001 | Recital Attendance - 4 semesters | 0 |
| Applied Music in Major Performance Area: ${ }^{3}$ |  | 12 |
| MUA 3076 | Junior Recital | 0 |
| MUA 4076 | Senior Recital | 0 |
| MUE 4051 | Internship in Music | 1 |
| MUH 3040 | History of Western Music I | 3 |
| One-unit Ensemble ${ }^{4}$ |  | 4 |
| Upper-Divis | eory ${ }^{5}$ | 6 |


| Concentration Courses |  |  |
| :---: | :---: | :---: |
| MUA 2052 | Diction for Singers | 3 |
| MUE 3010 | Vocal Pedagogy | 2 |
| MUH 3009 | Vocal Literature I | 2 |
| Music Electiv |  | 4 |
| Choose one (1) course from the following: |  |  |
| COM 3015 | Oral Interpretation |  |
| TRE 2070 | Acting |  |
| TRE 3050 | Musical Theatre |  |
| Total Units |  | 71 |
| Required of all Music majors. <br> ${ }^{2}$ Applied Music in major performing area; must advance to the 2000level. <br> ${ }^{3}$ MUA 1000-4000 level <br> ${ }^{4}$ MUP 3000-level <br> ${ }^{5}$ MUT 3000, 4000-level <br> ${ }^{6}$ Performance majors with a vocal concentration must complete their Foundational Explorations (FE) language requirement in French or German. Approved transfer courses in Italian will also fulfill this requirement. |  |  |
| Note(s): Transfer students in the BMUS in Performance degree must complete one (1) unit of major ensemble credit and two (2) units of applied music credit each semester. |  |  |
| Total Degree (with FE): 132 Units |  |  |
| Music Minor |  |  |

Code Title Units

Required Courses
MUH 1001 Introduction to Listening (FE) 2

MUT 1020 Music Theory I 4
Applied study in instrument or voice 2
One-unit Ensembles 2
Additional upper-division units in Music 7
Three (3) units from MUH upper-division courses 3
Total Units 20

## College of Health Sciences

## Administration

Dean: Jeff Sullivan, Ph.D.
Office: Balboa 114
Telephone: (619) 849-2629
Email: jeffsullivan@pointloma.edu
Administrative Assistant: Amber Courtney

## General Information

The College of Health Sciences exists to provide multidisciplinary education in health, fitness, wellness and medicine that transforms students and prepares them to serve the world as an expression of the Christian faith. The College is defined by exceptional faculty and staff who are committed to innovative teaching and learning; rigorous and inspired scholarship; and clinical experiences that are evidence
based, outcomes focused, and empower students to improve the human condition. We extend the mission of Point Loma Nazarene University to engage and challenge minds, to form and model character, and to view service as an expression of faith.

The College offers undergraduate programs through the Department of Kinesiology in Applied Health Science, and Health and Human Performance. We offer graduate programs in Athletic Training, Exercise Science, Integrative Wellness, Kinesiology, Physician Assistant Education, Sport Management and Sport Performance

## Accreditations and Affiliations

For information about Accreditations and Affiliations, please click here (p. 11).

## Academic Organization

The College of Health Sciences, under the direction of the dean of the College, functions with the supervision of academic departments, programs, and centers. The following is a list of chairs, directors, and deans in the college.

## Departments

Department of Kinesiology - Brandon Sawyer, chair
Department of Physician Assistant Education - Dana Sayre-Stanhope, chair

## Graduate Programs

Master of Science in Athletic Training - Nicole Cosby, director Master of Science in Kinesiology - Brent Alvar, director
Master of Science in Kinesiology - Integrative Wellness - Jessica Matthews, director
Master of Science in Medicine - Physician Assistant - Dana Sayre-
Stanhope, director

## Additional Locations

Balboa Campus - Jeff Sullivan, dean

## 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 Health Sciences.

## Department of Kinesiology <br> 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

Chair - Brandon Sawyer, Ph.D.
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

Ryan Nokes, Ph.D.
Rocky Mountain University
Brandon Sawyer, Ph.D.
Arizona State University
To view requirements for majors, minors, and certificates, see the Degree Program Information (p. 244) page.

- Applied Health Science, B.S. (p. 98)
- Health and Human Performance, B.A. (p. 99)


## Athletic Training

## ATR 5000 Seminar in Athletic Training (1 Unit)

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 Units)

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 the Lower Extremity (3 Units)

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
Also offered as ATR 6087.
Concurrent: ATR 5087L

## ATR 5087L Evidence-Based Orthopedic Assessment of the Lower Extremity Laboratory (1 Unit)

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.
Also offered as ATR 6087L.
Concurrent: ATR 5087

## ATR 5088 Evidence-Based Orthopedic Assessment of the Spine and Upper Extremities (3 Units)

This course addresses evaluation techniques and care for musculoskeletal injuries to the upper extremities and spine for graduatelevel 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.
Also offered as ATR 6088.
Concurrent: ATR 5088L
ATR 5088L Evidence-Based Orthopedic Assessment of the Spine and Upper Extremities Laboratory (1 Unit)
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.
Also offered as ATR 6088L.

## Concurrent: ATR 5088

## ATR 5090 Clinical Internship I (3 Units)

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 of 200 and a maximum of 500 clinical hours.
Also offered as ATR 6090.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.

## ATR 5091 Clinical Internship II (3 Units)

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.
Also offered as ATR 6091.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.

## Kinesiology

KIN 1000 Fitness Through Movement (FE) (2 Units)
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.

## KIN 1001 Orientation to Kinesiology (1 Unit)

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 Units)
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 Units) 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(s): KIN 1002

## KIN 1010 Martial Arts and Self Defense (FE) (1 Unit)

An introductory course for the general student covering mixed martial arts (karate/tae kwon do, jujitsu/aikido) and self defense.

## KIN 1011 Beginning Soccer (FE) (1 Unit)

This course will cover the basic beginning concepts of soccer. It will also enhance the importance of healthy stewardship of personal health.

## KIN 1012 Yoga Sculpt (FE) (1 Unit)

Development of personal fitness through a variety of activities including yoga, pilates, core stability ball, light weights, resistance bands, and mat work.

## KIN 1013 Yoga (FE) (1 Unit)

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.
KIN 1014 Cheerleading (FE) (1 Unit)
May be repeated up to a total of four (4) units.
Prerequisite(s): Consent of instructor.
KIN 1015 Adapted Physical Activity (FE) (1 Unit)
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 two (2) units.
Prerequisite(s): Physician's referral and approval of the department
chair.

KIN 1016 High Intensity Functional Training (FE) (1 Unit)
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.

## KIN 1017 Contemporary Dance (FE) (1 Unit)

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.
KIN 1018 Southern California Hiking (FE) (1 Unit)
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.

## KIN 1019 Core and Cardio Training (FE) (1 Unit)

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.
KIN 1020 Beginning Tennis (FE) (1 Unit)
Fundamental techniques, rules, court play, and etiquette.
KIN 1021 Advanced Tennis (FE) (1 Unit)
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.

## KIN 1022 Pickleball (FE) (1 Unit)

This is a beginning pickleball course in which students will develop the basic skills to play the game of pickleball. These will include: safety, etiquette, rules, scoring, forehand and backhand groundstrokes, volleys, serves, lobs, overheads, dink shots, proper footwork, basic strategies and court positioning for singles and doubles play. Basic fitness and training principles will be discussed as applicable to the sport of pickleball.

## KIN 1030 Beginning Volleyball (FE) (1 Unit)

An introduction to the fundamental skills for effective play and an understanding of the rules of the game.

## KIN 1035 Badminton (FE) (1 Unit)

An introduction to the basic techniques, strategies, and rules for singles and doubles play.
KIN 1040 Beginning Swimming (FE) (1 Unit)
Fundamental swim strokes, skills, and safety techniques geared toward developing fitness.
Fee: Special fee.
KIN 1041 Advanced Swimming (FE) (1 Unit)
Training techniques in competitive swimming. Starts, turns, conditioning, stroke mechanics.
Prerequisite(s): KIN 1040 or consent of instructor.
Fee: Special fee.
KIN 1044 Beginning Surfing (FE) (1 Unit)
Instruction and participation in the basic skills of surfing and rough water safety.

KIN 1048 Boot Camp Fitness (Aerobics) (FE) (1 Unit)
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.

## KIN 1055 Weight Training (FE) (1 Unit)

Development of skills and knowledge pertaining to building strength, endurance, and flexibility through the use of weights.

KIN 1060 Golf (FE) (1 Unit)
An introduction to basic skill techniques, rules, safety, and etiquette leading to a practical golf course experience.
Fee: Special fee.
KIN 1068 Outdoor Adventures (FE) (1 Unit)
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.
Fee: Special fee for transportation and food.
KIN 1070 Varsity Basketball: Men (FE) (1 Unit)
May be repeated up to four (4) units.
KIN 1071 Varsity Basketball: Women (FE) (1 Unit)
May be repeated up to four (4) units.
KIN 1072 Varsity Tennis: Men (FE) (1 Unit)
May be repeated up to four (4) units.
KIN 1073 Varsity Tennis: Women (FE) (1 Unit)
May be repeated up to four (4) units.
KIN 1075 Varsity Track and Field: Women (FE) (1 Unit)
May be repeated up to four (4) units.
KIN 1076 Varsity Golf (FE) (1 Unit)
May be repeated up to four (4) units.
KIN 1077 Varsity Baseball (FE) (1 Unit)
May be repeated up to four (4) units.
KIN 1078 Varsity Softball (FE) (1 Unit)
May be repeated up to four (4) units.
KIN 1080 Varsity Soccer: Men (FE) (1 Unit)
May be repeated up to four (4) units.
KIN 1081 Varsity Volleyball (FE) (1 Unit)
May be repeated up to four (4) units.
KIN 1083 Varsity Cross Country: Women (FE) (1 Unit)
May be repeated up to four (4) units.
KIN 1084 Varsity Soccer: Women (FE) (1 Unit)
May be repeated up to four (4) units.
KIN 2000 Optimal Health (FE) (2 Units)
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.

KIN 2001 Fundamentals of Fitness Assessment and Development (2 Units)
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.

KIN 2020 Team Sports Fundamentals and Strategies (FE) (2 Units) 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.

## KIN 2025 Individual and Dual Sports Fundamentals and Strategies (FE) (2 Units)

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.

## KIN 2030 Lifestyle as Medicine (FE) (2 Units)

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 evidencebased approaches to prevent and manage chronic diseases in their families, communities, and their own lives.

## KIN 2050 Medical Terminology (2 Units)

This course focuses on the principles of medical word building using root words, prefixes, and suffixes to help students develop medical vocabulary used in health care settings. The course includes common terms, definitions, and pronunciations for each body system, including pathology, pharmacology, radiography, laboratory tests, and surgical procedures.
KIN 2080 Care and Prevention of Athletic Injuries (2 Units)
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.
Fee: Special fee.
KIN 2080L Care and Prevention of Athletic Injuries Lab (1 Unit)
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.
Corequisite(s): KIN 2080
Fee: Special fee.
KIN 3001 Fitness Assessment and Exercise Prescription (3 Units) 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.
Prerequisite(s): Junior or Senior standing.
Corequisite(s): KIN 3001L
Fee: Special fee.
KIN 3001L Fitness Assessment and Exercise Prescription Lab (1 Unit)
Practical laboratory experiences in fitness assessment and exercise prescription.
Corequisite(s): KIN 3001
Fee: Special fee.

KIN 3008 Methods of Teaching Physical Education (3 Units)
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): KIN 1000 or KIN 2000 or SWF 3015
KIN 3012 Motor Learning and Motor Development (3 Units)
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 Units)
In-depth study of the structure and function of neuro-musculo-skeletal components of the human body in motion.
Laboratory experiences included.
Prerequisite(s): BIO 1030 or consent of instructor.

## KIN 3027 Applied Biomechanics (2 Units)

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.
Corequisite(s): KIN 3025

## KIN 3027L Biomechanics Laboratory (1 Unit)

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(s): KIN 3027
KIN 3030 Nutrition for Exercise and Sport Performance (3 Units)
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): KIN 2000, KIN 2030, or consent of instructor.

## KIN 3040 Physiology of Exercise (3 Units)

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.
Prerequisite(s): BIO 1040 or consent of instructor.
Fee: Special fee.
KIN 3040L Physiology of Exercise Lab (1 Unit)
Practical experiences in assessing human physiological responses to exercise and training.
Corequisite(s): KIN 3040

KIN 3050 Foundations and Techniques of Coaching (3 Units)
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): KIN 2020 or consent of instructor.
KIN 3070 Praxis of Strength Training and Conditioning (3 Units)
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
KIN 3075 Movement Interventions and Corrective Exercise (2 Units)
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 and BIO 1040
Corequisite(s): KIN 3027
KIN 3085 Pathology of Injury and Illness (3 Units)
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
KIN 3087 Assessment of Lower Extremity Pathology (3 Units)
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.
KIN 3088 Assessment of Head, Spinal, and Upper Extremity Pathology (3 Units)
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.

## KIN 4010 Therapeutic Exercise (3 Units)

Theory and practice of active therapeutic techniques including manual, William's, and McKensie therapies, proprioceptive neuromuscular facilitation and progressive resistance.

## KIN 4020 Pharmacology (1 Unit)

Study of drug classifications and medico-legal aspects of therapeutic and pharmacological treatments.

## KIN 4030 Clinical Exercise Physiology (3 Units)

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.
Prerequisite(s): KIN 3040
Fee: Special fee.

## KIN 4040 Measurement, Statistics, and Evaluation of Human

 Performance (3 Units)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 administration and interpretation are the central content areas of the course with application to sport science, sports medicine, and sport performance.

KIN 4075 Gross Anatomy: Neuromusculoskeletal Dissection of the Spine and Extremities (3 Units)
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): BIO 1030 and BIO 1040
KIN 4080 Leadership in the Fitness Professions (3 Units)
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.

KIN 4084 Practicum in Kinesiology (1-3 Units)
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 (6) units.
Prerequisite(s): Consent of instructor.
KIN 4088 Internship in Kinesiology (1-3 Units)
An off-campus experience under supervision of a faculty member in which the student gains experience in the field of kinesiology.
May be repeated for up to a total of six (6) units.
Prerequisite(s): Consent of instructor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.

## KIN 4090 Special Studies in Kinesiology (1-3 Units)

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 for up to a total of six (6) units.
Prerequisite(s): Consent of instructor and department chair.
KIN 4091 Research in Kinesiology (1-3 Units)
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 (6) units.
Prerequisite(s): Consent of department chair.

## KIN 4095 Kinesiology Capstone (1 Unit)

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 Units)

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.
Online.
Also offered as KIN 6010.
KIN 5075 Gross Anatomy. Neuromusculoskeletal Dissection of the Spine and Extremities (3 Units)
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.
Also offered as KIN 4075 and KIN 6075.
Prerequisite(s): Consent of instructor.

## Applied Health Science, B.S. Program Learning Outcomes

## All Applied Health Science majors will be able to:

1. Speak and write effectively to a target audience on essential information in health care.
2. Critically evaluate and integrate new information into professional practice to solve relevant health care concerns.
3. Describe the mechanisms (i.e. metabolic, physiologic, biomechanical, and developmental) by which physical activity aids in health care settings.
4. Demonstrate preparedness to serve others in various health care settings through their selected vocation or calling.

| Code | Title U | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| BIO 1030 and BIO 1030L | Human Anatomy and Physiology I (FE) and Human Anatomy and Physiology I Laboratory (FE) | 4 |
| BIO 1040 <br> and BIO 1040L | Human Anatomy and Physiology II and Human Anatomy and Physiology II Laboratory | y 4 |
| BIO 2010 and BIO 2010L | Cell Biology and Biochemistry (FE) and Cell Biology and Biochemistry Laboratory (FE) | ) 4 |
| $\begin{aligned} & \text { BIO } 2020 \\ & \text { and BIO } 2020 \text { L } \end{aligned}$ | Microbiology of Infectious Diseases and Microbiology of Infectious Diseases Laboratory | 4 |


| CHE 1052 and CHE 1052L | General Chemistry I (FE) and General Chemistry I Lab (FE) | 5 |
| :---: | :---: | :---: |
| CHE 1053 and CHE 1053L | General Chemistry II and General Chemistry II Lab | 4 |
| KIN 1001 | Orientation to Kinesiology | 1 |
| KIN 2080 | Care and Prevention of Athletic Injuries | 2 |
|  |  | 2 |
| or KIN 2030 | Lifestyle as Medicine (FE) |  |
| MTH 2003 | Introduction to Statistics | 3 |
| PSY 1003 | General Psychology (FE) | 3 |
| Upper-Division Requirements |  |  |
| 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 3085 | Pathology of Injury and Illness | 3 |
| KIN 4095 | Kinesiology Capstone | 1 |
| PSY 3021 | Abnormal Psychology | 3 |
| Elective Courses |  |  |
| Complete a minimum of twelve (12) units with at least seven (7) units 12 being upper division from the following: |  |  |
| ATR 5000 | Seminar in Athletic Training |  |
| ATR 5005 | Research Methods and Statistical Techniques for Clinical Decision Making in Sports Medicine |  |
| ATR 5087 <br> and <br> ATR 5087L | Evidence-Based Orthopedic Assessment of the Lower Extremity and Evidence-Based Orthopedic Assessment of the Lower Extremity Laboratory |  |
| ATR 5088 and ATR 5088L | Evidence-Based Orthopedic Assessment of the Spine and Upper Extremities and Evidence-Based Orthopedic Assessment of the Spine and Upper Extremities Laboratory |  |
| ATR 5090 | Clinical Internship I |  |
| ATR 5091 | Clinical Internship II |  |
| BIO 2011 and BIO 2011L | Ecological and Evolutionary Systems (FE) and Ecological and Evolutionary Systems Laboratory (FE) |  |
| BIO 3015 and BIO 3015L | Microbiology and Microbiology Laboratory |  |
| BIO 3045 and BIO 3045L | Genetics and Genetics Laboratory |  |
| BIO 4050 and BIO 4050L | Advanced Biochemistry and Advanced Biochemistry Laboratory ${ }^{1}$ |  |
| BIO 4070 | Neuroscience |  |
| CHE 2094 <br> and <br> CHE 2094L | Organic Chemistry I and Organic Chemistry I Lab |  |
| CHE 2096 and CHE 2096L | Organic Chemistry II and Organic Chemistry II Lab |  |
| CHD 1050 | Human Development |  |
| KIN 2050 | Medical Terminology |  |
| KIN 3001 and KIN 3001L | Fitness Assessment and Exercise Prescription and Fitness Assessment and Exercise Prescription Lab |  |


| KIN 3027L | Biomechanics Laboratory |
| :---: | :---: |
| KIN 3030 | Nutrition for Exercise and Sport Performance |
| KIN 3040L | Physiology of Exercise Lab |
| KIN 3070 | Praxis of Strength Training and Conditioning |
| KIN 3075 | Movement Interventions and Corrective Exercise |
| KIN 3087 | Assessment of Lower Extremity Pathology |
| KIN 3088 | Assessment of Head, Spinal, and Upper Extremity Pathology |
| KIN 4010 | Therapeutic Exercise |
| KIN 4020 | Pharmacology |
| KIN 4030 | Clinical Exercise Physiology |
| KIN 4075 | Gross Anatomy: Neuromusculoskeletal Dissection of the Spine and Extremities |
| KIN 4088 | Internship in Kinesiology (3 Units Required) |
| KIN 5010 | Evidence-Based Practice and Decision Making in Kinesiology |
| PHY 1044 <br> and PHY 1044L | General Physics I (FE) and General Physics I Lab (FE) |
| PHY 1054 <br> and PHY 1054L | General Physics II (FE) and General Physics II Lab (FE) |
| PSY 3008 | Developmental Psychology - Birth Through Adolescence |
| SOC 4070 | Medical Sociology |

Total Units
65
${ }^{1}$ Or CHE 4050 \& CHE 4050L

Note(s): 11 units meet Foundational Explorations requirements.

## Health and Human Performance, B.A. Program Learning Outcomes

## All Health and Human Performance majors will be able to:

1. Speak and write effectively to a target audience on essential information in human movement/health and human performance.
2. Critically evaluate and integrate new information into professional practice to solve relevant health or fitness problems.
3. Assess fitness and human movement to determine risk for injury and develop programs to 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. Demonstrate preparedness to serve others in various fitness or health care settings through their selected vocation and calling.

## Concentrations

- Exercise and Sport Science (p. 100)
- Pre-Allied Health (p. 100)

| Exercise and Sport Science Concentration |  |  |
| :---: | :---: | :---: |
| Code | Title U | Units |
| Lower-Division Requirements |  |  |
| BIO 1030 and BIO 1030L | Human Anatomy and Physiology I (FE) and Human Anatomy and Physiology I Laboratory (FE) | 4 |
| BIO 1040 and BIO 1040L | Human Anatomy and Physiology II and Human Anatomy and Physiology II Laboratory | $y$ |
| KIN 1001 | Orientation to Kinesiology | 1 |
| KIN 2080 and KIN 2080L | Care and Prevention of Athletic Injuries and Care and Prevention of Athletic Injuries Lab | 3 |
| KIN 2000 or KIN 2030 | Optimal Health (FE) <br> Lifestyle as Medicine (FE) | 2 |
| Choose one (1) of the following: |  | 5 |
| CHE 1003 and CHE 1003L | Introduction to General, Organic, and Biological Chemistry (FE) and Introduction to General, Organic, and Biological Chemistry Lab (FE) |  |
| CHE 1052 <br> and <br> CHE 1052L | General Chemistry I (FE) <br> and General Chemistry I Lab (FE) |  |
| Lower-Division Electives |  |  |
| Exercise and Sport Science: |  |  |
| Choose one (1) course from the following: |  | 2-3 |
| KIN 2001 | Fundamentals of Fitness Assessment and Development |  |
| KIN 2020 | Team Sports Fundamentals and Strategies (FE) |  |
| KIN 2025 | Individual and Dual Sports Fundamentals and Strategies (FE) |  |
| NUT 2025 | Fundamentals of Nutrition |  |
| Pre-Allied Health: |  |  |
| Choose one (1) course from the following: |  | 2-4 |
| BIO 2010 and BIO 2010 | Cell Biology and Biochemistry (FE) and Cell Biology and Biochemistry Laboratory (FE) |  |
| BIO 2020 and BIO 2020 | Microbiology of Infectious Diseases and Microbiology of Infectious Diseases Laboratory |  |
| CHD 1050 | Human Development |  |
| KIN 2001 | Fundamentals of Fitness Assessment and Development |  |
| PHY 1044 and PHY 1044L | General Physics I (FE) and General Physics I Lab (FE) |  |
| PHY 1054 <br> and <br> PHY 1054L | General Physics II (FE) and General Physics II Lab (FE) |  |
| PSY 1003 | General Psychology (FE) |  |
| Upper-Division Requirements |  |  |
| KIN 3001 and KIN 3001L | Fitness Assessment and Exercise Prescription and Fitness Assessment and Exercise Prescription Lab | ${ }^{4}$ |
| KIN 3012 | Motor Learning and Motor Development | 3 |
| KIN 3025 | Structural Kinesiology | 2 |
| KIN 3027 | Applied Biomechanics | 2 |
| KIN 3030 | Nutrition for Exercise and Sport Performance | 3 |


| KIN 3040 and KIN 3040L | Physiology of Exercise and Physiology of Exercise Lab | 4 |
| :---: | :---: | :---: |
| KIN 3070 | Praxis of Strength Training and Conditioning | 3 |
| KIN 4040 | Measurement, Statistics, and Evaluation of Human Performance | 3 |
| or MTH 2003 | Introduction to Statistics |  |
| KIN 4095 | Kinesiology Capstone | 1 |
| Concentration Courses |  |  |
| Choose a minimum of eleven (11) units that are not counting in the major requirements above: |  |  |
| KIN 4080 | Leadership in the Fitness Professions (required) | 3 |
| Choose 8-9 units from the following: |  | 8-9 |
| BUS 3013 | Business Communications |  |
| EDU 3002 | Foundations of Education and Learning Theory |  |
| EDU 3006 | Principles of Language Acquisition |  |
| EDU 4004 | Foundations of Special Education |  |
| KIN 1002 | Emergency Medical Technician - Basic |  |
| KIN 1003 | Emergency Medical Technician Laboratory - Basic |  |
| KIN 2050 | Medical Terminology |  |
| KIN 3008 | Methods of Teaching Physical Education |  |
| KIN 3027L | Biomechanics Laboratory |  |
| KIN 3075 | Movement Interventions and Corrective Exercise |  |
| KIN 3085 | Pathology of Injury and Illness |  |
| KIN 4010 | Therapeutic Exercise |  |
| KIN 4030 | Clinical Exercise Physiology |  |
| KIN 4084 | Practicum in Kinesiology |  |
| KIN 4088 | Internship in Kinesiology |  |
| KIN 4090 | Special Studies in Kinesiology |  |
| PSY 3008 | Developmental Psychology - Birth Through Adolescence |  |
| SOC 4070 | Medical Sociology |  |
| Total Units |  | -63 |

## Pre-Allied Health Concentration

Code Title

Units

Lower-Division Requirements
BIO $1030 \quad 4$
and BIO 1030L and Human Anatomy and Physiology I Laboratory (FE)
BIO 1040 Human Anatomy and Physiology II 4
and BIO 1040L and Human Anatomy and Physiology II Laboratory
KIN 1001 Orientation to Kinesiology
Care and Prevention of Athletic Injuries

Care and Prevention of Athletic Injuries 3 and Care and Prevention of Athletic Injuries Lab and KIN 2080L
KIN $2000 \quad$ Optimal Health (FE)
2
or KIN 2030 Lifestyle as Medicine (FE)
Choose one (1) of the following:
5

| CHE 1003 |  |
| :--- | :--- |
| and |  |
| CHE 1003L | Introduction to General, Organic, and Biological <br> Chemistry (FE) <br> and Introduction to General, Organic, and <br> Biological Chemistry Lab (FE) |
| CHE 1052 General Chemistry I (FE) <br> and <br> CHE 1052L |  |


| Lower-Division Electives |  |  |
| :--- | :--- | :--- |
| Exercise and Sport Science: | $2-3$ |  |
| Choose one (1) course from the following: |  |  |
| KIN 2001 | Fundamentals of Fitness Assessment and <br> Development |  |
| KIN 2020 | Team Sports Fundamentals and Strategies (FE) |  |

ATR 5088

| ATR 5088L | Evidence-Based Orthopedic Assessment of the <br> Spine and Upper Extremities Laboratory |
| :--- | :--- |
| ATR 5090 | Clinical Internship I |
| ATR 5091 | Clinical Internship II |
| BIO 2010 | Cell Biology and Biochemistry (FE) |
| BIO 2010L | Cell Biology and Biochemistry Laboratory (FE) |
| BIO 2020 | Microbiology of Infectious Diseases |
| BIO 2020L | Microbiology of Infectious Diseases Laboratory |
| BUS 3013 | Business Communications |
| CHD 1050 | Human Development |
| KIN 1002 | Emergency Medical Technician - Basic |
| KIN 1003 | Emergency Medical Technician Laboratory - Basic |
| KIN 2050 | Medical Terminology |
| KIN 3008 | Methods of Teaching Physical Education |
| KIN 3085 | Pathology of Injury and Illness |
| KIN 3087 | Assessment of Lower Extremity Pathology |
| KIN 3088 | Assessment of Head, Spinal, and Upper Extremity |

KIN 4010 Therapeutic Exercise
KIN 4075 Gross Anatomy: Neuromusculoskeletal Dissection of the Spine and Extremities
KIN 4088
KIN 5010

PHY 1044 General Physics I (FE)
PHY 1044L General Physics I Lab (FE)
PHY 1054 General Physics II (FE)
PHY 1054L General Physics II Lab (FE)
PSY 3008 Developmental Psychology - Birth Through Adolescence
PSY 3021 Abnormal Psychology
SOC $4070 \quad$ Medical Sociology
Total Units 59-63

## 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. (p. 25) (Single Subject Art California Teaching Credential)
- Biology, B.A. (p. 109) (Single Subject Science California Teaching Credential)
- Health and Human Performance, B.A. (p. 99) (Single Subject Physical Education California Teaching Credential)
- French, B.A. (p. 66) (Single Subject World Languages: French California Teaching Credential)
- History, B.A. (p. 45) (Single Subject Social Sciences Teaching Credential)
- Literature-English Education, B.A. (p. 67) (Single Subject English Teaching Credential)
- Mathematics, B.S. (p. 137) (Single Subject Mathematics Teaching Credential)
- Music Education, B.A. (p. 88) (Single Subject Music California Teaching Credential)
- Spanish, B.A. (p. 69) (Single Subject World Languages: Spanish California Teaching Credential)

For the 4-year credential track, the following 3000 or 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 3rd credential course, meeting all program, university and state requirements for classroom observations and tests required prior to student teaching. Students will be vetted through a screening process, which may include a faculty interview, prior to being placed in student teaching. Candidates major in the academic discipline of their choice (e.g. Kinesiology) 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

| Code | Title | Units |
| :---: | :---: | :---: |
| EDU 3002 | Foundations of Education and Learning Theory ${ }^{1}$ | 3 |
| EDU 3006 | Principles of Language Acquisition ${ }^{1}$ | 3 |
| EDU 4004 | Foundations of Special Education ${ }^{1}$ | 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 ${ }^{1}$ | 3 |
| EDU 4021 | General Methods for Secondary Teachers ${ }^{1}$ | 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 |
| Choose one (1) course from the following based on major: |  | 3 |
| EDU 4033 | Methods for Teaching Secondary Mathematics (Mathematics Majors) |  |
| EDU 4034 | Methods of Teaching Secondary Science (Biology Major) ${ }^{2}$ |  |
| EDU 4035 | Methods of Teaching Secondary Social Science (History Majors) |  |


| EDU 4036 | Methods for Teaching Secondary Foreign <br> Language (French/Spanish Majors) |
| :--- | :--- |
| EDU 4037 | Methods for Teaching Secondary Visual Arts (Art <br> Education Majors) |
| EDU 4038 | Methods for Teaching Secondary Physical <br> Education (Exercise and Sports Science Majors) |
| EDU 4039 | Content-Specific Pedagogy for Secondary <br> Teachers (Music Education Majors) |

Total Units
33
${ }^{1}$ Requires 20 hours of supervised field experience working with students in a classroom setting.
${ }^{2}$ BIO 4063 also satisfies this credential requirement.
${ }^{3}$ ART 4055 also satisfies this credential requirement.
${ }^{4}$ MUE 4054 also satisfies this credential requirement.

## 3+2 Master of Science in Athletic Training Track

The 3+2 Master of Science in Athletic Training (3+2 MSAT track) is an accelerated program that allows students to obtain a Bachelor of Arts in Health and Human Performance and a Master of Science in Athletic Training in five years. The 3+2 MSAT track is divided into two components: the pre-professional phase which includes the completion of years 1-3 and the professional phase which includes academic years 4-5. During the professional phase students will compete all of the requirements for the Master of Science in Athletic Training.

Students within the Pre-Allied Health concentration desiring to apply to the $3+2$ MSAT track can apply to the program upon successful completion of year 3 and upon meeting all requirements for entry into the program. Students entering the $3+2$ MSAT track will earn their Bachelor of Arts in Health and Human Performance upon successful completion of their 4th year and will earn a Master of Science in Athletic Training degree upon successful completion of year 5.

The following 5000-level courses have been strategically added to the undergraduate degree course plan and must be taken during the final year for the Bachelor's degree to be granted. These courses represent the courses taken in the 1 st year of the Master of Science in Athletic Training and can be used as upper-division electives within the Health and Human Performance major.
Required Courses to Complete the Pre-professional Phase of the 3+2 MSAT Track

| Code | Title | Units |
| :--- | :--- | ---: |
| ATR 5000 | Seminar in Athletic Training | 1 |
| ATR 5005 | Research Methods and Statistical Techniques for <br> Clinical Decision Making in Sports Medicine | 3 |
| ATR 5087 | Evidence-Based Orthopedic Assessment of the <br> Lower Extremity | 3 |
| ATR 5087L | Evidence-Based Orthopedic Assessment of the <br> Lower Extremity Laboratory | 1 |
| ATR 5088 | Evidence-Based Orthopedic Assessment of the <br> ATR 5088L | Evidence-Based Orthopedic Assessment of the |
|  | Spine and Upper Extremities Laboratory | 3 |
| ATR 5090 | Clinical Internship I 1 <br> ATR 5091 Clinical Internship II | 3 |


| KIN 5010 | Evidence-Based Practice and Decision Making in <br> Kinesiology | 3 |
| :--- | :--- | :---: |
| KIN 5075 | Gross Anatomy: Neuromusculoskeletal Dissection <br> of the Spine and Extremities | 3 |

Total Units

Once the student has met all of the requirements of the undergraduate degree and is enrolled in their final semester, the student would then apply to the Master of Science in Athletic Training and complete the remaining courses required to complete the program.

Required Courses to Complete the Professional Phase of the 3+2 MSAT Track

| Code | Title | Units |
| :--- | :--- | ---: |
| ATR 6007 | Research Project Seminar | 1 |
| ATR 6008 | Research Seminar II | 1 |
| ATR 6010 | Therapeutic Interventions | 3 |
| ATR 6010L | Therapeutic Interventions Laboratory | 1 |
| ATR 6011 | Advanced Functional Movement Interventions | 3 |
| ATR 6015 | Therapeutic Agents | 2 |
| ATR 6015L | Therapeutic Agents Laboratory | 1 |
| ATR 6020 | Pharmacology for Allied Health Care Professionals | 2 |
| ATR 6050 | Psychology of Sport, Injury and Rehabilitation | 2 |
| ATR 6065 | Leadership and Management in Athletic Training | 3 |
| ATR 6085 | General Medical Conditions and Medical | 3 |
| ATR 6092 | Terminology |  |
| ATR 6093 | Clinical Preceptorship | 3 |
| ATR 6094 | Clinical Practicum I | 3 |
| ATR 6099 | Athletic Training Capstone | 3 |
| KIN 6026 | Sport and Exercise Nutrition for Peak Performance | 3 |
| Total Units |  | 36 |

## College of Natural and Social Sciences

## Administration

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## 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.

## Centers

Point Loma Nazarene University maintains the following centers within the organization of the College of Natural and Social Sciences:

- The Center for Justice and Reconciliation
- The Early Childhood Learning Center


## Accreditations and Affiliations

For information about Accreditations and Affiliations, please click here (p. 11).

## 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

Department of Biology - Dawne Page, chair Department of Chemistry - Matthieu Rouffet, chair Department of Mathematics, Information, and Computer Sciences - Maria Zack, 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

## Centers

The Center for Justice and Reconciliation - Kim Berry Jones, director The Early Childhood Learning Center - Susan Rogers, academic 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.

## 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 environmental stewardship at over 50 participating Christian colleges and universities. Courses are offered during a 3 -week May term and two 5 -week summer sessions from May to early August. May term students take one course (4 units) at the Great Lakes or Costa Rica campus; Summer Session students take 2 courses (8 units) at the Great Lakes campus (summer session I and II) or Pacific Rim campus (summer session II). All courses transfer in as upperdivision electives for the Environmental Science B.S., Biology B.S./B.A., and Environmental Studies (Biology emphasis) B.A. majors, and for the Environmental Biology and Sustainability Studies minors. [An off-campus field-based program like Au Sable is a requirement for Environmental Science majors.] Financial aid is available through Au Sable. Point Loma Nazarene University is a Sustaining Partner with Au Sable, which means that PLNU students are eligible for additional financial aid and access to high-demand courses. Interested students should contact both the Study Abroad Office and the Au Sable campus rep (Dr. Mike Mooring) for further
information and to start your application. To see the course offerings, go to www.ausable.org/college (http://www.ausable.org/college/).

## Faculty

Chair - Dawne Page, Ph.D.
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

Yoojin Choi, Ph.D.
Harvard University
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
Michael Mooring, Ph.D.
University of California, Davis
Andrew Nosal, Ph.D.
Scripps Institution of Oceanography, University of California, San Diego
Dawne Page, Ph.D.
University of California, San Francisco
Brandon Sawyer, Ph.D.
Arizona State University
Heidi Woelbern, Ph.D.
University of California, Los Angeles
To view requirements for majors, minors, and certificates, see the Degree Program Information (p. 244) page.

- Biology, B.A. (p. 109)
- Biology, B.S. (p. 110)
- Biology-Chemistry, B.S. (Biology) (p. 111)
- Environmental Science (Biology), B.S. (p. 112)
- Biology: Cell and Molecular Biology Minor (p. 113)
- Biology: Environmental Biology Minor (p. 113)
- Biology: Organismal Biology Minor (p. 114)
- Computational Science Minor - Biology/Environmental Science (Biology) (p. 114)
- Computational Science Minor - Biology/Genetics (Biology) (p. 115)
- Science-Business Minor (Science Majors - Biology Department) (p. 116)
- Science-Marketing Minor (Science Majors - Biology Department) (p. 116)


## Biology

BIO 1001 Human Biology and Bioethics (FE) (3 Units)
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 (FE) (1 Unit) An inquiry-based laboratory that is a co-requisite for BIO 1001. Letter grade.
Corequisite(s): BIO 1001
BIO 1002 Environment and People (FE) (FE) (4 Units)
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 (FE) (3 Units)
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 (FE) (1 Unit)
An inquiry-based laboratory that is a co-requisite for BIO 1003.
Letter grade.
Corequisite(s): BIO 1003
BIO 1004 Biotechnology and Society (FE) (4 Units)
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, knockouts, 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 (FE) (3 Units)

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 (FE) (1 Unit)
An inquiry-based laboratory that is a co-requisite for BIO 1005.

## Letter grade.

Corequisite(s): BIO 1005

## BIO 1006 Global Health and Pathogens (FE) (4 Units)

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 (FE) (3 Units)
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(s): CHE 1003 or CHE 1052
Corequisite(s): BIO 1030L
BIO 1030L Human Anatomy and Physiology I Laboratory (FE) (1 Unit)
An anatomy and physiology laboratory that is a co-requisite for BIO 1030. Letter grade.
Corequisite(s): BIO 1030
BIO 1040 Human Anatomy and Physiology II (3 Units)
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 Unit)
An anatomy and physiology laboratory that is a co-requisite for BIO 1040.

## Letter grade.

Corequisite(s): BIO 1040

## BIO 2010 Cell Biology and Biochemistry (FE) (3 Units)

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 (FE) (1 Unit)
An inquiry-based laboratory that is a co-requisite for BIO 2010.
Letter grade.
Corequisite(s): BIO 2010
BIO 2011 Ecological and Evolutionary Systems (FE) (3 Units)
An introduction to the principles of ecology, evolutionary biology and sustainability.
Corequisite(s): BIO 2011L
BIO 2011 Ecological and Evolutionary Systems Laboratory (FE) (1 Unit)
An inquiry-based laboratory that is a co-requisite for BIO 2011.
Letter grade.
Corequisite(s): BIO 2011
BIO 2012 Organismal Biology (3 Units)
Principles of animal and plant structure, function, and diversity.
Prerequisite(s): BIO 2011
Corequisite(s): BIO 2012L

## BIO 2012L Organismal Biology Laboratory (1 Unit)

An inquiry-based laboratory that is a co-requisite for BIO 2012.
Letter grade.
Corequisite(s): BIO 2012
BIO 2020 Microbiology of Infectious Diseases (3 Units)
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 or CHE 1052; BIO 1040 (may be taken concurrently).
Corequisite(s): BIO 2020L
BIO 2020L Microbiology of Infectious Diseases Laboratory (1 Unit)
A laboratory that is a co-requisite for BIO 2020.
Letter grade.
Corequisite(s): BIO 2020
BIO 3012 Applied Plant Biology (2 Units)
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.
Prerequisite(s): BIO 2012
Recommended: MTH 2003 or MTH 3063

## BIO 3015 Microbiology (3 Units)

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 Unit)

An inquiry-based laboratory that is a co-requisite for BIO 3015.
Letter grade.
Corequisite(s): BIO 3015
BIO 3023 Introduction to Oceanography (3 Units)
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 Unit)
A field work-based laboratory that is a co-requisite for BIO 3023.
Letter grade.
Corequisite(s): BIO 3023

## BIO 3033 Marine Biology (3 Units)

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 Unit)

A field work-based laboratory that is a co-requisite for BIO 3033.
Letter grade.
Corequisite(s): BIO 3033
BIO 3040 Field Biology: Neotropical Ecology (2 Units)
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 Units)

The study of the inheritance, organization, expression and variability of genes.
Prerequisite(s): BIO 2010 with a grade of " C " or better or consent of instructor.
Corequisite(s): BIO 3045L
BIO 3045L Genetics Laboratory (1 Unit)
An inquiry-based laboratory that is a co-requisite for BIO 3045.
Letter grade.
Corequisite(s): BIO 3045

## BIO 3050 Advanced Cell Biology (3 Units)

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 Unit)
A laboratory that is a co-requisite for BIO 3050 .
Letter grade.
Corequisite(s): BIO 3050

## BIO 3052 Research Methodology (3 Units)

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 Units)

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 biologgers, 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 Unit)

A field work-based laboratory that is a co-requisite for BIO 3063.
Letter grade.
Corequisite(s): BIO 3063

## BIO 3080 Molecular Biology (3 Units)

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): BIO 3045 and CHE 1052
Corequisite(s): BIO 3080L

## BIO 3080L Molecular Biology Laboratory (1 Unit)

An inquiry-based laboratory that is a co-requisite for BIO 3080.
Letter grade.
Corequisite(s): BIO 3080

## BIO 3090 Immunology (3 Units)

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 repertories, 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 Unit)

An inquiry-based laboratory that is a co-requisite for BIO 3090. Letter grade.
Corequisite(s): BIO 3090
BIO 4000 Developmental Biology (3 Units)
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 Unit)
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 grade.
Corequisite(s): BIO 4000

## BIO 4010 Vertebrate Biology (3 Units)

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 Unit)

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 grade.
Corequisite(s): BIO 4010
BIO 4023 Advanced Human Physiology (3 Units)
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 consent of instructor (Cell and Molecular Biology or Organismal minors).
Recommended: MTH 2003 or MTH 3063
BIO 4023L Advanced Human Physiology Laboratory (1 Unit)
An inquiry-based laboratory that is a co-requisite for BIO 4023.
Letter grade.
Corequisite(s): BIO 4023

## BIO 4030 Animal Behavior (3 Units)

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 Unit)

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 grade.
Corequisite(s): BIO 4030

## BIO 4050 Advanced Biochemistry (3 Units)

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.
Also offered as CHE 4050.
Prerequisite(s): BIO 2010 and CHE 2094
Corequisite(s): BIO 4050L

## BIO 4050L Advanced Biochemistry Laboratory (1 Unit)

An inquiry-based laboratory that is a co-requisite for BIO 4050.

## Letter grade.

Also offered as CHE 4050L.
Corequisite(s): BIO 4050
BIO 4063 Methods of Teaching Secondary Science (3 Units)
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 stateadopted 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 EDU 6024 (graduate level). PLNU students who complete BIO 4063 are exempt from taking EDU 4034 or EDU 6024 for their preliminary single subject credential.
Prerequisite(s): BIO 2010 or FE-BIO and at least Sophomore standing.

## BIO 4070 Neuroscience (3 Units)

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, pathophysiology, 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 Units)

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 Unit)
A field work-based laboratory that is a co-requisite for BIO 4073.
Letter grade.
Corequisite(s): BIO 4073

## BIO 4083 Introduction to Geographic Information Systems (GIS) (3 Units)

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 Units)

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. May be repeated for a maximum of three (3) units. Credit/No Credit.
Prerequisite(s): Junior or Senior standing; consent of department chair and faculty advisor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.
BIO 4095 Special Topics - Naturalist Interpretation (3 Units) Instruction includes topics specific to how to conduct research for information of a particular location and unique characteristics of that environment and ecosystem.

## BIO 4097 Biology Seminar (1 Unit)

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, Biology-Chemistry, or Environmental Science major.

## BIO 4099 Research in Biology (1-3 Units)

Independent investigation, under the supervision of a member of the biology faculty.
May be repeated for a total of six (6) units, but no more than three (3) units may count toward upper-division requirements for graduation.
Prerequisite(s): Junior or Senior standing and consent of instructor.

## Environmental Science

EVS 3096 Advanced Biology (3 Units)
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 Units)

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 Units)
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 Units)

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).

## Biology, B.A. <br> 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.

| Code | Title U | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| BIO 2010 and BIO 2010L | ```Cell Biology and Biochemistry (FE) and Cell Biology and Biochemistry Laboratory (FE) 1``` | ) 4 |
| BIO 2011 and BIO 2011L | Ecological and Evolutionary Systems (FE) and Ecological and Evolutionary Systems Laboratory (FE) ${ }^{1}$ | 4 |
| BIO 2012 and BIO 2012L | Organismal Biology and Organismal Biology Laboratory | 4 |
| CHE 1052 <br> and CHE 1052L | General Chemistry I (FE) and General Chemistry I Lab (FE) ${ }^{1}$ | 5 |
| CHE 1053 and CHE 1053L | General Chemistry II and General Chemistry II Lab | 4 |
| CHE 2094 and CHE 2094L | Organic Chemistry I and Organic Chemistry I Lab ${ }^{1}$ | 4 |
| MTH 1044 | Calculus with Applications (FE) ${ }^{1}$ | 4 |
| Upper-Division Requirements |  |  |
| BIO 3045 and BIO 3045L | Genetics and Genetics Laboratory | 4 |
| BIO 3052 | Research Methodology | 3 |
| BIO 3063 and BIO 3063L | Conservation Ecology and Conservation Ecology Laboratory | 4 |
| BIO 4097 | Biology Seminar | 1 |
| MTH 3063 | Calculus Based Statistics with R | 3 |
| Elective Courses |  |  |
| Choose a minimu following: ${ }^{2}$ | m of twelve (12) units of electives from the | 12 |
| BIO 3012 | Applied Plant Biology |  |
| BIO 3015 and BIO 3015 | Microbiology and Microbiology Laboratory |  |
| BIO 3023 and BIO 3023 | Introduction to Oceanography and Introduction to Oceanography Laboratory |  |


| BIO 3033 and BIO | Marine Biology and Marine Biology Laboratory |
| :---: | :---: |
| BIO 3040 | Field Biology: Neotropical Ecology |
| BIO 3050 and BIO | Advanced Cell Biology and Advanced Cell Biology Laboratory |
| BIO 3080 and BIO 30 | Molecular Biology and Molecular Biology Laboratory |
| BIO 3090 <br> and BIO 30 | Immunology and Immunology Laboratory |
| BIO 4000 <br> and BIO | Developmental Biology and Developmental Biology Laboratory |
| BIO 4010 and BIO | Vertebrate Biology and Vertebrate Biology Laboratory |
| BIO 4023 <br> and BIO 40 | Advanced Human Physiology and Advanced Human Physiology Laboratory |
| BIO 4030 <br> and BIO 403 | Animal Behavior and Animal Behavior Laboratory |
| BIO 4050 and BIO 40 | Advanced Biochemistry and Advanced Biochemistry Laboratory |
| BIO 4063 | Methods of Teaching Secondary Science |
| BIO 4070 | Neuroscience |
| BIO 4073 and BIO | Experimental Marine Ecology and Experimental Marine Ecology Laboratory |
| BIO 4083 | Introduction to Geographic Information Systems (GIS) |
| $\begin{array}{r} \mathrm{BIO} 4090 \\ \text { or BIO } \end{array}$ | Internship in Biology Research in Biology |
| Total Units | 56 |
| 112 units m <br> 2 Courses an concurrent | oundational Explorations requirements. eir corresponding lab (if applicable) must be taken |
| 4-Year Credential Track: Single Subject |  |
| 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. (p. 25) (Single Subject Art California Teaching Credential) |  |
| - Health and Human Performance, B.A. (p. 99) (Single Subject Physical Education California Teaching Credential) |  |
| - French, B.A. (p. 66) (Single Subject World Languages: French California Teaching Credential) |  |
| - History, B.A. (p. 45) (Single Subject Social Sciences Teaching Credential) |  |
| - Literature-English Education, B.A. (p. 67) (Single Subject English Teaching Credential) |  |
| - Mathematics, B.S. (p. 137) (Single Subject Mathematics Teaching Credential) |  | concurrently.

## 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. (p. 25) (Single Subject Art California Teaching Credential)
- Biology, B.A. (p. 109) (Single Subject Science California Teaching Credential)
- Health and Human Performance, B.A. (p. 99) (Single Subject Physical Education California Teaching Credential)
- French, B.A. (p. 66) (Single Subject World Languages: French California Teaching Credential)
- History, B.A. (p. 45) (Single Subject Social Sciences Teaching Credential)
- Literature-English Education, B.A. (p. 67) (Single Subject English Teaching Credential

Credential)

- Music Education, B.A. (p. 88) (Single Subject Music California Teaching Credential)
- Spanish, B.A. (p. 69) (Single Subject World Languages: Spanish California Teaching Credential)

For the 4-year credential track, the following 3000 or 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 3rd credential course, meeting all program, university and state requirements for classroom observations and tests required prior to student teaching. Students will be vetted through a screening process, which may include a faculty interview, prior to being placed in student teaching. Candidates major in the academic discipline of their choice (e.g. Kinesiology) 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

| Code | Title | Units |
| :--- | :--- | ---: |
| EDU 3002 | Foundations of Education and Learning Theory ${ }^{1}$ | 3 |
| EDU 3006 | Principles of Language Acquisition ${ }^{1}$ | 3 |
| EDU 4004 | Foundations of Special Education ${ }^{1}$ | 3 |
| EDU 4009 | Classroom Assessment and Research Practices | 3 |
| EDU 4017 | Teaching and Learning Capstone: Contemporary | 2 |
|  | Issues in the Vocation of Education |  |
| EDU 4020 | Literacy Instruction for Secondary Teachers ${ }^{1}$ | 3 |
| EDU 4021 | General Methods for Secondary Teachers ${ }^{1}$ | 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 |
| Choose one (1) course from the following based on major: | 3 |  |


| EDU 4033 | Methods for Teaching Secondary Mathematics <br> (Mathematics Majors) |
| :--- | :--- |
| EDU 4034 | Methods of Teaching Secondary Science (Biology <br> Major) $^{2}$ |
| EDU 4035 | Methods of Teaching Secondary Social Science <br> (History Majors) |
| EDU 4036 | Methods for Teaching Secondary Foreign <br> Language (French/Spanish Majors) |
| EDU 4037 | Methods for Teaching Secondary Visual Arts (Art <br> Education Majors) |

1 Requires 20 hours of supervised field experience working with students in a classroom setting.
2 BIO 4063 also satisfies this credential requirement.
${ }^{3}$ ART 4055 also satisfies this credential requirement.
${ }^{4}$ 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.

## Code Title Units <br> Lower-Division Requirements

BIO $2010 \quad$ Cell Biology and Biochemistry (FE) 4 and BIO 2010L and Cell Biology and Biochemistry Laboratory (FE) 1

BIO 2011
and BIO 2011L
Ecological and Evolutionary Systems (FE)
and Ecological and Evolutionary Systems Laboratory (FE) ${ }^{1}$
BIO 2012 Organismal Biology 4
and BIO 2012L and Organismal Biology Laboratory
CHE 1052
and CHE 1052L
General Chemistry I (FE)

CHE 1053
and CHE 1053L
CHE 2094
and CHE 2094L
MTH 1044
PHY 1044
and PHY 1044L
PHY 1054
and PHY 1054L and General Physics II Lab (FE)
Upper-Division Requirements
BIO 3045 Genetics
4
and BIO 3045L and Genetics Laboratory
BIO 3052 Research Methodology
3
BIO 3063 Conservation Ecology 4
and BIO 3063L and Conservation Ecology Laboratory
BIO 3080
and BIO 3080L and Molecular Biology Laboratory

33

## Total Units



| BIO 4097 Biology Seminar <br> MTH 3063 Calculus Based Statistics with R |  |
| :--- | :--- | :--- |
| Elective Courses | 3 |
| Choose a minimum of eleven (11) units from the following: |  |

Approved Off-Campus
Total Units
12 units meet Foundational Explorations requirements.
${ }^{2}$ Courses and their corresponding lab (if applicable) must be taken concurrently.

## 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.

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| BIO 2010 and BIO 2010L | Cell Biology and Biochemistry (FE) and Cell Biology and Biochemistry Laboratory (FE) | ) 4 |
| BIO 2011 and BIO 2011L | Ecological and Evolutionary Systems (FE) and Ecological and Evolutionary Systems Laboratory (FE) | 4 |
| BIO 2012 and BIO 2012L | Organismal Biology and Organismal Biology Laboratory | 4 |
| CHE 1052 and CHE 1052L | General Chemistry I (FE) and General Chemistry I Lab (FE) | 5 |
| CHE 1053 and CHE 1053L | General Chemistry II and General Chemistry II Lab | 4 |
| CHE 2013 | Analytical Chemistry | 3 |
| CHE 2094 and CHE 2094L | Organic Chemistry I and Organic Chemistry I Lab | 4 |
| CHE 2096 and CHE 2096L | Organic Chemistry II and Organic Chemistry II Lab | 4 |
| MTH 1044 | Calculus with Applications (FE) | 4 |
| Choose one (1) sequence from the following: |  | 8 |

Sequence 1:
PHY 1044 General Physics I (FE)
and and General Physics I Lab (FE)
PHY 1044L
PHY 1054 General Physics II (FE)
and and General Physics II Lab (FE)
PHY 1054L
Sequence 2:

| PHY 2044 | University Physics I (FE) |
| :--- | :--- |
| and | and University Physics I Lab (FE) |

PHY 2044L
PHY 2054 University Physics II
and
and University Physics II Lab
PHY 2054L

| Upper-Division Requirements |  |  |
| :--- | :--- | :--- |
| BIO 3045 | Genetics |  |
| and BIO 3045L | and Genetics Laboratory | 4 |
| BIO 3080 <br> and BIO 3080L | Molecular Biology <br> and Molecular Biology Laboratory | 4 |
| BIO 4097 | Biology Seminar | 1 |
| CHE 3025 | Physical Chemistry I |  |
| and CHE 3025L | and Physical Chemistry I Lab | 4 |
| Choose one (1) course from the following: | 4 |  |


| BIO 4050 <br> and BIO 4050L | Advanced Biochemistry and Advanced Biochemistry Laboratory |  |
| :---: | :---: | :---: |
| CHE 4050 <br> and <br> CHE 4050L | Advanced Biochemistry and Advanced Biochemistry Lab |  |
| Choose one (1) cou | urse from the following: | 2-3 |
| CHE 3026 P | Physical Chemistry II |  |
| CHE 3051 | Organic Structure Elucidation |  |
| CHE 3070 | Instrumental Analysis |  |
| CHE 4053 Ad | Advanced Organic Chemistry |  |
| CHE 4066 | Bioinorganic Chemistry |  |
| CHE 4068 Ad | Advanced Inorganic Chemistry |  |
| Choose at least five | (5) units from the following: ${ }^{1}$ | 5 |
| BIO 3012 A | Applied Plant Biology |  |
| BIO 3015 and BIO 3015L | Microbiology and Microbiology Laboratory |  |
| $\begin{aligned} & \text { BIO } 3023 \\ & \text { and BIO } 3023 \mathrm{~L} \end{aligned}$ | Introduction to Oceanography and Introduction to Oceanography Laboratory |  |
| BIO 3033 and BIO 3033L | Marine Biology and Marine Biology Laboratory |  |
| BIO 3040 F | Field Biology: Neotropical Ecology |  |
| BIO 3050 and BIO 3050L | Advanced Cell Biology and Advanced Cell Biology Laboratory |  |
| BIO 3052 R | Research Methodology |  |
| BIO 3063 and BIO 3063L | Conservation Ecology and Conservation Ecology Laboratory |  |
| $\begin{aligned} & \text { BIO } 3090 \\ & \text { and BIO } 3090 \mathrm{~L} \end{aligned}$ | Immunology and Immunology Laboratory |  |
| $\begin{aligned} & \text { BIO } 4000 \\ & \text { and BIO } 4000 \mathrm{~L} \end{aligned}$ | Developmental Biology and Developmental Biology Laboratory |  |
| BIO 4010 and BIO 4010L | Vertebrate Biology and Vertebrate Biology Laboratory |  |
| BIO 4023 and BIO 4023L | Advanced Human Physiology and Advanced Human Physiology Laboratory |  |
| BIO 4030 <br> and BIO 4030L | Animal Behavior and Animal Behavior Laboratory |  |
| BIO 4070 | Neuroscience |  |
| $\begin{aligned} & \text { BIO } 4073 \\ & \text { and BIO } 4073 \mathrm{~L} \end{aligned}$ | Experimental Marine Ecology and Experimental Marine Ecology Laboratory |  |

Total Units 68-69

1
Courses and their corresponding lab (if applicable) must be taken concurrently.

## 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.

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| BIO 1002 | Environment and People (FE) | 4 |
| $\begin{aligned} & \text { BIO } 2010 \\ & \text { and BIO 2010L } \end{aligned}$ | Cell Biology and Biochemistry (FE) and Cell Biology and Biochemistry Laboratory (FE) | ) |
| BIO 2011 and BIO 2011L | Ecological and Evolutionary Systems (FE) and Ecological and Evolutionary Systems Laboratory (FE) | 4 |
| $\begin{aligned} & \text { BIO } 2012 \\ & \text { and BIO 2012L } \end{aligned}$ | Organismal Biology and Organismal Biology Laboratory | 4 |
| CHE 1052 and CHE 1052L | General Chemistry I (FE) and General Chemistry I Lab (FE) | 5 |
| CHE 1053 and CHE 1053L | General Chemistry II and General Chemistry II Lab | 4 |
| CHE 2013 | Analytical Chemistry | 3 |
| CHE 2094 and CHE 2094L | Organic Chemistry I and Organic Chemistry I Lab | 4 |
| MTH 1044 | Calculus with Applications (FE) | 4 |
| Choose one (1) course from the following: |  | 3 |


| ECO 1001 | Principles of Macroeconomics (FE) |
| :--- | :--- |
| ECO 1002 | Principles of Microeconomics (FE) |
| SOC 2001 | Cultural Anthropology (FE) |


| Upper-Division Requirements |  |  |
| :---: | :---: | :---: |
| BIO 3045 <br> and BIO 3045L | Genetics and Genetics Laboratory | 4 |
| BIO 3063 and BIO 3063L | Conservation Ecology and Conservation Ecology Laboratory | 4 |
| BIO 4083 | Introduction to Geographic Information Systems (GIS) | 3 |
| BIO 4097 | Biology Seminar | 1 |
| CHE 3070 | Instrumental Analysis | 2 |
| CHE 4070 and CHE 4070L | Environmental Chemistry and Environmental Chemistry Laboratory | 4 |
| MTH 3063 | Calculus Based Statistics with R | 3 |

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 offcampus 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 |
| :--- | :--- |
| EVS 3097 | Advanced Ecology |
| EVS 3098 | Advanced Ecological Applications |
| EVS 3099 | Public Policy and Stewardship |


| Advanced Science Electives |  |  |
| :---: | :---: | :---: |
| Choose a minimum | m of eight (8) units from the following: 1,2 | 8 |
| BIO 3012 | Applied Plant Biology |  |
| BIO 3015 and BIO 3015L | Microbiology and Microbiology Laboratory |  |
| BIO 3023 and BIO 3023L | Introduction to Oceanography and Introduction to Oceanography Laboratory |  |
| BIO 3033 and BIO 3033L | Marine Biology and Marine Biology Laboratory |  |
| BIO 3040 | Field Biology: Neotropical Ecology |  |
| BIO 4010 and BIO 4010L | Vertebrate Biology and Vertebrate Biology Laboratory |  |
| BIO 4023 and BIO 4023L | Advanced Human Physiology and Advanced Human Physiology Laboratory |  |
| BIO 4030 and BIO 4030L | Animal Behavior and Animal Behavior Laboratory |  |
| BIO 4073 and BIO 4073L | Experimental Marine Ecology and Experimental Marine Ecology Laboratory |  |
| BIO 4050 and BIO 4050L | Advanced Biochemistry and Advanced Biochemistry Laboratory ${ }^{3}$ |  |
| CHE 2096 <br> and CHE 2096L | Organic Chemistry II and Organic Chemistry II Lab |  |
| CHE 3025 <br> and <br> CHE 3025L | Physical Chemistry I and Physical Chemistry I Lab |  |
| CHE 3051 | Organic Structure Elucidation |  |
| CHE 4066 | Bioinorganic Chemistry |  |
| CHE 4068 | Advanced Inorganic Chemistry |  |

## Other Related Electives

Choose a minimum of four (4) units from the following: ${ }^{1,4}$

## Methodology:

| BIO 3052 | Research Methodology |
| :--- | :--- |
| BIO 4090 | Internship in Biology |
| BIO 4099 | Research in Biology |
| CHE 4090 | Internship in Chemistry |
| CHE 4099 | Research in Chemistry |
| Public Policy | and Stewardship: |
| BUS 4075 | Sustainability in Action |
| PHL 3060 | Philosophy and the Sciences |
| POL 2090 | World Regional Geography |
| POL 4035 | Global Governance |

POL 4041 Issues in Public Policy

Total Units
1 One or more approved off-campus environmental course(s) may fulfill part or all of this requirement.
2 Courses and their corresponding lab (if applicable) must be taken concurrently.
3 Or CHE 4050 and CHE 4050L
4 Students can customize their degree by taking one (1) course from each of the two (2) categories.

## Biology: Cell and Molecular Biology Minor

Code Title Units

## Required Courses

BIO $2010 \quad$ Cell Biology and Biochemistry (FE) 4
and BIO 2010L and Cell Biology and Biochemistry Laboratory (FE)
BIO 2011 Ecological and Evolutionary Systems (FE)
and BIO 2011L and Ecological and Evolutionary Systems
Laboratory (FE)
BIO 3045 Genetics 4
and BIO 3045L and Genetics Laboratory
and CHE 1052L and General Chemistry I Lab (FE)

## Elective Courses

Choose eight (8) units from the following: ${ }^{1} 8$
BIO 3015 Microbiology
and BIO 3015L and Microbiology Laboratory
BIO 3050 Advanced Cell Biology
and BIO 3050L and Advanced Cell Biology Laboratory
BIO 3052 Research Methodology
BIO 3080 Molecular Biology
and BIO 3080L and Molecular Biology Laboratory
BIO 3090 Immunology
and BIO 3090L and Immunology Laboratory
BIO 4000 Developmental Biology
and BIO 4000L and Developmental Biology Laboratory
BIO 4023 Advanced Human Physiology
and BIO 4023L and Advanced Human Physiology Laboratory
Total Units
${ }^{1}$ Courses and their corresponding lab (if applicable) must be taken concurrently.

## Biology: Environmental Biology Minor

| Code | Title | Units |
| :--- | :--- | ---: |
| Lower-Division Requirements |  |  |
| BIO 1002 | Environment and People (FE) | 4 |
| BIO 2011 Ecological and Evolutionary Systems (FE) <br> and BIO 2011L and Ecological and Evolutionary Systems <br> Laboratory (FE) <br> Choose one (1) of the following: 4 |  |  |

CHE 1001 Chemistry and Society (FE)

| CHE 1052 | General Chemistry I (FE) |
| :--- | :--- |
| and | and General Chemistry I Lab (FE) |
| CHE 1052L |  |

CHE 1052L

## Upper-Division Requirements

| BIO 3063 | Conservation Ecology |
| :--- | :--- |
| and BIO 3063L | and Conservation Ecology Laboratory |

Choose five (5) units of Approved Electives from the following: ${ }^{1} 5$
BIO 3012 Applied Plant Biology
BIO 3023 Introduction to Oceanography
and BIO 3023L and Introduction to Oceanography Laboratory
BIO 3033 Marine Biology
and BIO 3033L and Marine Biology Laboratory
BIO 3040 Field Biology: Neotropical Ecology
BIO 4010 Vertebrate Biology
and BIO 4010L and Vertebrate Biology Laboratory
BIO 4030 Animal Behavior
and BIO 4030L and Animal Behavior Laboratory
BIO 4073 Experimental Marine Ecology
and BIO 4073L and Experimental Marine Ecology Laboratory
BIO 4083 Introduction to Geographic Information Systems (GIS)
Off-Campus Requirement
One (1) approved off-campus field-immersion course 4

Total Units
${ }^{1}$ Courses and their corresponding lab (if applicable) must be taken concurrently.

## Biology: Organismal Biology Minor

| Code | Title U | Units |
| :---: | :---: | :---: |
| Required Courses |  |  |
| BIO 2010 and BIO 2010L | Cell Biology and Biochemistry (FE) and Cell Biology and Biochemistry Laboratory (FE) | ) 4 |
| BIO 2011 and BIO 2011L | Ecological and Evolutionary Systems (FE) and Ecological and Evolutionary Systems Laboratory (FE) | 4 |
| BIO 2012 and BIO 2012L | Organismal Biology and Organismal Biology Laboratory | 4 |
| BIO 3063 and BIO 3063L | Conservation Ecology and Conservation Ecology Laboratory | 4 |
| Choose eight (8) units from the following electives: |  | 8 |
| BIO 3012 | Applied Plant Biology |  |
| BIO 3015 and BIO 3015 | Microbiology and Microbiology Laboratory |  |
| BIO 3023 and BIO 3023 | Introduction to Oceanography and Introduction to Oceanography Laboratory |  |
| BIO 3033 and BIO 3033 | Marine Biology and Marine Biology Laboratory |  |
| BIO 3040 | Field Biology: Neotropical Ecology |  |
| BIO 4010 and BIO 4010 | Vertebrate Biology and Vertebrate Biology Laboratory |  |
| BIO 4023 and BIO 4023 | Advanced Human Physiology and Advanced Human Physiology Laboratory |  |
| BIO 4030 and BIO 4030 | Animal Behavior and Animal Behavior Laboratory |  |

BIO 4073 Experimental Marine Ecology and BIO 4073L and Experimental Marine Ecology Laboratory

Total 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<br>\section*{Biology Major}<br>Code Title Units

Lower-Division Requirements
BIO 2011 Ecological and Evolutionary Systems (FE) 4
and BIO 2011L and Ecological and Evolutionary Systems Laboratory (FE)
CSC 1043 Introduction to Computer Programming 3
and CSC 1043L and Introduction to Computer Programming Lab
Upper-Division Requirements
BIO 3063 Conservation Ecology 4
and BIO 3063L and Conservation Ecology Laboratory
CSC 3002 UNIX and Python Scripting for Computational 2 Science
CSC 3011 Machine Learning and Multivariate Modeling in R 1
or CSC 3031 Data Visualization and Communication with R
Project
Choose at least three (3) units from the following:
CSC 4133 Service Learning in Computer Science
HON 4098 Honors Project I
and HON 4099 and Honors Project II
MTH 4133 Service Learning in Mathematics
Biology Major - Required Courses
CSC 3022 Data Management for Computational Science 2
MTH 1044 Calculus with Applications (FE) 4
MTH $3063 \quad$ Calculus Based Statistics with R 3
Total Units 26

## Computer Science Major

Code Title Units
Lower-Division Requirements
BIO 2011 Ecological and Evolutionary Systems (FE) 4
and BIO 2011L and Ecological and Evolutionary Systems Laboratory (FE)
CSC 1043 Introduction to Computer Programming 3
and CSC 1043L and Introduction to Computer Programming Lab
Upper-Division Requirements

| BIO 3063 <br> and BIO 3063L | Conservation Ecology and Conservation Ecology Laboratory | 4 |
| :---: | :---: | :---: |
| CSC 3002 | UNIX and Python Scripting for Computational Science | 2 |
| CSC 3011 or CSC 3031 | Machine Learning and Multivariate Modeling in R <br> Data Visualization and Communication with $R$ | 1 |
| Project |  |  |
| Choose at least three (3) units from the following: |  | 3 |
| CSC 4133 | Service Learning in Computer Science |  |
| HON 4098 and HON 4099 | Honors Project I and Honors Project II |  |
| MTH 4133 | Service Learning in Mathematics |  |
| Computer Science Majors - Required Courses |  |  |
| ISS 4014 | Data Base Systems and Web Integration | 4 |
| MTH 1064 and MTH 1064L | Calculus I (FE) <br> and Calculus I Lab (FE) | 4 |
| $\begin{aligned} & \text { MTH } 3063 \\ & \text { or MTH } 3083 \end{aligned}$ | Calculus Based Statistics with R Mathematical Probability and Statistics | 3 |
| Total Units |  | 28 |
| Mathematics Major |  |  |
| Code | Title | Units |
| Lower-Division Requirements |  |  |
| BIO 2011 <br> and BIO 2011L | Ecological and Evolutionary Systems (FE) and Ecological and Evolutionary Systems Laboratory (FE) | 4 |
| CSC 1043 and CSC 1043L | Introduction to Computer Programming and Introduction to Computer Programming Lab | 3 |
| Upper-Division Requirements |  |  |
| BIO 3063 and BIO 3063L | Conservation Ecology and Conservation Ecology Laboratory | 4 |
| CSC 3002 | UNIX and Python Scripting for Computational Science | 2 |
| $\begin{aligned} & \text { CSC } 3011 \\ & \text { or CSC } 3031 \end{aligned}$ | Machine Learning and Multivariate Modeling in R Data Visualization and Communication with $R$ | 1 |
| Project |  |  |
| Choose at least three (3) units from the following: |  | 3 |
| CSC 4133 | Service Learning in Computer Science |  |
| HON 4098 and HON 4099 | Honors Project I and Honors Project II |  |
| MTH 4133 | Service Learning in Mathematics |  |
| Mathematics Majors - Required Courses |  |  |
| CSC 3022 | Data Management for Computational Science | 2 |
| MTH 1064 and MTH 1064L | Calculus I (FE) and Calculus I Lab (FE) | 4 |
| MTH 3083 | Mathematical Probability and Statistics | 3 |
| Total Units |  | 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

4 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 <br> Emphasis

## Biology Major

Code Title Units

Lower-Division Requirements
BIO $2010 \quad$ Cell Biology and Biochemistry (FE) 4 and BIO 2010L and Cell Biology and Biochemistry Laboratory (FE) CSC 1043 Introduction to Computer Programming 3 and CSC 1043L and Introduction to Computer Programming Lab

| Upper-Division Requirements |  |
| :--- | :--- |
| BIO $3045 \quad$ Genetics | 4 |


| and BIO 3045L | and Genetics Laboratory |
| :--- | :--- |
| CSC 3002 | UNIX and Python Scripting for Computational 2 | Science

CSC 3011 Machine Learning and Multivariate Modeling in R 1
or CSC 3031 Data Visualization and Communication with R
Project
Choose at least three (3) units from the following: 3

| CSC 4133 | Service Learning in Computer Science |  |
| :--- | :--- | ---: |
| HON 4098 | Honors Project I |  |
| and HON 4099 | and Honors Project II |  |
| MTH 4133 | Service Learning in Mathematics |  |
| Biology Major | Required Courses |  |
| CSC 3022 | Data Management for Computational Science | 2 |
| MTH 1044 | Calculus with Applications (FE) | 4 |
| MTH 3063 | Calculus Based Statistics with R | 3 |
| Total Units |  | $\mathbf{2 6}$ |

## Computer Science Majors

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| BIO 2010 and BIO 2010L | Cell Biology and Biochemistry (FE) and Cell Biology and Biochemistry Laboratory (FE) | ) |
| $\begin{aligned} & \text { CSC } 1043 \\ & \text { and CSC 1043L } \end{aligned}$ | Introduction to Computer Programming and Introduction to Computer Programming Lab | 3 |
| Upper-Division Requirements |  |  |
| BIO 3045 and BIO 3045L | Genetics and Genetics Laboratory | 4 |
| CSC 3002 | UNIX and Python Scripting for Computational Science | 2 |
| $\begin{aligned} & \text { CSC } 3011 \\ & \text { or CSC } 3031 \end{aligned}$ | Machine Learning and Multivariate Modeling in $R$ Data Visualization and Communication with $R$ | 1 |
| Project |  |  |
| Choose at leas | ee (3) units from the following: | 3 |

CSC 4133 Service Learning in Computer Science
HON 4098 Honors Project I
and HON 4099 and Honors Project II
MTH 4133 Service Learning in Mathematics
Computer Science Majors - Required Courses

| ISS 4014 | Data Base Systems and Web Integration | 4 |
| :--- | :--- | ---: |
| MTH 1064 | Calculus I (FE) | 4 |
| and MTH 1064L | and Calculus I Lab (FE) |  |
| MTH 3083 | Mathematical Probability and Statistics | $\mathbf{3}$ |
| Total Units |  | $\mathbf{2 8}$ |

## Mathematics Majors

Code Title
Units
Lower-Division Requirements

| BIO 2010 and BIO 2010L | Cell Biology and Biochemistry (FE) and Cell Biology and Biochemistry Laboratory (FE) | 4 |
| :---: | :---: | :---: |
| CSC 1043 <br> and CSC 1043L | Introduction to Computer Programming and Introduction to Computer Programming Lab | 3 |
| Upper-Division Requirements |  |  |
| BIO 3045 and BIO 3045L | Genetics and Genetics Laboratory | 4 |
| CSC 3002 | UNIX and Python Scripting for Computational Science | 2 |
| $\begin{aligned} & \text { CSC } 3011 \\ & \quad \text { or CSC } 3031 \end{aligned}$ | Machine Learning and Multivariate Modeling in R Data Visualization and Communication with $R$ | 1 |
| Project |  |  |
| Choose at least | ee (3) units from the following: | 3 |


| CSC 4133 | Service Learning in Computer Science |  |
| :--- | :--- | :--- |
| HON 4098 | Honors Project I |  |
| and HON 4099 | and Honors Project II |  |
| MTH 4133 |  | Service Learning in Mathematics |
| Mathematics Majors - Required Courses |  |  |
| CSC 3022 | Data Management for Computational Science | 2 |
| MTH 1064 | Calculus I (FE) |  |
| and MTH 1064L | and Calculus I Lab (FE) | 4 |
| MTH 3083 | Mathematical Probability and Statistics | 3 |
| Total Units |  | $\mathbf{2 6}$ |

## Science-Business Minor (Science Majors - Biology Department)

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.

| Code | Title U | Units |
| :---: | :---: | :---: |
| Required Courses |  |  |
| ACC 2000 | Principles of Accounting for Non-Business Majors | s 3 |
| $\begin{aligned} & \text { BIO } 2010 \\ & \text { and BIO 2010L } \end{aligned}$ | Cell Biology and Biochemistry (FE) and Cell Biology and Biochemistry Laboratory (FE) | ) 4 |
| BIO 3045 and BIO 3045L | Genetics and Genetics Laboratory | 4 |
| CHE 2094 and CHE 2094L | Organic Chemistry I and Organic Chemistry I Lab | 4 |
| MGT 2012 | Principles of Management | 3 |
| MKT 3032 | Principles of Marketing | 3 |
| MTH 1044 or MTH 1064 | Calculus with Applications (FE) Calculus I (FE) | 4 |
| Choose one (1) course from the following: |  | 3 |


| BUS 4075 | Sustainability in Action |
| :--- | :--- |
| MGT 3020 | Organizational Behavior |
| MGT 3074 | Human Resource Management |
| MGT 3082 | Applied Entrepreneurship |
| MGT 4012 | Leadership Theory and Practice |
| MGT 4070 | Nonprofit Organization Management |
| MGT 4084 | Operations Management |
| 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.
Code Title Units

Required Courses

| ACC 2000 | Principles of Accounting for Non-Business Majors 1 | 3 |
| :---: | :---: | :---: |
| BIO 2010 and BIO 2010L | Cell Biology and Biochemistry (FE) and Cell Biology and Biochemistry Laboratory (FE) | 4 |
| BIO 3045 and BIO 3045L | Genetics and Genetics Laboratory | 4 |
| MKT 3032 | Principles of Marketing | 3 |
| MTH 1044 or MTH 1064 | Calculus with Applications (FE) Calculus I (FE) | 4 |
| Choose two (2) courses from the following Marketing courses: |  | 6 |
| MKT 3033 | Consumer and Organizational Buying Behavior |  |
| MKT 3036 | Integrated Marketing and Sales Communication |  |
| MKT 3050 | Digital Marketing Essentials |  |
| Total Units |  | 24 |

1 The ACC 2001 and ACC 2002 sequence may be substituted for ACC 2000.

## Department of Chemistry

## Purposes

- To prepare students for graduate studies in fields related to Chemistry, Biochemistry, or Health Professions (e.g. Medical, Dental, Pharmacy, etc.);
- To prepare students to enter careers in industry (biotech, etc.) 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 Department of Chemistry aims to provide a space to support students and their passions. Quality classroom instruction paired with
a laboratory rich curriculum ensures students gain both necessary knowledge and hands-on experience to be prepared for a variety of science related fields. Deliberate mentoring from our expert faculty provides students with the knowledge and confidence to pursue their goals. Additionally, the Chemistry Undergraduate Research program provides students with the opportunity to apply to work under the direction of experienced faculty on original research projects in a variety of fields within chemistry and biochemistry. Our research students gain approximately 400 hours of hands-on lab experience in a single summer. Students work in our state-of-the-art laboratory facility, studying subjects ranging from organic and inorganic synthesis to drug discovery, natural products chemistry, and structural biology. Results of their research are often published in peer-reviewed professional journals and/or presented at scientific conferences with students included as co-authors. As remarkable evidence of loyalty and support, department alumni also contribute nearly $\$ 70,000$ annually to partially fund the research program 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

Students who graduate with a degree from the Department of Chemistry leave PLNU prepared for graduate schools or careers in industry or teaching. Since 2004, more than $90 \%$ of students who have applied for admission to medical, dental, optometry, pharmacy, and veterinary schools have been accepted. Acceptance rates for Biology and Chemistry students applying to graduate (M.A., M.S., and Ph.D.) programs is over $90 \%$. 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 in our program, and our department is proud of each of our graduates.

## Faculty

Chair - Matthieu Rouffet, Ph.D.
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.
School of Pharmacy, Reims, France
Sam Stoneburner, Ph.D.
University of Minnesota - Twin Cities
To view requirements for majors, minors, and certificates, see the Degree Program Information (p. 244) page.

- Biology-Chemistry, B.S. (Chemistry) (p. 119)
- Chemistry, B.S. (p. 120)
- Environmental Science (Chemistry), B.S. (p. 121)
- Computational Science Minor - Chemistry (Chemistry) (p. 122)
- Science-Business Minor (Science Majors - Chemistry Department) (p. 123)
- Science-Marketing Minor (Science Majors - Chemistry Department) (p. 123)


## Chemistry

CHE 1001 Chemistry and Society (FE) (4 Units)
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 Foundational Explorations requirement; does not count toward any Chemistry Department majors.
Prerequisite(s): MTH 0099 or equivalent.
CHE 1002 Chemistry in our Everyday Lives (FE) (3 Units)
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(s): MTH 0099 or equivalent.
Corequisite(s): CHE 1002L
CHE 1002L Chemistry in our Everyday Lives Lab (FE) (1 Unit)
A lab course designed for a hands-on exploration of basic principles of chemistry as they apply to our everyday lives.
Pre or Corequisite(s): CHE 1002
CHE 1003 Introduction to General, Organic, and Biological Chemistry (FE) (4 Units)
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 Foundational Explorations 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 (FE) (1 Unit)
An inquiry-based laboratory that is a co-requisite for CHE1003.
Pre or Corequisite(s): CHE 1003
CHE 1052 General Chemistry I (FE) (4 Units)
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 (FE) (1 Unit)
An inquiry-based laboratory that is a co-requisite for CHE 1052.
Letter grade.
Corequisite(s): CHE 1052
CHE 1053 General Chemistry II (3 Units)
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 Unit)
An inquiry-based laboratory that is a co-requisite for CHE 1053.
Letter grade.
Corequisite(s): CHE 1053
CHE 2001 Serving Through Healing: An Introduction to Health Professions (1 Unit)
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.
Credit/No Credit.
CHE 2013 Analytical Chemistry (3 Units)
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 Units)
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 Unit)
An inquiry-based laboratory that is a co-requisite for CHE 2094.
Letter grade.
Corequisite(s): CHE 2094
CHE 2096 Organic Chemistry II (3 Units)
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 Unit)
An inquiry-based laboratory that is a co-requisite for CHE 2096.
Letter grade.
Corequisite(s): CHE 2096
CHE 3025 Physical Chemistry I (3 Units)
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, MTH 1044 or MTH 1064, and PHY 1054 or PHY 2054
Corequisite(s): CHE 3025L
CHE 3025L Physical Chemistry I Lab (1 Unit)
An inquiry-based laboratory that is a co-requisite for CHE 3025.
Letter grade.
Corequisite(s): CHE 3025
CHE 3026 Physical Chemistry II (3 Units)
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, MTH 1044 or MTH 1064, and PHY 1054 or PHY 2054

CHE 3027 Physical Chemistry II Laboratory (1 Unit)
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 Units)
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.
Prerequisite(s): CHE 2096 and consent of instructor.
CHE 3070 Instrumental Analysis (2 Units)
Analytical analysis using instruments such as gas chromatography, high performance liquid chromatography, ultraviolet-visible, FT-infrared and nuclear magnetic resonance spectroscopy, and mass spectrometry. One four-hour laboratory each week.
Prerequisite(s): CHE 2013 and consent of instructor.
CHE 4050 Advanced Biochemistry (3 Units)
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.
Also offered as BIO 4050.
Prerequisite(s): BIO 2010 and CHE 2094
Corequisite(s): CHE 4050L
CHE 4050L Advanced Biochemistry Lab (1 Unit)
An inquiry-based laboratory that is a co-requisite for CHE 4050.
Letter grade.
Corequisite(s): CHE 4050
CHE 4053 Advanced Organic Chemistry (2 Units)
Advanced study of organic reaction mechanisms including: the Hammett equation, isotope and substituent effects and orbital symmetry. Modern synthetic reactions are presented.
Prerequisite(s): CHE 2096 and consent of instructor.
CHE 4054 Advanced Organic Chemistry Laboratory (1 Unit)
Designed to accompany CHE 4053. Emphasis on modern synthetic methods and purification of complex reaction mixtures.
One four-hour laboratory each week.
Corequisite(s): CHE 4053

## CHE 4066 Bioinorganic Chemistry (2 Units)

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.
Prerequisite(s): CHE 2096 or consent of instructor.
CHE 4067 Advanced Inorganic Chemistry Laboratory (1 Unit)
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(s): CHE 4068

CHE 4068 Advanced Inorganic Chemistry (3 Units)
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 4070 Environmental Chemistry (3 Units)

This course covers the chemistry of Earth's environment, including the natural chemical processes as well as anthropogenic contributions. The environment in this context is divided into the atmosphere, the hydrosphere, the lithosphere, and anthrosphere. Particular emphasis is given to human influences in each of these "spheres," including the causes, effects, detection, prevention, and mitigation of pollution. Environmental pollution is a global problem, with many technological and cultural causes, and as such requires an understanding of numerous disciplines in order to solve. This course thus involves the integration of concepts from chemistry, biology, geology, ecology, atmospheric sciences, hydrology, toxicology, political science, and others.
Prerequisite(s): CHE 2013, CHE 2094, and CHE 2094L
CHE 4070L Environmental Chemistry Laboratory (1 Unit)
Designed to accompany CHE 4070. The lab component will focus primarily on detection of pollutants in air and water by using modern chemical instrumentation. The skills learned will be applied to a class research project.
One four-hour laboratory each week.
Pre or Corequisite(s): CHE 4070
CHE 4075 Special Topics in Chemistry (2 Units)
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.
Prerequisite(s): CHE 2096 or consent of instructor.
CHE 4090 Internship in Chemistry (1-3 Units)
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.
May be repeated up to a maximum of three (3) units. Credit/No Credit.
Prerequisite(s): Junior or Senior standing; consent of department chair and faculty advisor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.
CHE 4095 Chemistry Seminar (1 Unit)
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 Units)
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 (4) units.
Corequisite(s): Consent of instructor.
Open to Juniors and Seniors.

## 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.
Code
Lower-Division Requirements
BIO 2010

and BIO 2010L $\quad$\begin{tabular}{l}
Cell Biology and Biochemistry (FE) <br>
and Cell Biology and Biochemistry Laboratory (FE) <br>
BIO 2011 <br>
and BIO 2011L

$\quad$

Ecological and Evolutionary Systems (FE) <br>
and Ecological and Evolutionary Systems <br>
Laboratory (FE)
\end{tabular}$\quad 4$

Sequence 1:
PHY 1044
and
General Physics I (FE)

PHY 1044L
PHY 1054 General Physics II (FE)
and and General Physics II Lab (FE)
PHY 1054L
Sequence 2:
PHY 2044 University Physics I (FE)
and and University Physics I Lab (FE)
PHY 2044L
PHY 2054
University Physics II
and
and University Physics II Lab

PHY 2054L

| Upper-Division Requirements |  |  |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { BIO } 3045 \\ & \text { and BIO } 3045 \mathrm{~L} \end{aligned}$ | Genetics and Genetics Laboratory | 4 |
| $\begin{aligned} & \text { BIO } 3080 \\ & \text { and BIO } 3080 \mathrm{~L} \end{aligned}$ | Molecular Biology and Molecular Biology Laboratory | 4 |
| BIO 4097 | Biology Seminar | 1 |
| CHE 3025 and CHE 3025L | Physical Chemistry I and Physical Chemistry I Lab | 4 |
| Choose one (1) of the following: |  | 4 |
| BIO 4050 and BIO 4050L | Advanced Biochemistry and Advanced Biochemistry Laboratory |  |
| CHE 4050 and CHE 4050L | Advanced Biochemistry and Advanced Biochemistry Lab |  |
| Choose one (1) course from the following: |  | 2-3 |
| CHE 3026 | Physical Chemistry II |  |
| CHE 3051 | Organic Structure Elucidation |  |
| CHE 3070 | Instrumental Analysis |  |
| CHE 4053 | Advanced Organic Chemistry |  |
| CHE 4066 | Bioinorganic Chemistry |  |
| CHE 4068 | Advanced Inorganic Chemistry |  |
| Choose st least five (5) units from the following: ${ }^{1}$ |  | 5 |
| BIO 3012 | Applied Plant Biology |  |
| BIO 3015 <br> and BIO 3015L | Microbiology and Microbiology Laboratory |  |
| BIO 3023 and BIO 3023L | Introduction to Oceanography and Introduction to Oceanography Laboratory |  |
| BIO 3033 and BIO 3033L | Marine Biology and Marine Biology Laboratory |  |
| BIO 3040 | Field Biology: Neotropical Ecology |  |
| BIO 3050 and BIO 3050L | Advanced Cell Biology and Advanced Cell Biology Laboratory |  |
| BIO 3052 | Research Methodology |  |
| BIO 3063 and BIO 3063L | Conservation Ecology and Conservation Ecology Laboratory |  |
| BIO 3090 and BIO 3090L | Immunology and Immunology Laboratory |  |
| BIO 4000 and BIO 4000L | Developmental Biology and Developmental Biology Laboratory |  |
| BIO 4010 and BIO 4010L | Vertebrate Biology and Vertebrate Biology Laboratory |  |
| BIO 4023 and BIO 4023L | Advanced Human Physiology and Advanced Human Physiology Laboratory |  |
| BIO 4030 and BIO 4030L | Animal Behavior and Animal Behavior Laboratory |  |
| BIO 4070 | Neuroscience |  |
| BIO 4073 and BIO 4073L | Experimental Marine Ecology and Experimental Marine Ecology Laboratory |  |


| Total Units 68-69 |
| :--- | :--- |

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

## Chemistry, B.S. <br> 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.

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| CHE 1052 and CHE 1052L | General Chemistry I (FE) and General Chemistry I Lab (FE) | 5 |
| CHE 1053 and CHE 1053L | General Chemistry II and General Chemistry II Lab | 4 |
| CHE 2013 | Analytical Chemistry | 3 |
| CHE 2094 and CHE 2094L | Organic Chemistry I and Organic Chemistry I Lab | 4 |
| CHE 2096 and CHE 2096L | Organic Chemistry II and Organic Chemistry II Lab | 4 |
| MTH 1064 and MTH 1064L | Calculus I (FE) and Calculus I Lab (FE) | 4 |
| MTH 1074 and MTH 1074L | Calculus II and Calculus II Lab | 4 |
| PHY 2044 and PHY 2044L | University Physics I (FE) and University Physics I Lab (FE) | 4 |
| PHY 2054 and PHY 2054L | University Physics II and University Physics II Lab | 4 |

## Upper-Division Requirements

CHE $3025 \quad$ Physical Chemistry I 4
and CHE 3025L and Physical Chemistry I Lab
CHE 3026 Physical Chemistry II 4
and CHE 3027 and Physical Chemistry II Laboratory
CHE $3051 \quad$ Organic Structure Elucidation 2
CHE $3070 \quad$ Instrumental Analysis 2
CHE 4050 Advanced Biochemistry 4
and CHE 4050L and Advanced Biochemistry Lab
CHE 4053 Advanced Organic Chemistry
3
and CHE 4054 and Advanced Organic Chemistry Laboratory
CHE 4066 Bioinorganic Chemistry 2

CHE 4067 Advanced Inorganic Chemistry Laboratory 4
and CHE 4068 and Advanced Inorganic Chemistry
CHE $4095 \quad$ Chemistry Seminar 1

Biology and Physics 3000-level or higher, Math 2000-level or higher 3-4 1,2

## Total Units

[^1]2 Recommended: CHE 4099, MTH 2033, MTH 2074

Notes(s): Accepting Associate Degree for Transfer (ADT) (p. 227)

## 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.

| Code | Title U | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| BIO 1002 | Environment and People (FE) | 4 |
| BIO 2010 and BIO 2010L | Cell Biology and Biochemistry (FE) and Cell Biology and Biochemistry Laboratory (FE) | ) 4 |
| BIO 2011 and BIO 2011L | Ecological and Evolutionary Systems (FE) and Ecological and Evolutionary Systems Laboratory (FE) | 4 |
| BIO 2012 and BIO 2012L | Organismal Biology and Organismal Biology Laboratory | 4 |
| CHE 1052 and CHE 1052L | General Chemistry I (FE) and General Chemistry I Lab (FE) | 5 |
| CHE 1053 and CHE 1053L | General Chemistry II and General Chemistry II Lab | 4 |
| CHE 2013 | Analytical Chemistry | 3 |
| CHE 2094 and CHE 2094L | Organic Chemistry I and Organic Chemistry I Lab | 4 |
| MTH 1044 | Calculus with Applications (FE) | 4 |
| Choose one (1) course from the following: |  | 3 |
| ECO 1001 | Principles of Macroeconomics (FE) |  |
| ECO 1002 | Principles of Microeconomics (FE) |  |
| SOC 2001 | Cultural Anthropology (FE) |  |

## Upper-Division Requirements

| BIO 3045 and BIO 3045L | Genetics and Genetics Laboratory | 4 |
| :---: | :---: | :---: |
| BIO 3063 and BIO 3063L | Conservation Ecology and Conservation Ecology Laboratory | 4 |
| BIO 4083 | Introduction to Geographic Information Systems (GIS) | 3 |
| BIO 4097 | Biology Seminar | 1 |
| CHE 3070 | Instrumental Analysis | 2 |
| CHE 4070 and CHE 4070L | Environmental Chemistry and Environmental Chemistry Laboratory | 4 |
| MTH 3063 | Calculus Based Statistics with R | 3 |
| Upper-Division Electives |  | 12 |
| 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 offcampus 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 |  |
| EVS 3097 | Advanced Ecology |  |
| EVS 3098 | Advanced Ecological Applications |  |
| EVS 3099 | Public Policy and Stewardship |  |
| Advanced Science Electives |  |  |
| Choose a minim | m of eight (8) units from the following: ${ }^{\text {1,2 }}$ | 8 |
| BIO 3012 | Applied Plant Biology |  |
| BIO 3015 and BIO 3015 | Microbiology and Microbiology Laboratory |  |
| BIO 3023 and BIO 3023 | Introduction to Oceanography and Introduction to Oceanography Laboratory |  |
| BIO 3033 and BIO 3033 | Marine Biology and Marine Biology Laboratory |  |
| BIO 3040 | Field Biology: Neotropical Ecology |  |
| BIO 4010 and BIO 4010 | Vertebrate Biology and Vertebrate Biology Laboratory |  |
| BIO 4023 and BIO 4023 | Advanced Human Physiology and Advanced Human Physiology Laboratory |  |
| BIO 4030 and BIO 4030 | Animal Behavior and Animal Behavior Laboratory |  |
| BIO 4073 and BIO 4073 | Experimental Marine Ecology and Experimental Marine Ecology Laboratory |  |
| BIO 4050 and BIO 4050 | Advanced Biochemistry and Advanced Biochemistry Laboratory ${ }^{3}$ |  |
| CHE 2096 <br> and CHE 2096L | Organic Chemistry II and Organic Chemistry II Lab |  |
| CHE 3025 <br> and <br> CHE 3025L | Physical Chemistry I and Physical Chemistry I Lab |  |
| CHE 3051 | Organic Structure Elucidation |  |
| CHE 4066 | Bioinorganic Chemistry |  |
| CHE 4068 | Advanced Inorganic Chemistry |  |
| Other Related Electives |  |  |
| Choose a minimum of four (4) units from the following: ${ }^{\text {1,4 }}$ |  | 4 |
| Methodology: |  |  |


| BIO 3052 | Research Methodology |
| :--- | :--- |
| BIO 4090 | Internship in Biology |
| BIO 4099 | Research in Biology |
| CHE 4090 | Internship in Chemistry |
| CHE 4099 | Research in Chemistry |
| Public Policy and Stewardship: |  |
| BUS 4075 | Sustainability in Action |
| PHL 3060 | Philosophy and the Sciences |
| POL 2090 | World Regional Geography |
| POL 4035 | Global Governance |
| POL 4041 | Issues in Public Policy |
| Tat Units |  |

${ }^{1}$ One or more approved off-campus environmental course(s) may fulfill part or all of this requirement.
2 Courses and their corresponding lab (if applicable) must be taken concurrently.
${ }^{3}$ Or CHE 4050 and CHE 4050 L .
4 Students can customize their degree by taking one (1) course from each of the two (2) categories.

## 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

## Chemistry Major

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| CHE 1052 and CHE 1052L | General Chemistry I (FE) and General Chemistry I Lab (FE) | 5 |
| CHE 1053 and CHE 1053L | General Chemistry II and General Chemistry II Lab | 4 |
| CSC 1043 and CSC 1043L | Introduction to Computer Programming and Introduction to Computer Programming Lab | 3 |
| MTH 1064 and MTH 1064L | Calculus I (FE) and Calculus I Lab (FE) | 4 |
| Upper-Division Requirements |  |  |
| CSC 3002 | UNIX and Python Scripting for Computational Science | 2 |
| $\begin{aligned} & \text { CSC } 3011 \\ & \text { or CSC } 3031 \end{aligned}$ | Machine Learning and Multivariate Modeling in R Data Visualization and Communication with $R$ | 1 |
| Project |  |  |
| Choose one (1) of | the following: | 3 |
| CSC 4133 | Service Learning in Computer Science |  |
| HON 4098 and HON 4099 | Honors Project I and Honors Project II |  |
| MTH 4133 | Service Learning in Mathematics |  |


| Chemistry Major - Required Courses |  |  |
| :--- | :--- | ---: |
| CHE 2013 | Analytical Chemistry | 3 |
| CHE 3025 | Physical Chemistry I | 4 |
| and CHE 3025L | and Physical Chemistry I Lab |  |
| CSC 3022 | Data Management for Computational Science | 2 |
| MTH 3063 | Calculus Based Statistics with R | 3 |
| or MTH 3083 | Mathematical Probability and Statistics |  |

Total Units
34

## Computer Science Major

Code Title Units

Lower-Division Requirements
CHE $1052 \quad$ General Chemistry I (FE) 5
and CHE 1052L and General Chemistry I Lab (FE)
CHE 1053 General Chemistry II
4
and CHE 1053L and General Chemistry II Lab
CSC 1043 Introduction to Computer Programming 3
and CSC 1043L and Introduction to Computer Programming Lab
MTH $1064 \quad$ Calculus I (FE)
4
and MTH 1064L and Calculus I Lab (FE)
Upper-Division Requirements

| CSC 3002 | UNIX and Python Scripting for Computational <br> Science | 2 |
| :---: | :--- | :---: |
| CSC 3011 | Machine Learning and Multivariate Modeling in R | 1 |
| or CSC 3031 | Data Visualization and Communication with R |  |

Project
Choose one (1) of the following: 3

CSC 4133 Service Learning in Computer Science
HON 4098 Honors Project I
and HON 4099 and Honors Project II
MTH 4133 Service Learning in Mathematics
Computer Science Major - 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
Total Units 29

## Mathematics Majors

Code Title Units

Lower-Division Requirements
CHE $1052 \quad$ General Chemistry I (FE) 5
and CHE 1052L and General Chemistry I Lab (FE)
CHE 1053 General Chemistry II
4
and CHE 1053L and General Chemistry II Lab
CSC 1043 Introduction to Computer Programming 3
and CSC 1043L and Introduction to Computer Programming Lab
MTH $1064 \quad$ Calculus I (FE)
4
and MTH 1064L and Calculus I Lab (FE)
Upper-Division Requirements
CSC 3002
UNIX and Python Scripting for Computational
2

## Science

CSC 3011 Machine Learning and Multivariate Modeling in R 1
or CSC 3031 Data Visualization and Communication with R

## Project

| Choose one (1) of the following: | 3 |  |
| :--- | :--- | ---: |
| CSC 4133 | Service Learning in Computer Science |  |
| HON 4098 | Honors Project I |  |
| and HON 4099 | and Honors Project II |  |
| MTH 4133 |  | Service Learning in Mathematics |
| Mathematics Major - Required Courses |  |  |
| CHE 2013 | Analytical Chemistry |  |
| CHE 3025 | Physical Chemistry I |  |
| and CHE 3025L | and Physical Chemistry I Lab | 3 |
| CSC 3022 | Data Management for Computational Science | 2 |
| MTH 3083 | Mathematical Probability and Statistics | 3 |
| Total Units |  | 34 |

## Science-Business Minor (Science Majors - Chemistry Department)

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.

| Code | Title U | Units |
| :---: | :---: | :---: |
| Required Courses |  |  |
| ACC 2000 | Principles of Accounting for Non-Business Majors | 3 |
| BIO 2010 and BIO 2010L | Cell Biology and Biochemistry (FE) and Cell Biology and Biochemistry Laboratory (FE) | 4 |
| BIO 3045 and BIO 3045L | Genetics and Genetics Laboratory | 4 |
| CHE 2094 and CHE 2094L | Organic Chemistry I and Organic Chemistry I Lab | 4 |
| MGT 2012 | Principles of Management | 3 |
| MKT 3032 | Principles of Marketing | 3 |
| MTH 1044 or MTH 1064 | Calculus with Applications (FE) Calculus I (FE) | 4 |
| Choose one (1) course from the following: |  | 3 |
| BUS 4075 | Sustainability in Action |  |
| MGT 3020 | Organizational Behavior |  |
| MGT 3074 | Human Resource Management |  |
| MGT 3082 | Applied Entrepreneurship |  |
| MGT 4012 | Leadership Theory and Practice |  |
| MGT 4070 | Nonprofit Organization Management |  |
| MGT 4084 | Operations Management |  |

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

Code Title Un

Required Courses

| ACC 2000 | Principles of Accounting for Non-Business Majors <br> 1 | 3 |
| :--- | :--- | :---: |
| BIO 2010 <br> and BIO 2010L | Cell Biology and Biochemistry (FE) <br> and Cell Biology and Biochemistry Laboratory (FE) | 4 |
| BIO 3045 <br> and BIO 3045L | Genetics <br> and Genetics Laboratory | 4 |
| MKT 3032 | Principles of Marketing | 3 |
| MTH 1044 | Calculus with Applications (FE) | 4 |
| or MTH 1064 | Calculus I (FE) |  |

Choose two (2) from the following Marketing courses: 6

| MKT 3033 | Consumer and Organizational Buying Behavior |
| :--- | :--- |
| MKT 3036 | Integrated Marketing and Sales Communication |
| MKT 3050 | Digital Marketing Essentials |

Total Units

1 The ACC 2001 and ACC 2002 sequence may be substituted for ACC 2000.

## Department of Mathematical, Information, and Computer Sciences <br> Mission Statement <br> 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:
a. careers that use mathematics, data science, computer science, and information systems in business, industry, government and the non-profit sector.
b. graduate study in fields related to mathematics, data science, computer science, and information systems.
c. 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, data science, information systems, and computer science.
5. To integrate the study of mathematics, data science, 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, data science, espionage, teaching, data analytics, software engineering, project management, and systems analysis.

## Faculty

Chair - Maria Zack, Ph.D.
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
Carlson Triebold, Ph.D.
Purdue University
Maria Zack, Ph.D.
University of California, San Diego
To view requirements for majors, minors, and certificates, see the Degree Program Information (p. 244) page.

- Computer Science: Cyber Security, B.S. (p. 130)
- Computer Science: Software Engineering, B.A. (p. 131)
- Computer Science: Software Engineering, B.S. (p. 131)
- Computer Science: Technical Applications, B.S. (p. 132)
- Data Science, B.S. (p. 133)
- General Engineering: Computer Science Engineering, B.S.E. (Mathematics and Computer Science) (p. 134)
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- Computational Science Minor - Biology/Environmental Science (Mathematics and Computer Science) (p. 139)
- Computational Science Minor - Biology/Genetics (Mathematics and Computer Science) (p. 140)
- Computational Science Minor - Chemistry (Mathematics and Computer Science) (p. 141)
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- Computational Science Minor - Psychology (Mathematics and Computer Science) (p. 143)
- Computer Science Minor (p. 144)
- Computer Technology - Business Minor (Math and Computer Science Majors) (p. 144)
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- Mathematics Minor (p. 145)
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- Software Engineering Certificate (p. 145)


## Computer Science

CSC 1011 Computer Programming for the Absolute Beginner (1 Unit) 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
Students who have credit for CSC 1043 may not take this course.
CSC 1043 Introduction to Computer Programming (2 Units)
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 multidimensional 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.
Also offered as EGR 1043.
Prerequisite(s): MTH 1013 or equivalent.
Corequisite(s): CSC 1043L
CSC 1043L Introduction to Computer Programming Lab (1 Unit) A lab course designed for a hands-on exploration of Introductory Computer Programming. Meets two hours per week.
Not repeatable. Letter grade.
Also offered as EGR 1043L.
Prerequisite(s): MTH 1013 or equivalent.
Corequisite(s): CSC 1043

CSC 1054 Objects and Elementary Data Structures (3 Units)
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. Also offered as EGR 1054.
Prerequisite(s): CSC 1043 or EGR 1043 with a grade of C- or higher. Corequisite(s): CSC 1054L
CSC 1054L Objects and Elementary Data Structures Lab (1 Unit)
A lab course designed for a hands-on exploration of Objects and Elementary Data Structures. Meets two hours per week.
Not repeatable. Letter grade.
Also offered as EGR 1054L.
Prerequisite(s): CSC 1043 or EGR 1043 with a grade of C- or higher. Corequisite(s): CSC 1054
CSC 2052 Data Structures in C++ (1 Unit)
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.
Prerequisite(s): CSC 1054 or EGR 1054 with a grade of C- or higher.
Corequisite(s): CSC 2052L
CSC 2052 is the first quad of CSC 2054.
CSC 2052L Data Structures in C++ Lab (1 Unit)
A lab course designed for a hands-on exploration of Data Structures in C+
+. Meets two hours per week.
Not repeatable. Letter grade.
Prerequisite(s): CSC 1054 or EGR 1054 with a grade of C- or higher. Corequisite(s): CSC 2052
CSC 2054 Data Structures and Algorithms (3 Units)
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 or EGR 1054 with a grade of C- or higher. Corequisite(s): CSC 2054L

## CSC 2054L Data Structures and Algorithms Lab (1 Unit)

A lab course designed for a hands-on exploration of Data Structures and Algorithms. Meets two hours per week.
Not repeatable. Letter grade.
Prerequisite(s): CSC 1054 or EGR 1054 with a grade of C- or higher. Corequisite(s): CSC 2054

## CSC 3002 UNIX and Python Scripting for Computational Science (2 Units)

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 or EGR 1043 with a grade of C- or higher.

CSC 3011 Machine Learning and Multivariate Modeling in R (1 Unit) 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 or EGR 1043 with a grade of C- or higher.
CSC 3012 Operating Systems for Software Engineering Certificate (2 Units)
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.

## Prerequisite(s): CSC 2052 or CSC 2054

## CSC 3014 Operating Systems (4 Units)

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.

## Also offered as EGR 3014.

Prerequisite(s): CSC 2052 or CSC 2054
CSC 3021 Computational Tools (1 Unit)
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.
Prerequisite(s): CSC 3002 or consent of instructor.
CSC 3021 is the first quad of CSC 3022.
CSC 3022 Data Management for Computational Science (2 Units) 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 Units)
This course offers an in-depth treatment of the software development process. Software analysis and design study emphasizes an objectoriented 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 Unit) 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.
Also offered as EGR 3023.
Prerequisite(s): CSC 1043 or EGR 1043 with a grade of C- or higher.
CSC 3054 Design and Analysis of Algorithms (4 Units)
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 Units)

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 3102 Security+ Exam Preparation (1-2 Units)
This is an independent study course designed for students who wish to prepare for the CompTIA's Security+ certification exam. The course is intended for students who have already completed at least one course in computer security.
Prerequisite(s): Consent of instructor.
CSC 3112 Network+ Exam Preparation (1-2 Units)
This is an independent study course designed for students who wish to prepare for the CompTIA's Network+ certification exam. The course is intended for students who have already completed at least one course in computer networking.
Prerequisite(s): Consent of instructor.
CSC 4012 Topics in Computer Science (2 Units)
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 (6) units.
Prerequisite(s): CSC 2054, MTH 1031 and MTH 1044 or MTH 1064 and consent of instructor.
CSC 4054 Computer Architecture and Assembly Language (4 Units)
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.
Also offered as EGR 4054.
Prerequisite(s): CSC 1054 or EGR 1054 with a grade of C- or higher and Junior or Senior standing.

CSC 4081 Senior Seminar in Computer Science (1 Unit)
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.

## 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 Units)
Study of a selected problem or topic under the direction of an instructor. The instructor and student propose the course of study.
May be repeated for a total of six (6) units.
Prerequisite(s): Consent of instructor and approval by the department chair is required.
CSC 4093 Software Project (3 Units)
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 Units)
Independent research conducted under the guidance of a faculty mentor. The instructor and student propose the research topic. 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 Unit)
The continuation of independent research conducted under the guidance of a faculty mentor. The instructor and student propose the research topic.
Credit/No Credit.
Prerequisite(s): Approval of the department chair, CSC 4102, and consent of instructor.

## CSC 4133 Service Learning in Computer Science (3 Units)

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.

## Information Systems

ISS 3042 Project Management and Quality Assurance (2 Units)
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 Units)
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 Units)
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 Units)
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 Units)
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 Units)
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 Units)
A supervised experience in which the student works with industry professionals to gain experience with managing information systems. May be repeated for a total of four (4) units. Credit/No Credit.
Prerequisite(s): Student must have taken at least two upper-division computer science or information systems courses for their major and consent of instructor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.
ISS 4081 Senior Seminar in Information Systems (1 Unit)
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.
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 Units) Independent research conducted under the guidance of a faculty mentor. The instructor and student propose the research topic.
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 Unit)
The continuation of independent research conducted under the guidance of a faculty mentor. The instructor and student propose the research topic.
Credit/No Credit.
Prerequisite(s): ISS 4102, approval of the department chair, and consent of instructor.
ISS 4133 Service Learning in Computer Information Systems (3 Units) 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.

## Mathematics

## MTH 0099 Elementary Algebra (3 Units)

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.
This course does not count toward the minimum 128 units required for graduation.

## MTH 1013 College Algebra (3 Units)

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 Unit)
An introduction to mathematical modeling using mathematical concepts from Calculus I.
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 Unit)
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 Units)
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 (FE) (4 Units)
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 Units)
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 (FE) (3 Units)

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 (FE) (1 Unit)
An introduction to mathematical modeling using mathematical concepts from Calculus I.
Corequisite(s): MTH 1064

## MTH 1073 Business Calculus (FE) (3 Units)

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 Units)
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 Unit)

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 Units)

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 Units)
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 Units) 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 Units)

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 Units)

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 Units)
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 (FE) (3 Units)
A Foundational Explorations 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 Units)
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.
Prerequisite(s): MTH 1074 with a grade of C- or higher.
MTH 3033 Differential Equations (3 Units)
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 Units)
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 Units)

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 Units)

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 Units)

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 nonmathematical disciplines. Written report and oral presentation are required.
Prerequisite(s): MTH 2074 and MTH 3083
MTH 3083 Mathematical Probability and Statistics (3 Units)
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 Units)
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 Units)
Complex numbers, analytic functions, integration, series, contour integration, residues and conformal maps.
Corequisite(s): MTH 2074

## MTH 4024 Real Analysis (4 Units)

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 Units)
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 Units)
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 Units)
Independent research conducted under the guidance of a faculty mentor. The instructor and student propose the research topic.
Credit/No Credit.
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 Unit)
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 meeting are held during the semester and a series of lectures by the professor and others are presented on location.
Prerequisite(s): Consent of instructor.

## MTH 4072 Internship in Data Science (2 Units)

A supervised experience in which the student works with industry professionals to gain experience in data science.
May be repeated up to a total of four (4) units. Credit/No Credit.
Prerequisite(s): MTH 2092, MTH 3083, and consent of instructor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.
MTH 4081 Senior Seminar in Computer Science (1 Unit)
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.
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 Units)
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 up to a total of six (6) units.
Prerequisite(s): Consent of instructor.
MTH 4092 Special Topics in Mathematics (2 Units)
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 up to a total of six (6) units.
Prerequisite(s): Consent of instructor.
MTH 4102 Independent Research in Mathematics I (2 Units)
Independent research conducted under the guidance of a faculty mentor. The instructor and student propose the research topic.
Credit/No Credit.
Prerequisite(s): Approval of the department chair, consent of instructor, and Junior standing.

## MTH 4121 Independent Research in Mathematics II (1 Unit)

The continuation of independent research conducted under the guidance of a faculty mentor. The instructor and student propose the research topic.
Credit/No Credit.
Prerequisite(s): MTH 4102, approval of the department chair, and consent of instructor.
MTH 4133 Service Learning in Mathematics (3 Units)
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.

## Physics

## PHY 4082 Senior Project II (2 Units)

This course provides students (teams) with the opportunity to hone and finish building the project design initiated in PHY 4072. The students will prepare a scientific paper about their research/project and give an oral presentation of their findings. This course will normally be completed in a student's senior year.
Prerequisite(s): PHY 4072 or consent of instructor.

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

## Program Learning Outcomes

## Graduates of the program will be able to:

- write correct and robust software.
- use well-known algorithms and computational techniques to solve problems.
- analyze the interaction between hardware and software.
- apply their technical knowledge and critical thinking to solve problems.
- speak about their work with precision, clarity and organization.
- write about their work with precision, clarity and organization.
- identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
- collaborate effectively in teams.
- understand and create arguments supported by quantitative evidence.
- understand the professional, ethical, and social issues and responsibilities with the implementation and use of technology.

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| CSC 1043 and CSC 1043L | Introduction to Computer Programming and Introduction to Computer Programming Lab | 3 |
| CSC 1054 and CSC 1054L | Objects and Elementary Data Structures and Objects and Elementary Data Structures Lab | 4 |
| CSC 2054 and CSC 2054L | Data Structures and Algorithms and Data Structures and Algorithms Lab | 4 |
| MTH 1064 and MTH 1064L | Calculus I (FE) and Calculus I Lab (FE) ${ }^{1}$ | 4 |
| MTH 1074 and MTH 1074L | Calculus II and Calculus II Lab | 4 |
| MTH 2003 | Introduction to Statistics ${ }^{2}$ | 3 |
| 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 (1) se | equence from the following: | 2-3 |
| CSC 4102 <br> and CSC 4121 | Independent Research in Computer Science I and Independent Research in Computer Science II |  |
| CSC 4133 | Service Learning in Computer Science |  |
| HON 4098 and HON 4099 | Honors Project I and Honors Project II |  |
| ISS 4072 | Internship in Information Systems ${ }^{3}$ |  |
| Elective Courses |  |  |
| Choose five (5) or | six (6) units from the following: ${ }^{3}$ | 5-6 |
| CSC 3002 | UNIX and Python Scripting for Computational Science |  |
| CSC 3011 | Machine Learning and Multivariate Modeling in R |  |
| CSC 3021 | Computational Tools |  |
| CSC 3031 | Data Visualization and Communication with R |  |
| CSC 3102 | Security+ Exam Preparation |  |
| CSC 3112 | Network+ Exam Preparation |  |
| CSC 4012 | Topics in Computer Science |  |
| CSC 4091 | Independent Studies in Computer Science |  |
| CSC 4093 | Software Project |  |
| CSC 4102 | Independent Research in Computer Science I |  |
| CSC 4121 | Independent Research in Computer Science II |  |
| CSC 4133 | Service Learning in Computer Science |  |
| $\begin{aligned} & \text { EGR } 2024 \\ & \text { and } \\ & \text { EGR 2024L } \end{aligned}$ | Circuit Analysis and Circuit Analysis Lab |  |
| EGR 3053 <br> and EGR 3053L | Analog Electronics and Analog Electronics Lab |  |
| EGR 3093 <br> and EGR 3093L | Digital Electronics and Digital Electronics Lab |  |
| $\begin{aligned} & \text { EGR } 4042 \\ & \text { and } \\ & \text { EGR } 4042 \text { L } \end{aligned}$ | Embedded Systems and Robotics and Embedded Systems and Robotics Lab |  |
| EGR 4103 | Electrical Signals and Systems |  |
| HON 4098 | Honors Project I |  |
| HON 4099 | Honors Project II |  |
| ISS 3042 | Project Management and Quality Assurance |  |
| ISS 4072 | Internship in Information Systems |  |
| MTH 2033 | Linear Algebra |  |
| MTH 2074 | Calculus III |  |
| Total Units |  | -64 |
| 1 MTH 1044 may substitute for MTH 1064. <br> 2 MTH 3063 or MTH 3083 may substitute for MTH 2003. <br> ${ }^{3} \mathrm{Six}(6)$ elective units required if ISS 4072 is chosen. |  |  |
| Total Units for the Degree: 59 (plus 4 units of FE) |  |  |

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

## Program Learning Outcomes

## Graduates of the program will be able to:

- write correct and robust software.
- use well-known algorithms and computational techniques to solve problems.
- analyze the interaction between hardware and software.
- apply their technical knowledge and critical thinking to solve problems.
- speak about their work with precision, clarity and organization.
- write about their work with precision, clarity and organization.
- identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
- collaborate effectively in teams.
- understand and create arguments supported by quantitative evidence.
- understand the professional, ethical, and social issues and responsibilities with the implementation and use of technology.

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| $\begin{aligned} & \text { CSC } 1043 \\ & \text { and CSC 1043L } \end{aligned}$ | Introduction to Computer Programming and Introduction to Computer Programming Lab | 3 |
| $\begin{aligned} & \text { CSC } 1054 \\ & \text { and CSC 1054L } \end{aligned}$ | Objects and Elementary Data Structures and Objects and Elementary Data Structures Lab | 4 |
| $\begin{aligned} & \text { CSC } 2054 \\ & \text { and CSC } 2054 \text { L } \end{aligned}$ | Data Structures and Algorithms and Data Structures and Algorithms Lab | 4 |
| MTH 1064 and MTH 1064L | Calculus I (FE) and Calculus I Lab (FE) ${ }^{1}$ | 4 |
| MTH 2003 | Introduction to Statistics ${ }^{2}$ | 3 |
| Upper-Division Requirements |  |  |
| BUS 3013 | Business Communications | 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 (1) s | quence from the following: | 2-3 |

CSC 4102 Independent Research in Computer Science I and CSC 4121 and Independent Research in Computer Science II
CSC 4133 Service Learning in Computer Science
HON 4098 Honors Project I
and HON 4099 and Honors Project II
ISS 4072 Internship in Information Systems ${ }^{3}$

## Elective Courses

Choose four (4) or five (5) additional units from the following: ${ }^{3}$
CSC 3002 UNIX and Python Scripting for Computational Science

| CSC 3011 | Machine Learning and Multivariate Modeling in R |
| :---: | :---: |
| CSC 3021 | Computational Tools |
| CSC 3031 | Data Visualization and Communication with R |
| CSC 3102 | Security+ Exam Preparation |
| CSC 3112 | Network+ Exam Preparation |
| CSC 4012 | Topics in Computer Science |
| CSC 4091 | Independent Studies in Computer Science |
| CSC 4093 | Software Project |
| CSC 4102 | Independent Research in Computer Science I |
| CSC 4121 | Independent Research in Computer Science II |
| CSC 4133 | Service Learning in Computer Science |
| HON 4098 | Honors Project I |
| HON 4099 | Honors Project II |
| ISS 3073 | Networking and Security |
| ISS 3092 | Topics in Cyber Security |
| ISS 4003 | Information and Computer Security |
| ISS 4012 | Topics in Information Security |
| ISS 4072 | Internship in Information Systems |
| MTH 1074 <br> and <br> MTH 1074L | Calculus II and Calculus II Lab |
| MTH 2033 | Linear Algebra |
| MTH 2074 | Calculus III |
| MTH 3073 | Mathematical Modeling |
| Total Units | 52-54 |
| 1 MTH 1044 ma 2 MTH 3063 or ${ }^{3}$ Five (5) electi | substitute for MTH 1064. <br> TH 3083 may substitute for MTH 2003. units required if ISS 4072 is chosen. |
| Total Units: 49 Units Without FE |  |
| Computer Science: Software |  |
| Enginee | $19, B . S$ |

## Program Learning Outcomes

## Graduates of the program will be able to:

- write correct and robust software.
- use well-known algorithms and computational techniques to solve problems.
- analyze the interaction between hardware and software.
- apply their technical knowledge and critical thinking to solve problems.
- speak about their work with precision, clarity and organization.
- write about their work with precision, clarity and organization.
- identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
- collaborate effectively in teams.
- understand and create arguments supported by quantitative evidence.
- understand the professional, ethical, and social issues and responsibilities with the implementation and use of technology.

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| CSC 1043 <br> and CSC 1043L | Introduction to Computer Programming and Introduction to Computer Programming Lab | 3 |
| CSC 1054 <br> and CSC 1054L | Objects and Elementary Data Structures and Objects and Elementary Data Structures Lab | 4 |
| CSC 2054 <br> and CSC 2054L | Data Structures and Algorithms and Data Structures and Algorithms Lab | 4 |
| MTH 1064 and MTH 1064L | Calculus I (FE) <br> and Calculus I Lab (FE) ${ }^{1}$ | 4 |
| MTH 1074 and MTH 1074L | Calculus II and Calculus II Lab | 4 |
| MTH 2003 | Introduction to Statistics ${ }^{2}$ | 3 |
| Upper-Division Requirements |  |  |
| BUS 3013 | Business Communications | 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 (1) sequence from the following: |  | 2-3 |
| CSC 4102 <br> and CSC 4121 | Independent Research in Computer Science I and Independent Research in Computer Science II |  |
| CSC 4133 | Service Learning in Computer Science |  |
| HON 4098 <br> and HON 4099 | Honors Project I and Honors Project II |  |
| ISS 4072 | Internship in Information Systems ${ }^{3}$ |  |
| Elective Courses |  |  |
| Choose six (6) to seven (7) additional units from the following: ${ }^{3}$ |  | 6-7 |
| CSC 3002 | UNIX and Python Scripting for Computational Science |  |
| CSC 3011 | Machine Learning and Multivariate Modeling in R |  |
| CSC 3021 | Computational Tools |  |
| CSC 3031 | Data Visualization and Communication with R |  |
| CSC 3102 | Security+ Exam Preparation |  |
| CSC 3112 | Network+ Exam Preparation |  |
| CSC 4012 | Topics in Computer Science |  |
| CSC 4091 | Independent Studies in Computer Science |  |
| CSC 4102 | Independent Research in Computer Science I |  |
| CSC 4121 | Independent Research in Computer Science II |  |
| CSC 4133 | Service Learning in Computer Science |  |
| HON 4098 | Honors Project I |  |
| HON 4099 | Honors Project II |  |
| ISS 3073 | Networking and Security |  |
| ISS 3092 | Topics in Cyber Security |  |
| ISS 4003 | Information and Computer Security |  |
| ISS 4012 | Topics in Information Security |  |
| ISS 4072 | Internship in Information Systems |  |
| MTH 2033 | Linear Algebra |  |

MTH 2074
Calculus III
Total Units
61-63
${ }^{1}$ MTH 1044 may substitute for MTH 1064.
${ }^{2}$ MTH 3063 or MTH 3083 may substitute for MTH 2003.
${ }^{3}$ Seven (7) units required if ISS 4072 chosen from sequence above.

Total: 59 Units Without FE

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

 Program Learning Outcomes
## Graduates of the program will be able to:

- write correct and robust software.
- use well-known algorithms and computational techniques to solve problems.
- analyze the interaction between hardware and software.
- apply their technical knowledge and critical thinking to solve problems.
- speak about their work with precision, clarity and organization.
- write about their work with precision, clarity and organization.
- identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
- collaborate effectively in teams.
- understand and create arguments supported by quantitative evidence.
- understand the professional, ethical, and social issues and responsibilities with the implementation and use of technology.


## Code Title Units

Lower-Division Requirements
CSC 1043 Introduction to Computer Programming 3 and CSC 1043L and Introduction to Computer Programming Lab
CSC $1054 \quad$ Objects and Elementary Data Structures
4
and CSC 1054L and Objects and Elementary Data Structures Lab
CSC 2054 Data Structures and Algorithms 4
$\begin{array}{ll}\text { and CSC 2054L } & \text { and Data Structures and Algorithms Lab } \\ \text { MTH } 1064 & \text { Calculus I (FE) }\end{array}$
and MTH 1064L and Calculus I Lab (FE)
MTH 1074 Calculus II 4
and MTH 1074L
MTH 2003 Introduction to Statistics ${ }^{1} 3$
MTH 2033 Linear Algebra 3

| 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 (1) sequence from the following:
CSC 4102 Independent Research in Computer Science I and CSC 4121 and Independent Research in Computer Science II
CSC 4133 Service Learning in Computer Science
HON 4098 Honors Project I
and HON 4099 and Honors Project II
ISS 4072 Internship in Information Systems ${ }^{2}$
Elective Courses
Choose five (5) or six (6) additional units from the following: ${ }^{2,3} \quad 5-6$

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

${ }^{1}$ MTH 3063 or MTH 3083 may substitute for MTH 2003.
${ }^{2} \operatorname{Six}$ (6) elective units required if ISS 4072 is chosen.
${ }^{3}$ An elective course may not count as both an upper-division requirement and a required "additional elective."

## Data Science, B.S. <br> Program Learning Outcomes

## Graduates of the program will be able to:

- demonstrate facility with analytical and algebraic concepts.
- write proofs.
- apply their mathematical knowledge and critical thinking to solve problems.
- use technology to solve problems.
- speak about their work with precision, clarity, and organization.
- write about their work with precision, clarity, and organization.
- identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
- collaborate effectively in teams.
- understand and create arguments supported by quantitative evidence.
- understand the professional, ethical, and social issues and responsibilities with the implementation and use of mathematical models and technology.


## Biology Track

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| CSC 1043 <br> and CSC 1043L | Introduction to Computer Programming and Introduction to Computer Programming Lab | 3 |
| CSC 1054 and CSC 1054L | Objects and Elementary Data Structures and Objects and Elementary Data Structures Lab | 4 |
| $\begin{aligned} & \text { CSC } 2052 \\ & \text { and CSC } 2052 \text { L } \end{aligned}$ | Data Structures in C++ and Data Structures in C++ Lab | 2 |
| MTH 1064 and MTH 1064L | Calculus I (FE) and Calculus I Lab (FE) | 4 |
| MTH 1074 and MTH 1074L | Calculus II and Calculus II Lab | 4 |
| MTH 2033 | Linear Algebra | 3 |
| MTH 2074 | Calculus III | 4 |
| MTH 2092 | Applied Project for Data Science | 2 |
| 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 Computer Science | 1 |
| $\begin{aligned} & \text { CSC } 3011 \\ & \quad \text { or } \operatorname{CSC} 3031 \end{aligned}$ | Machine Learning and Multivariate Modeling in R Data Visualization and Communication with R | 1 |
| MTH 4024 or MTH 4044 | Real Analysis Abstract Algebra | 4 |
| MTH 4062 or MTH 4072 | Research in Data Science Internship in Data Science | 2 |

Biology Courses
BIO $2010 \quad$ Cell Biology and Biochemistry (FE) 4
and BIO 2010L and Cell Biology and Biochemistry Laboratory (FE)
Choose one (1) of the following: ${ }^{1}$
BIO 2011 Ecological and Evolutionary Systems (FE)
and BIO 2011L and Ecological and Evolutionary Systems Laboratory (FE)
BIO 3045 Genetics
and BIO 3045L and Genetics Laboratory

## Total Units

${ }^{1}$ Recommended: Take
both BIO 2011/BIO 2011L and BIO 3045/BIO 3045L if there is space in your schedule.

## Finance Track

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| CSC 1043 and CSC 1043L | Introduction to Computer Programming and Introduction to Computer Programming Lab | 3 |
| CSC 1054 and CSC 1054L | Objects and Elementary Data Structures and Objects and Elementary Data Structures Lab | 4 |
| CSC 2052 <br> and CSC 2052L | Data Structures in C++ and Data Structures in C++ Lab | 2 |
| MTH 1064 and MTH 1064L | Calculus I (FE) and Calculus I Lab (FE) | 4 |
| MTH 1074 and MTH 1074L | Calculus II and Calculus II Lab | 4 |
| MTH 2033 | Linear Algebra | 3 |
| MTH 2074 | Calculus III | 4 |
| MTH 2092 | Applied Project for Data Science | 2 |
| 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 Computer Science | 1 |
| $\begin{aligned} & \text { CSC } 3011 \\ & \text { or CSC } 3031 \end{aligned}$ | Machine Learning and Multivariate Modeling in R Data Visualization and Communication with R | 1 |
| MTH 4024 or MTH 4044 | Real Analysis Abstract Algebra | 4 |
| MTH 4062 or MTH 4072 | Research in Data Science Internship in Data Science | 2 |
| Finance Courses |  |  |
| ACC 2000 | Principles of Accounting for Non-Business Majors | s 3 |
| FIN 3035 | Business Finance | 3 |
| Choose one (1) course from the following: ${ }^{1} 3$ |  |  |
| ECO 1000 | Survey of Economics (FE) |  |
| ECO 1001 | Principles of Macroeconomics (FE) |  |
| ECO 1002 | Principles of Microeconomics (FE) |  |

## Total Units

1 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.

Note(s): An elective course may not count as both an upper-division requirement and a required "additional elective."

## Total Non-FE Units for Degree: 59

# General Engineering: Computer Science Engineering, B.S.E. (Mathematics and Computer Science) <br> <br> Program Learning Outcomes 

 <br> <br> Program Learning Outcomes}

## Graduates of the program will demonstrate:

- an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
- an ability to communicate effectively with a range of audiences.
- Students will effectively communicate complicated technical information in writing.
- Students will effectively communicate complicated technical information orally.
- Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
- an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
- an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
- an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Code Title Units
Lower-Division Requirements
CSC 2054 Data Structures and Algorithms 4 and CSC 2054L and Data Structures and Algorithms Lab
EGR 1012 Introduction to Engineering
2
and EGR 1012 and Introduction to Engineering I
EGR 1023 Introduction to Engineering II
and EGR 1023L
EGR 1043
and EGR 1043L
EGR 1054
and EGR 1054L
EGR 2024
and EGR 2024L
MTH 1064
and MTH 1064L
MTH 1074
and MTH 1074L
MTH 2074 Calculus III 4
PHY $2044 \quad 4$
and PHY 2044L and University Physics I Lab (FE)

| PHY 2054 and PHY 2054L | University Physics II and University Physics II Lab | 4 |
| :---: | :---: | :---: |
| Upper-Division Requirements |  |  |
| EGR 3014 | Operating Systems | 4 |
| EGR 3023 | Software Engineering | 3 |
| EGR 3053 and EGR 3053L | Analog Electronics and Analog Electronics Lab | 3 |
| EGR 3073 | Networking and Security | 3 |
| EGR 3093 and EGR 3093L | Digital Electronics and Digital Electronics Lab | 3 |
| 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 |
| MTH 3063 or MTH 3083 | Calculus Based Statistics with R Mathematical Probability and Statistics | 3 |

Total Units 78
Total: 78 Units (70 without FE)

## Recommended:

| Code | Title | Units |
| :--- | :--- | ---: |
| EGR 4042 | Embedded Systems and Robotics | 2 |
| and EGR 4042L | and Embedded Systems and Robotics Lab |  |
| MTH 3043 | Discrete Mathematics | 3 |

## Information Systems (Mathematical, Information, and Computer Science), B.S.

## Program Learning Outcomes

## Graduates of the program 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 their technical knowledge and critical thinking to solve problems.
- understand and create arguments supported by quantitative evidence.
- understand the professional, ethical, and social issues and responsibilities with the implementation and use of technology.

| Code | Title | Units |
| :--- | :--- | :--- |
| 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 |  |
| and CSC 1043L | and Introduction to Computer Programming Lab | 3 |
| CSC 1054 | Objects and Elementary Data Structures | 4 |
| and CSC 1054L | and Objects and Elementary Data Structures Lab |  |
| CSC 2052 | Data Structures in C++ | 2 |
| and CSC 2052L | and Data Structures in C++ Lab | 3 |
| ECO 1002 | Principles of Microeconomics (FE) | 3 |
| MGT 2012 | Principles of Management | 3 |
| MTH 1073 | Business Calculus (FE) |  |

${ }^{1}$ MTH 1044 or MTH 1064 may substitute for MTH 1073.

## Recommended:

| Code | Title | Units |
| :--- | :--- | ---: |
| Cross-Cultural | Experience |  |
| CSC 3023 | Software Engineering | 3 |
| ISS 3092 | Topics in Cyber Security | 2 |
| PHL 2011 | Ethics (FE) | 3 |

## Mathematics, B.A.

## Program Learning Outcomes

## Graduates of the program will be able to:

- demonstrate facility with analytical and algebraic concepts.
- write proofs.
- apply their mathematical knowledge and critical thinking to solve problems.
- use technology to solve problems.
- speak about their work with precision, clarity, and organization.
- write about their work with precision, clarity, and organization.
- identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
- collaborate effectively in teams.
- understand and create arguments supported by quantitative evidence.
- understand the professional, ethical, and social issues and responsibilities with the implementation and use of mathematical models and technology.

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| $\begin{aligned} & \text { CSC } 1043 \\ & \text { and CSC 1043L } \end{aligned}$ | Introduction to Computer Programming and Introduction to Computer Programming Lab | 3 |
| CSC 1054 and CSC 1054L | Objects and Elementary Data Structures and Objects and Elementary Data Structures Lab | 4 |
| MTH 1064 and MTH 1064L | Calculus I (FE) and Calculus I Lab (FE) | 4 |
| MTH 1074 and MTH 1074L | Calculus II and Calculus II Lab | 4 |
| MTH 2033 | Linear Algebra | 3 |
| MTH 2074 | Calculus III | 4 |
| 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 Computer Science | 1 |
| MTH 4024 or MTH 4044 | Real Analysis <br> Abstract Algebra | 4 |
| Choose one (1) course from the following: |  | 3 |
| MTH 3033 | Differential Equations |  |
| MTH 3043 | Discrete Mathematics |  |
| MTH 3073 | Mathematical Modeling |  |
| MTH 4013 | Complex Analysis |  |
| Choose one (1) sequence from the following: |  | 3 |
| HON 4098 and HON 4099 | Honors Project I and Honors Project II |  |
| MTH 4102 and MTH 4121 | Independent Research in Mathematics I and Independent Research in Mathematics II |  |
| MTH 4133 | Service Learning in Mathematics |  |
| Elective Courses |  |  |
| Choose eight (8) additional units from the following: ${ }^{1}$ |  | 8 |
| CSC 3011 | Machine Learning and Multivariate Modeling in R |  |
| CSC 3021 | Computational Tools |  |
| CSC 3031 | Data Visualization and Communication with R |  |
| HON 4098 | Honors Project I |  |
| HON 4099 | Honors Project II |  |
| MTH 3033 | Differential Equations |  |
| MTH 3043 | Discrete Mathematics |  |
| MTH 3073 | Mathematical Modeling |  |


| MTH 4002 | Topics in Geometry |
| :--- | :--- |
| MTH 4013 | Complex Analysis |
| MTH 4024 | Real Analysis |
| MTH 4044 | Abstract Algebra |
| MTH 4053 | Advanced Applied Statistics |
| MTH 4062 | Research in Data Science |
| MTH 4071 | History of Mathematics Study Tour |
| MTH 4072 | Internship in Data Science |
| MTH 4091 | Independent Study in Mathematics |
| MTH 4092 | Special Topics in Mathematics |
| MTH 4102 | Independent Research in Mathematics I |
| MTH 4121 | Independent Research in Mathematics II |
| MTH 4133 | Service Learning in Mathematics |
| Total Units |  |

Total Units
1 An elective course may not count as both an upper-division requirement and a required "additional elective."

## Total Non-FE 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 FE).

## Program Learning Outcomes

## Graduates of the program will be able to:

- demonstrate facility with analytical and algebraic concepts.
- write proofs.
- apply their mathematical knowledge and critical thinking to solve problems.
- use technology to solve problems.
- speak about their work with precision, clarity, and organization.
- write about their work with precision, clarity, and organization.
- identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
- collaborate effectively in teams.
- understand and create arguments supported by quantitative evidence.
- understand the professional, ethical, and social issues and responsibilities with the implementation and use of mathematical models and technology.

| Code | Title | Units |
| :--- | :--- | ---: |
| Lower-Division Requirements |  |  |
| Eighteen (18) units of transferred Mathematics ${ }^{1}$ | 18 |  |
| Upper-Division Requirements |  |  |
| MTH 3012 | Number Theory with Proofs | 2 |
| MTH 3052 | History of Mathematics | 2 |
| MTH 3083 | Mathematical Probability and Statistics | 3 |
| MTH 4024 | Real Analysis | 4 |
| or MTH 4044 | Abstract Algebra |  |


| MTH 4081 | Senior Seminar in Computer Science | 1 |
| :---: | :---: | :---: |
| Choose one (1) course from the following: |  | 3 |
| MTH 3033 | Differential Equations |  |
| MTH 3043 | Discrete Mathematics |  |
| MTH 3073 | Mathematical Modeling |  |
| MTH 4013 | Complex Analysis |  |
| Choose one (1) sequence from the following: |  | 3 |
| HON 4098 and HON 4099 | Honors Project I and Honors Project II |  |
| MTH 4102 and MTH 4121 | Independent Research in Mathematics I and Independent Research in Mathematics II |  |
| MTH 4133 | Service Learning in Mathematics |  |
| Elective Courses |  |  |
| Choose twelve (12) additional units from the following: |  | 12 |
| CSC 1043 <br> and CSC 1043L | Introduction to Computer Programming and Introduction to Computer Programming Lab |  |
| $\begin{aligned} & \text { CSC } 1054 \\ & \text { and } \\ & \text { CSC 1054L } \end{aligned}$ | Objects and Elementary Data Structures and Objects and Elementary Data Structures Lab |  |
| CSC 3011 | Machine Learning and Multivariate Modeling in R |  |
| CSC 3021 | Computational Tools |  |
| CSC 3031 | Data Visualization and Communication with R |  |
| HON 4098 | Honors Project I |  |
| HON 4099 | Honors Project II |  |
| MTH 3033 | Differential Equations |  |
| MTH 3043 | Discrete Mathematics |  |
| MTH 3073 | Mathematical Modeling |  |
| MTH 4002 | Topics in Geometry |  |
| MTH 4013 | Complex Analysis |  |
| MTH 4024 | Real Analysis |  |
| MTH 4044 | Abstract Algebra |  |
| MTH 4071 | History of Mathematics Study Tour |  |
| MTH 4091 | Independent Study in Mathematics |  |
| MTH 4092 | Special Topics in Mathematics |  |
| MTH 4102 | Independent Research in Mathematics I |  |
| MTH 4121 | Independent Research in Mathematics II |  |
| MTH 4133 | Service Learning in Mathematics |  |

## Total Units

1 Transferred in from the community college; 4 units are FE.

## Total Units for Degree: 48 (44 non-FE units)

Note(s): Associate Degree for Transfer (ADT) (p. 227) students only.

## Mathematics, B.S. <br> Program Learning Outcomes

## Graduates of the program will be able to:

- demonstrate facility with analytical and algebraic concepts.
- write proofs.
- apply their mathematical knowledge and critical thinking to solve problems.
- use technology to solve problems.
- speak about their work with precision, clarity, and organization.
- write about their work with precision, clarity, and organization.
- identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
- collaborate effectively in teams.
- understand and create arguments supported by quantitative evidence.
- understand the professional, ethical, and social issues and responsibilities with the implementation and use of mathematical models and technology.

Code Title Units
Lower-Division Requirements
CSC 1043 Introduction to Computer Programming 3 and CSC 1043L and Introduction to Computer Programming Lab
CSC 1054 Objects and Elementary Data Structures 4
and CSC 1054L and Objects and Elementary Data Structures Lab
CSC $2052 \quad$ Data Structures in C++ 2
and CSC 2052L and Data Structures in C++ Lab
MTH $1064 \quad$ Calculus I (FE) 4
$\begin{array}{lll}\text { and MTH 1064L } & \text { and Calculus I Lab (FE) } & \\ \text { MTH 1074 } & \text { Calculus II } & 4\end{array}$
and MTH 1074L $\begin{array}{ll}\text { and Calculus II Lab } & 4\end{array}$
MTH 2033 Linear Algebra 3
MTH 2074 Calculus III 4
PHY $2044 \quad 4$
and PHY 2044L and University Physics I Lab (FE)
Upper-Division Requirements
MTH $3012 \quad$ Number Theory with Proofs 2

MTH 3033 Differential Equations 3
MTH $3052 \quad$ 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 Computer Science 1
MTH 4092 Special Topics in Mathematics 2
Choose two (2) courses from the following: 6
MTH 3043 Discrete Mathematics
MTH 3073 Mathematical Modeling
MTH 4013 Complex Analysis
Choose one (1) sequence from the following: 3
HON 4098 Honors Project I
and HON 4099 and Honors Project II
MTH 4102 Independent Research in Mathematics I
and MTH 4121 and Independent Research in Mathematics II
MTH 4133 Service Learning in Mathematics
Elective Courses
Choose five (5) additional units from the following: ${ }^{1} 5$
CSC 3011 Machine Learning and Multivariate Modeling in R
CSC 3021 Computational Tools
CSC 3031 Data Visualization and Communication with R
HON 4098 Honors Project I
HON 4099 Honors Project II
MTH 3043 Discrete Mathematics

| MTH 3073 | Mathematical Modeling |
| :--- | :--- |
| MTH 4002 | Topics in Geometry |
| MTH 4013 | Complex Analysis |
| MTH 4053 | Advanced Applied Statistics |
| MTH 4062 | Research in Data Science |
| MTH 4071 | History of Mathematics Study Tour |
| MTH 4072 | Internship in Data Science |
| MTH 4091 | Independent Study in Mathematics |
| MTH 4092 | Special Topics in Mathematics |
| MTH 4102 | Independent Research in Mathematics I |
| MTH 4121 | Independent Research in Mathematics II |
| MTH 4133 | Service Learning in Mathematics |

Total Units
1 An elective course may not count as both an upper-division requirement and a required "additional elective."

## Total Non-FE 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. (p. 25) (Single Subject Art California Teaching Credential)
- Biology, B.A. (p. 109) (Single Subject Science California Teaching Credential)
- Health and Human Performance, B.A. (p. 99) (Single Subject Physical Education California Teaching Credential)
- French, B.A. (p. 66) (Single Subject World Languages: French California Teaching Credential)
- History, B.A. (p. 45) (Single Subject Social Sciences Teaching Credential)
- Literature-English Education, B.A. (p. 67) (Single Subject English Teaching Credential)
- Mathematics, B.S. (p. 137) (Single Subject Mathematics Teaching Credential)
- Music Education, B.A. (p. 88) (Single Subject Music California Teaching Credential)
- Spanish, B.A. (p. 69) (Single Subject World Languages: Spanish California Teaching Credential)

For the 4 -year credential track, the following 3000 or 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 3rd credential course, meeting all program, university and state requirements for classroom observations and tests required prior to student teaching. Students will be vetted through a screening process, which may include a faculty interview, prior to being placed in student teaching. Candidates major in the academic discipline of their choice (e.g. Kinesiology) 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

| Code | Title | Units |
| :--- | :--- | ---: |
| EDU 3002 | Foundations of Education and Learning Theory ${ }^{1}$ | 3 |
| EDU 3006 | Principles of Language Acquisition ${ }^{1}$ | 3 |


| EDU 4004 | Foundations of Special Education ${ }^{1}$ | 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 ${ }^{1}$ | 3 |
| EDU 4021 | General Methods for Secondary Teachers ${ }^{1}$ | 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 |
| Choose one ( | urse from the following based on major: | 3 |
| EDU 4033 | Methods for Teaching Secondary Mathematics (Mathematics Majors) |  |
| EDU 4034 | Methods of Teaching Secondary Science (Biology Major) ${ }^{2}$ |  |
| EDU 4035 | Methods of Teaching Secondary Social Science (History Majors) |  |
| EDU 4036 | Methods for Teaching Secondary Foreign Language (French/Spanish Majors) |  |
| EDU 4037 | Methods for Teaching Secondary Visual Arts (Art Education Majors) ${ }^{3}$ |  |
| EDU 4038 | Methods for Teaching Secondary Physical Education (Exercise and Sports Science Majors) |  |
| EDU 4039 | Content-Specific Pedagogy for Secondary Teachers (Music Education Majors) ${ }^{4}$ |  |

## Total Units

${ }^{1}$ Requires 20 hours of supervised field experience working with students in a classroom setting.
2 BIO 4063 also satisfies this credential requirement.
${ }^{3}$ ART 4055 also satisfies this credential requirement.
4 MUE 4054 also satisfies this credential requirement.

## 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

## Biology Major

Code Title<br>Units

## Lower-Division Requirements

BIO 2011 Ecological and Evolutionary Systems (FE)
4 and BIO 2011L and Ecological and Evolutionary Systems Laboratory (FE)

| CSC 1043 and CSC 1043L | Introduction to Computer Programming and Introduction to Computer Programming Lab | 3 |
| :---: | :---: | :---: |
| Upper-Division Requirements |  |  |
| BIO 3063 and BIO 3063L | Conservation Ecology and Conservation Ecology Laboratory | 4 |
| CSC 3002 | UNIX and Python Scripting for Computational Science | 2 |
| $\begin{aligned} & \text { CSC } 3011 \\ & \text { or CSC } 3031 \end{aligned}$ | Machine Learning and Multivariate Modeling in R Data Visualization and Communication with $R$ | 1 |
| Project |  |  |
| Choose at least three (3) units from the following: |  | 3 |
| CSC 4133 | Service Learning in Computer Science |  |
| HON 4098 and HON 4099 | Honors Project I and Honors Project II |  |
| MTH 4133 | Service Learning in Mathematics |  |
| Biology Major - Required Courses |  |  |
| CSC 3022 | Data Management for Computational Science | 2 |
| MTH 1044 | Calculus with Applications (FE) | 4 |
| MTH 3063 | Calculus Based Statistics with R | 3 |
| Total Units |  | 26 |

## Computer Science Majors

Code Title Units

Lower-Division Requirements
$\left.\begin{array}{llc}\text { BIO 2011 } & \text { Ecological and Evolutionary Systems (FE) } \\ \text { and BIO 2011L }\end{array} \begin{array}{ll}\text { and Ecological and Evolutionary Systems } \\ \text { Laboratory (FE) }\end{array}\right]$
and CSC 1043L and Introduction to Computer Programming Lab

## Upper-Division Requirements

| BIO 3063 | Conservation Ecology |  |
| :--- | :--- | :--- |
| and BIO 3063L | and Conservation Ecology Laboratory | 4 |
| CSC 3002 | UNIX and Python Scripting for Computational <br> Science | 2 |
| CSC 3011 | Machine Learning and Multivariate Modeling in R | 1 |

## Project

Choose at least three (3) units from the following: 3

| CSC 4133 | Service Learning in Computer Science |  |
| :--- | :--- | :--- |
| HON 4098 | Honors Project I |  |
| and HON 4099 | and Honors Project II |  |
| MTH 4133 |  | Service Learning in Mathematics |
| Computer Science Majors - Required Courses |  |  |
| ISS 4014 | Data Base Systems and Web Integration | 4 |
| MTH 1064 | Calculus I (FE) |  |
| and MTH 1064L | and Calculus I Lab (FE) | 4 |
| MTH 3063 | Calculus Based Statistics with R <br> or MTH 3083 <br> Mathematical Probability and Statistics | 3 |

Total Units

| Mathematics Majors |  |  |
| :---: | :---: | :---: |
| Code | Title | Units |
| Lower-Division Requirements |  |  |
| BIO 2011 and BIO 2011L | Ecological and Evolutionary Systems (FE) and Ecological and Evolutionary Systems Laboratory (FE) | 4 |
| CSC 1043 <br> and CSC 1043L | Introduction to Computer Programming and Introduction to Computer Programming Lab | 3 |
| Upper-Division Requirements |  |  |
| BIO 3063 and BIO 3063L | Conservation Ecology and Conservation Ecology Laboratory | 4 |
| CSC 3002 | UNIX and Python Scripting for Computational Science | 2 |
| $\begin{aligned} & \text { CSC } 3011 \\ & \quad \text { or CSC } 3031 \end{aligned}$ | Machine Learning and Multivariate Modeling in R <br> Data Visualization and Communication with $R$ | 1 |
| Project |  |  |
| Choose at least three (3) units from the following: |  | 3 |
| CSC 4133 | Service Learning in Computer Science |  |
| HON 4098 and HON 4099 | Honors Project I and Honors Project II |  |
| MTH 4133 | Service Learning in Mathematics |  |
| Mathematics Majors - Required Courses |  |  |
| CSC 3022 | Data Management for Computational Science | 2 |
| MTH 1064 and MTH 1064L | Calculus I (FE) and Calculus I Lab (FE) | 4 |
| MTH 3083 | Mathematical Probability and Statistics | 3 |
| Total Units |  | 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

Biology Major

| Code | Title | Units |
| :--- | :--- | ---: |
| Lower-Division Requirements |  |  |
| BIO 2010 Cell Biology and Biochemistry (FE) <br> and BIO 2010L and Cell Biology and Biochemistry Laboratory (FE) | 4 |  |
| CSC 1043 | Introduction to Computer Programming <br> and CSC 1043L <br> and Introduction to Computer Programming Lab | 3 |
| Upper-Division Requirements |  |  |
| BIO 3045 Genetics <br> and BIO 3045L <br> and Genetics Laboratory <br> CSC 3002 UNIX and Python Scripting for Computational <br> Science | 2 |  |


| $\begin{aligned} & \text { CSC } 3011 \\ & \quad \text { or CSC } 3031 \end{aligned}$ | Machine Learning and Multivariate Modeling in R Data Visualization and Communication with R | 1 |
| :---: | :---: | :---: |
| Project |  |  |
| Choose at least th | ree (3) units of the following: | 3 |
| CSC 4133 | Service Learning in Computer Science |  |
| HON 4098 and HON 4099 | Honors Project I and Honors Project II |  |
| MTH 4133 | Service Learning in Mathematics |  |
| Biology Major - Required Courses |  |  |
| CSC 3022 | Data Management for Computational Science | 2 |
| MTH 1044 | Calculus with Applications (FE) | 4 |
| MTH 3063 | Calculus Based Statistics with R | 3 |
| Total Units |  | 26 |

## Computer Science Majors

Code Title Units

## Lower-Division Requirements

BIO $2010 \quad$ Cell Biology and Biochemistry (FE) 4 and BIO 2010L and Cell Biology and Biochemistry Laboratory (FE)
CSC 1043 Introduction to Computer Programming
and CSC 1043L and Introduction to Computer Programming Lab
Upper-Division Requirements
BIO 3045 Genetics 4

| and BIO 3045L | and Genetics Laboratory |
| :--- | :--- |
| CSC 3002 | UNIX and Python Scripting for Computational |

CSC 3002 UNIX and Python Scripting for Computational 2

CSC 3011 Machine Learning and Multivariate Modeling in R 1 or CSC 3031 Data Visualization and Communication with R
Project
Choose at least three (3) units of the following:
CSC 4133 Service Learning in Computer Science
HON 4098 Honors Project I
and HON 4099 and Honors Project II
MTH 4133 Service Learning in Mathematics
Computer Science Majors - Required Courses
ISS 4014 Data Base Systems and Web Integration 4
MTH 1064 Calculus I (FE) 4
and MTH 1064L and Calculus I Lab (FE)
MTH 3083 Mathematical Probability and Statistics 3
Total Units 28

## Mathematics Majors

Code Title Units
Lower-Division Requirements
BIO $2010 \quad$ Cell Biology and Biochemistry (FE) 4 and BIO 2010L and Cell Biology and Biochemistry Laboratory (FE) CSC 1043 Introduction to Computer Programming
and CSC 1043L and Introduction to Computer Programming Lab
Upper-Division Requirements
BIO 3045 Genetics
4
and BIO 3045L and Genetics Laboratory
CSC 3002 UNIX and Python Scripting for Computational 2 Science
CSC 3011 Machine Learning and Multivariate Modeling in R 1

| or CSC 3031 | Data Visualization and Communication with R |  |
| :---: | :---: | :---: |
| Project |  |  |
| Choose at least three (3) units of the following: |  | 3 |
| CSC 4133 | Service Learning in Computer Science |  |
| HON 4098 and HON 4099 | Honors Project I and Honors Project II |  |
| MTH 4133 | Service Learning in Mathematics |  |
| Mathematics Majors - Required Courses |  |  |
| CSC 3022 | Data Management for Computational Science | 2 |
| MTH 1064 and MTH 1064L | Calculus I (FE) <br> and Calculus I Lab (FE) | 4 |
| MTH 3083 | Mathematical Probability and Statistics | 3 |
| Total Units |  | 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

## Chemistry Major

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| CHE 1052 and CHE 1052L | General Chemistry I (FE) and General Chemistry I Lab (FE) | 5 |
| CHE 1053 and CHE 1053L | General Chemistry II and General Chemistry II Lab | 4 |
| CSC 1043 <br> and CSC 1043L | Introduction to Computer Programming and Introduction to Computer Programming Lab | 3 |
| MTH 1064 and MTH 1064L | Calculus I (FE) and Calculus I Lab (FE) | 4 |
| Upper-Division Requirements |  |  |
| CSC 3002 | UNIX and Python Scripting for Computational Science | 2 |
| $\begin{aligned} & \text { CSC } 3011 \\ & \quad \text { or CSC } 3031 \end{aligned}$ | Machine Learning and Multivariate Modeling in R Data Visualization and Communication with R | 1 |
| Project |  |  |
| Choose at least three (3) units from the following: |  | 3 |
| CSC 4133 | Service Learning in Computer Science |  |
| HON 4098 and HON 4099 | Honors Project I and Honors Project II |  |
| MTH 4133 | Service Learning in Mathematics |  |
| Chemistry Major - Required Courses |  |  |
| CHE 2013 | Analytical Chemistry | 3 |
| CHE 3025 and CHE 3025L | Physical Chemistry I and Physical Chemistry I Lab | 4 |
| CSC 3022 | Data Management for Computational Science | 2 |


| MTH 3063 | Calculus Based Statistics with R | 3 |
| :--- | :--- | :--- |
| or MTH 3083 | Mathematical Probability and Statistics |  |

Total Units

## Computer Science Majors

Code Title Units

## Lower-Division Requirements

CHE 1052 General Chemistry I (FE) 5
and CHE 1052L and General Chemistry I Lab (FE)
CHE 1053 General Chemistry II 4
and CHE 1053L and General Chemistry II Lab
CSC 1043 Introduction to Computer Programming
3
and CSC 1043L and Introduction to Computer Programming Lab
MTH $1064 \quad$ Calculus I (FE)
and Calculus I Lab (FE)
Upper-Division Requirements

| CSC 3002 | UNIX and Python Scripting for Computational | 2 |
| :---: | :--- | :--- |
| CSC 3011 | Science | Machine Learning and Multivariate Modeling in R |
| or CSC 3031 | Data Visualization and Communication with R |  |

Project
Choose at least three (3) units from the following: 3
CSC 4133 Service Learning in Computer Science
HON 4098 Honors Project I
and HON 4099 and Honors Project II
MTH 4133 Service Learning in Mathematics
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
Total Units 29

## Mathematics Majors

Code Title Units
Lower-Division Requirements
CHE $1052 \quad$ General Chemistry I (FE) 5
and CHE 1052L and General Chemistry I Lab (FE)
CHE 1053 General Chemistry II 4
and CHE 1053L and General Chemistry II Lab
CSC 1043 Introduction to Computer Programming 3
and CSC 1043L and Introduction to Computer Programming Lab
MTH $1064 \quad$ Calculus I (FE)
and MTH 1064L and Calculus I Lab (FE)
Upper-Division Requirements
CSC 3002 UNIX and Python Scripting for Computational 2
Science
CSC $3011 \quad$ Machine Learning and Multivariate Modeling in R $\quad 1$
or CSC 3031 Data Visualization and Communication with R

## Project

Choose at least three (3) units from the following: 3
CSC 4133 Service Learning in Computer Science
HON 4098 Honors Project I
and HON 4099 and Honors Project II
MTH 4133 Service Learning in Mathematics

| Mathematics Majors - Required Courses |  |  |
| :--- | :--- | ---: |
| CHE 2013 | Analytical Chemistry | 3 |
| CHE 3025 | Physical Chemistry I | 4 |
| and CHE 3025L | and Physical Chemistry I Lab |  |
| CSC 3022 | Data Management for Computational Science | 2 |
| MTH 3083 | Mathematical Probability and Statistics | 3 |
| Total Units |  | $\mathbf{3 4}$ |

## 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

## Physics Major ${ }^{1}$

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| $\begin{aligned} & \text { CSC } 1043 \\ & \text { and CSC 1043L } \end{aligned}$ | Introduction to Computer Programming and Introduction to Computer Programming Lab | 3 |
| MTH 1064 and MTH 1064L | Calculus I (FE) and Calculus I Lab (FE) | 4 |
| PHY 2044 and PHY 2044L | University Physics I (FE) and University Physics I Lab (FE) | 4 |
| PHY 2054 and PHY 2054L | University Physics II and University Physics II Lab | 4 |
| Upper-Division Requirements |  |  |
| CSC 3002 | UNIX and Python Scripting for Computational Science | 2 |
| MTH 3063 or MTH 3083 | Calculus Based Statistics with R Mathematical Probability and Statistics | 3 |
| Physics Major - Required Courses |  |  |
| $\begin{aligned} & \text { CSC } 1054 \\ & \text { and CSC 1054L } \end{aligned}$ | Objects and Elementary Data Structures and Objects and Elementary Data Structures Lab | 4 |
| CSC 3022 | Data Management for Computational Science | 2 |
| EGR 1012 and EGR 1012L | Introduction to Engineering I and Introduction to Engineering I Lab | 2 |
| PHY 3004 and PHY 3004L | Modern Physics and Modern Physics Lab | 4 |
| Project |  |  |

Choose at least three (3) units from the following: 3

| CSC 4133 | Service Learning in Computer Science |
| :--- | :--- |
| HON 4098 | Honors Project I |
| and HON 4099 | and Honors Project II |
| MTH 4133 | Service Learning in Mathematics |

Total Units
35
${ }^{1}$ Minor Total for PHY Majors: 35 (11 units distinct from the major)

## Electrical Engineering or Mechanical Engineering Physics Major ${ }^{1}$

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| CSC 1043 <br> and CSC 1043L | Introduction to Computer Programming and Introduction to Computer Programming Lab | 3 |
| MTH 1064 and MTH 1064L | Calculus I (FE) and Calculus I Lab (FE) | 4 |
| PHY 2044 and PHY 2044L | University Physics I (FE) and University Physics I Lab (FE) | 4 |
| PHY 2054 and PHY 2054L | University Physics II and University Physics II Lab | 4 |
| Upper-Division Requirements |  |  |
| CSC 3002 | UNIX and Python Scripting for Computational Science | 2 |
| $\text { MTH } 3063$ <br> or MTH 3083 | Calculus Based Statistics with R <br> Mathematical Probability and Statistics | 3 |

## Electrical Engineering or Mechanical Engineering Physics Major -

Required Courses
CSC 1054 Objects and Elementary Data Structures 4
and CSC 1054L and Objects and Elementary Data Structures Lab
CSC 2052 Data Structures in C++ 2
and CSC 2052L and Data Structures in C++ Lab
CSC 3022 Data Management for Computational Science 2
EGR 1012 Introduction to Engineering I 2
and EGR 1012L and Introduction to Engineering I Lab
Choose one (1) course from the following:
EGR 4013 Thermodynamics
or PHY 4013 Thermodynamics

| PHY 3004 | Modern Physics |
| :--- | :--- |
| and | and Modern Physics Lab |

PHY 3004L

## Project

Choose at least three (3) units from the following: 3
CSC 4133 Service Learning in Computer Science
HON 4098 Honors Project I
and HON 4099 and Honors Project II
MTH 4133 Service Learning in Mathematics
Total Units
36-37
${ }^{1}$ Minor Total for EGR Majors: 33 (9 units distinct from the major)

## Computer Science Majors ${ }^{1}$

Code Title Units

## Lower-Division Requirements

CSC 1043 Introduction to Computer Programming 3
and CSC 1043L and Introduction to Computer Programming Lab
MTH 1064 Calculus I (FE)
and MTH 1064L and Calculus I Lab (FE)
PHY $2044 \quad$ University Physics I (FE)
4
and PHY 2044L and University Physics I Lab (FE)

| PHY 2054 and PHY 2054L | University Physics II and University Physics II Lab | 4 |
| :---: | :---: | :---: |
| Upper-Division Requirements |  |  |
| CSC 3002 | UNIX and Python Scripting for Computational Science | 2 |
| MTH 3063 or MTH 3083 | Calculus Based Statistics with R <br> Mathematical Probability and Statistics | 3 |
| Computer Science Majors - Required Courses |  |  |
| ISS 4014 | Data Base Systems and Web Integration | 4 |
| $\begin{aligned} & \text { CSC } 3011 \\ & \quad \text { or CSC } 3031 \end{aligned}$ | Machine Learning and Multivariate Modeling in R <br> Data Visualization and Communication with $R$ | 1 |
| Project |  |  |
| Choose at least three (3) units from the following: |  | 3 |
| CSC 4133 | Service Learning in Computer Science |  |
| HON 4098 and HON 4099 | Honors Project I and Honors Project II |  |
| MTH 4133 | Service Learning in Mathematics |  |
| Total Units |  | 28 |
| ${ }^{1}$ Minor Total for Computer Science Majors: 28 (12 units distinct from the major) |  |  |
| Mathematics Majors ${ }^{1}$ |  |  |
| Code | Title | Units |
| Lower-Division Requirements |  |  |
| $\begin{aligned} & \text { CSC } 1043 \\ & \text { and CSC } 1043 \text { L } \end{aligned}$ | Introduction to Computer Programming and Introduction to Computer Programming Lab | 3 |
| MTH 1064 and MTH 1064L | Calculus I (FE) and Calculus I Lab (FE) | 4 |
| PHY 2044 and PHY 2044L | University Physics I (FE) and University Physics I Lab (FE) | 4 |
| PHY 2054 and PHY 2054L | University Physics II and University Physics II Lab | 4 |
| Upper-Division Requirements |  |  |
| CSC 3002 | UNIX and Python Scripting for Computational Science | 2 |
| MTH 3063 or MTH 3083 | Calculus Based Statistics with R <br> Mathematical Probability and Statistics | 3 |
| Mathematics Majors - Required Courses |  |  |
| CSC 3022 | Data Management for Computational Science | 2 |
| PHY 3004 and PHY 3004L | Modern Physics and Modern Physics Lab | 4 |
| $\begin{aligned} & \operatorname{CSC} 3011 \\ & \quad \text { or } \operatorname{CSC} 3031 \end{aligned}$ | Machine Learning and Multivariate Modeling in R Data Visualization and Communication with R | 1 |
| Project |  |  |
| Choose at least three (3) units from the following: 3 |  |  |
| CSC 4133 | Service Learning in Computer Science |  |
| HON 4098 and HON 4099 | Honors Project I and Honors Project II |  |
| MTH 4133 | Service Learning in Mathematics |  |



| 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 (1) | course from the following: | 3 |
| BUS 4075 | Sustainability in Action |  |
| BUS 4080 | International Business |  |
| MGT 3020 | Organizational Behavior |  |
| MGT 3074 | Human Resource Management |  |
| MGT 3082 | Applied Entrepreneurship |  |
| MGT 4012 | Leadership Theory and Practice |  |
| MGT 4070 | Nonprofit Organization Management |  |
| MGT 4084 | Operations Management |  |

1 The ACC 2001 and ACC 2002 sequence may be substituted for ACC 2000.

## 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.

| Code | Title U | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| ACC 2000 | Principles of Accounting for Non-Business Majors 1 | s 3 |
| CSC 1043 and CSC 1043L | Introduction to Computer Programming and Introduction to Computer Programming Lab | 3 |
| CSC 1054 <br> and CSC 1054L | Objects and Elementary Data Structures and Objects and Elementary Data Structures Lab | 4 |
| Choose one (1) course from the following: |  | 2-4 |
| $\begin{aligned} & \text { CSC } 2052 \\ & \text { and } \\ & \text { CSC 2052L } \end{aligned}$ | Data Structures in C++ and Data Structures in C++ Lab |  |
| CSC 2054 <br> and <br> CSC 2054L | Data Structures and Algorithms and Data Structures and Algorithms Lab |  |
| 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 (2) | urses from the following: | 6 |


| MKT 3033 | Consumer and Organizational Buying Behavior |
| :--- | :--- |
| MKT 3036 | Integrated Marketing and Sales Communication |
| MKT 3050 | Digital Marketing Essentials |
| MKT 4032 | Marketing Research and Analytics |
| Total Units |  |

${ }^{1}$ The ACC 2001 and ACC 2002 sequence may be substituted for ACC 2000.

## Mathematics Minor

| Code | Title | Units |
| :---: | :---: | :---: |
| Required Courses |  |  |
| MTH 1064 <br> and MTH 1064L | Calculus I (FE) and Calculus I Lab (FE) | 4 |
| MTH 1074 <br> and MTH 1074L | Calculus II and Calculus II Lab | 4 |
| MTH 2033 | Linear Algebra | 3 |
| Choose twelve (12) additional units from the following: |  | 12 |
| MTH 3012 | Number Theory with Proofs |  |
| MTH 2074 | Calculus III |  |
| MTH 3033 | Differential Equations |  |
| MTH 3043 | Discrete Mathematics |  |
| MTH 3052 | History of Mathematics |  |
| MTH 3063 or MTH 308 | Calculus Based Statistics with R <br> 3Mathematical Probability and Statistics |  |
| MTH 3073 | Mathematical Modeling |  |
| MTH 4002 | Topics in Geometry |  |
| MTH 4013 | Complex Analysis |  |
| MTH 4024 | Real Analysis |  |
| MTH 4044 | Abstract Algebra |  |
| MTH 4071 | History of Mathematics Study Tour |  |
| MTH 4092 | Special Topics in Mathematics |  |
| Total Units |  | 23 |

## Software Engineering Minor

Code Title Units Lower-Division Requirements
CSC 1043 Introduction to Computer Programming 3
and CSC 1043L and Introduction to Computer Programming Lab
CSC 1054
and CSC 1054L
CSC 2054
and CSC 2054L
Objects and Elementary Data Structures
4 and Objects and Elementary Data Structures Lab
and Data Structures and Algorithms Lab
Upper-Division Requirements
CSC 3014 Operating Systems 4
CSC 3023 Software Engineering 3
MTH 3043 Discrete Mathematics 3
CSC 3002 UNIX and Python Scripting for Computational 2 Science
or CSC 3022 Data Management for Computational Science

## Total Units

23

## Software Engineering Certificate

| Code | Title | Units |
| :--- | :--- | ---: |
| Lower-Division Requirements |  |  |
| CSC 1043 | Introduction to Computer Programming | 3 |
| and CSC 1043L | and Introduction to Computer Programming Lab |  |


| CSC 1054 <br> and CSC 1054L | Objects and Elementary Data Structures <br> and Objects and Elementary Data Structures Lab | 4 |
| :--- | :--- | ---: |
| CSC 2054 <br> and CSC 2054L | Data Structures and Algorithms <br> and Data Structures and Algorithms Lab <br> Upper-Division Requirements | 4 |
| CSC 3012 | Operating Systems for Software Engineering <br> Certificate | 2 |
| CSC 3023 | Software Engineering | $\mathbf{3}$ |
| Total Units |  | $\mathbf{1 6}$ |

## Department of Physics and Engineering <br> 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

Chair - Maria Zack, Ph.D.
Michelle Chen, Ph.D.
University of Pennsylvania

4 Anthony Cortez, Ph.D. University of California, Riverside

Paul Schmelzenbach, Ph.D.
Oregon State University

Maria Zack, Ph.D.<br>University of California, San Diego

To view requirements for majors, minors, and certificates, see the Degree Program Information (p. 244) page.

- General Engineering: Computer Science Engineering, B.S.E. (Physics and Engineering) (p. 150)
- General Engineering: Electrical Engineering, B.S.E. (p. 151)
- General Engineering: Mechanical Engineering Physics, B.S.E. (p. 152)
- Physics, B.A. (p. 152)
- Physics, B.A. for Associates Degree Transfer(ADT) Students (p. 153)
- Physics, B.S. (p. 154)
- Computational Science Minor - Physics (Physics and Engineering) (p. 154)
- Physics Minor (p. 156)


## Engineering

EGR 1012 Introduction to Engineering I (1 Unit)
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): EGR 1012L and MTH 1033 (or equivalent).
EGR 1012L Introduction to Engineering I Lab (1 Unit)
Laboratory to compliment EGR 1012. Meets two hours per week. Corequisite(s): EGR 1012

## EGR 1023 Introduction to Engineering II (2 Units)

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 Unit)
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 Units)
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 multidimensional 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.
Also offered as CSC 1043.
Prerequisite(s): MTH 1013 or equivalent.
Corequisite(s): EGR 1043L

EGR 1043L Introduction to Computer Programming Lab (1 Unit)
A lab course designed for a hands-on exploration of Introductory
Computer Programming. Meets two hours per week.
Also offered as CSC 1043L.
Prerequisite(s): MTH 1013 or equivalent.
Corequisite(s): EGR 1043
EGR 1054 Objects and Elementary Data Structures (3 Units)
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. Also offered as CSC 1054.
Prerequisite(s): EGR 1043 with a grade of C- or higher.
Corequisite(s): EGR 1054L
EGR 1054L Objects and Elementary Data Structures Lab (1 Unit)
A lab course designed for a hands-on exploration of Objects and
Elementary Data Structures. Meets two hours per week.
Also offered as CSC 1054L.
Prerequisite(s): EGR 1043 with a grade of C- or higher.
Corequisite(s): EGR 1054
EGR 2014 Engineering Mechanics: Statics (3 Units)
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 2014 L Engineering Mechanics: Statics Lab (1 Unit)

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 Circuit Analysis (3 Units)
Theory and analysis of electrical 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 Circuit Analysis Lab (1 Unit)
A lab course designed for a hands-on exploration of 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 Units)
A survey of nuclear physics including nuclear models, law of radioactive decay, radiation detection, and applications of nuclear science in engineering and medicine.
Also offered as PHY 3013.
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

EGR 3013L Nuclear Physics Lab (1 Unit)
A lab course designed for a hands-on exploration of Nuclear Physics.
Meets two hours per week.
Also offered as PHY 3013L.
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
EGR 3014 Operating Systems (4 Units)
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.
Also offered as CSC 3014.
Prerequisite(s): CSC 2052 with a grade of C- or higher or CSC 2054 with a grade of C - or higher.

## EGR 3023 Software Engineering (3 Units)

This course offers an in-depth treatment of the software development process. Software analysis and design study emphasizes an objectoriented approach that is introduced and contrasted with traditional design methodologies. CASE tools are used during the design process. Also offered as CSC 3023.
Corequisite(s): CSC 2054

## EGR 3034 Mechanics of Materials (3 Units)

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): EGR 2014 and PHY 2044 with a grade of C- or higher. Corequisite(s): EGR 3034L
EGR 3034L Mechanics of Materials Lab (1 Unit)
A lab course designed for a hands-on exploration of Mechanics of Materials. Meets two hours per week.
Prerequisite(s): EGR 2014 and PHY 2044 with a grade of C- or higher. Corequisite(s): EGR 3034
EGR 3043 Analytical Mechanics: Dynamics (3 Units)
Newtonian mechanics, dynamics of particles and rigid bodies, oscillatory motion, central forces, inertial tensors, Lagrangian and Hamiltonian formulations.
Also offered as PHY 3043.
Prerequisite(s): MTH 2074 with a grade of C- or higher and PHY 2054 with a grade of C - or higher.

## Recommended: MTH 3033

## EGR 3053 Analog Electronics (2 Units)

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 Unit)
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 Units)
Classical electromagnetism including topics in electrostatics,
magnetostatics, fields in matter, electromagnetic induction, and
Maxwell's equations.
Also offered as PHY 3063.
Prerequisite(s): MTH 2074 with a grade of C- or higher and PHY 2054 with a grade of C - or higher.

## Recommended: MTH 3033

EGR 3073 Networking and Security (3 Units)
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.
Also offered as ISS 3073.
Prerequisite(s): CSC 1054 with a grade of C- or higher or EGR 1054 with a grade of C - or higher and Junior standing.
EGR 3083 Electricity, Magnetism, and Waves II (3 Units)
Electrodynamics with an emphasis on application of Maxwell's equations particularly to electromagnetic radiation.
Also offered as PHY 3083.
Prerequisite(s): EGR 3063
EGR 3093 Digital Electronics (2 Units)
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 Unit)
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 Units)
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.
Also offered as ISS 4003.
Prerequisite(s): CSC 3014 or EGR 3014; EGR 3073 or ISS 3073
EGR 4013 Thermodynamics (3 Units)
Fundamental concepts of thermodynamics and statistical mechanics; applications to both classical and quantum systems.
Also offered as PHY 4013.
Prerequisite(s): PHY 2054
Recommended: MTH 3033

EGR 4042 Embedded Systems and Robotics (1 Unit)
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): CSC 2054 or EGR 2024 with a grade of C- or higher. Corequisite(s): EGR 4042L
EGR 4042L Embedded Systems and Robotics Lab (1 Unit)
A lab course designed for a hands-on exploration of Embedded Systems and Robotics. Meets two hours per week.
Prerequisite(s): CSC 2054 or EGR 2024 with a grade of C- or higher. Corequisite(s): EGR 4042
EGR 4054 Computer Architecture and Assembly Language (4 Units)
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 Units)

An introduction to the study of solids, including crystal structure, reciprocal lattices, crystal binding, phonons, and electron band theory. Also offered as PHY 4063.
Prerequisite(s): PHY 2054 with a grade of C- or higher.
EGR 4072 Senior Project I (2 Units)
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 Units)
This course provides students (teams with) the opportunity to hone and finish building the project design initiated in EGR 4072. The students will prepare a scientific paper about their research/project and give an oral presentation of their findings. This course will normally be completed in a student's senior year.
Prerequisite(s): EGR 4072 or consent of instructor.

## EGR 4090 Special Topics in Engineering (1-4 Units)

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 (6) units.
Prerequisite(s): Consent of instructor.
EGR 4092 Internship in Engineering (2 Units)
A supervised experience in which the student works with industry professionals to gain experience in engineering.
May be repeated up to a total of four (4) units. Credit/No Credit.
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 Units)
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 Units)
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.

## Physics

## PHY 1034 The Physics of Sound and Music (FE) (3 Units)

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(s): MTH 0099 or equivalent.
Corequisite(s): PHY 1034L
PHY 1034L The Physics of Sound and Music Lab (FE) (1 Unit)
A lab course designed for a hands-on exploration of The Physics of Sound and Music. Meets two hours per week.
Corequisite(s): PHY 1034
PHY 1044 General Physics I (FE) (3 Units)
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
Corequisite(s): PHY 1044L
PHY 1044L General Physics I Lab (FE) (1 Unit)
A lab course designed for a hands-on exploration of General Physics I.
Meets two hours per week.
Prerequisite(s): MTH 1033
Corequisite(s): PHY 1044
PHY 1054 General Physics II (FE) (3 Units)
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 (FE) (1 Unit)
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 (FE) (3 Units)
An analytic, calculus-based study of classical physics appropriate for science and engineering majors. Includes mechanics, waves, and thermodynamics.
Corequisite(s): MTH 1044 or MTH 1064 or consent of instructor and PHY 2044L.

## PHY 2044L University Physics I Lab (FE) (1 Unit)

A lab course designed for a hands-on exploration of University Physics I. Meets two hours per week.
Corequisite(s): MTH 1044 or MTH 1064 or consent of instructor and PHY 2044L.

PHY 2054 University Physics II (3 Units)
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): MTH 1074 or consent of instructor and PHY 2054L.
PHY 2054L University Physics II Lab (1 Unit)
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): MTH 1074 or consent of instructor and PHY 2054.

## PHY 3004 Modern Physics (3 Units)

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 Unit)
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 Units)
A survey of nuclear physics including nuclear models, laws of radioactive decay, radiation detection, and applications of nuclear science in engineering and medicine.
Also offered as EGR 3013.
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 Unit)

A lab course designed for a hands-on exploration of Nuclear Physics. Meets two hours per week.
Also offered as EGR 3013L.
Prerequisite(s): PHY 1054 with a grade of C- or higher or PHY 2054 with a grade of C - or higher.
Corequisite(s): PHY 3013
PHY 3043 Analytical Mechanics: Dynamics (3 Units)
Newtonian mechanics, dynamics of particles and rigid bodies, oscillatory motion, central forces, inertial tensors, Lagrangian and Hamiltonian formulations.
Also offered as EGR 3043.
Prerequisite(s): MTH 2074 and PHY 2054 with a grade of C- or higher. Recommended: MTH 3033
PHY 3063 Electricity, Magnetism, and Waves I (3 Units)
Classical electromagnetism including topics in electrostatics, magnetostatics, fields in matter, electromagnetic induction, and Maxwell's equations.
Also offered as EGR 3063.
Prerequisite(s): MTH 2074 and PHY 2054 with a grade of C- or higher. Recommended: MTH 3033
PHY 3083 Electricity, Magnetism, and Waves II (3 Units)
Electrodynamics with an emphasis on application of Maxwell's equations particularly to electromagnetic radiation.
Also offered as EGR 3083.
Prerequisite(s): EGR 3063 or PHY 3063

## PHY 4013 Thermodynamics (3 Units)

Fundamental concepts of thermodynamics and statistical mechanics; applications to both classical and quantum systems.
Also offered as EGR 4013.
Prerequisite(s): PHY 2054
Corequisite(s): MTH 3033
PHY 4053 Quantum Mechanics (3 Units)
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 Units)
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 I (2 Units)
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.
PHY 4082 Senior Project II (2 Units)
This course provides students (teams) with the opportunity to hone and finish building the project design initiated in PHY 4072. The students will prepare a scientific paper about their research/project and give an oral presentation of their findings. This course will normally be completed in a student's senior year.
Prerequisite(s): PHY 4072 or consent of instructor.
PHY 4090 Special Topics in Physics (1-3 Units)
The topics in physics chosen depend on regular or visiting faculty expertise as well as student demand.
May be repeated up to a total of six (6) units as long as content is different.
Prerequisite(s): Consent of instructor.
PHY 4092 Internship in Physics (2 Units)
A supervised experience in which the student works with industry professionals to gain experience in physics or engineering.
May be repeated up to a total of four (4) units. Credit/No Credit.
Prerequisite(s): Student must have taken at least two upper-division engineering or physics classes and consent of instructor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.

PHY 4099 Independent Studies in Physics (1-4 Units)
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.

## Physical Science

PSC 1004 The Cosmos (FE) (4 Units)
An introduction to our place in the universe emphasizing religious, cultural and historic perspectives including modern developments in physics and astronomy.
Meets a Foundational Explorations requirement; does not count toward any Chemistry or Physics majors.
Prerequisite(s): MTH 0099 or equivalent.

PSC 1014 Physical Science for Teachers (FE) (4 Units)
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 Foundational Explorations requirement; does not count toward the Chemistry or Physics major.
Pre or Corequisite(s): MTH 1013 or equivalent.
PSC 1023 Earth and Space Science for Teachers (3 Units)
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

> General Engineering: Computer Science Engineering, B.S.E. (Physics and Engineering)

## Program Learning Outcomes

## Graduates of the program will demonstrate:

- an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
- an ability to communicate effectively with a range of audiences.
- Students will effectively communicate complicated technical information in writing.
- Students will effectively communicate complicated technical information orally.
- Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
- an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
- an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
- an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

| Code | Title | Units |
| :--- | :--- | ---: |
| Lower-Division Requirements |  |  |
| CSC 2054 | Data Structures and Algorithms |  |
| and CSC 2054L | and Data Structures and Algorithms Lab | 4 |
| EGR 1012 Introduction to Engineering I <br> and EGR 1012L and Introduction to Engineering I Lab | 2 |  |


| EGR 1023 and EGR 1023L | Introduction to Engineering II and Introduction to Engineering II Lab | 3 |
| :---: | :---: | :---: |
| EGR 1043 and EGR 1043L | Introduction to Computer Programming and Introduction to Computer Programming Lab | 3 |
| EGR 1054 and EGR 1054L | Objects and Elementary Data Structures and Objects and Elementary Data Structures Lab | 4 |
| EGR 2024 and EGR 2024L | Circuit Analysis and Circuit Analysis Lab | 4 |
| MTH 1064 and MTH 1064L | Calculus I (FE) and Calculus I Lab (FE) | 4 |
| MTH 1074 and MTH 1074L | Calculus II and Calculus II Lab | 4 |
| MTH 2074 | Calculus III | 4 |
| PHY 2044 and PHY 2044L | University Physics I (FE) and University Physics I Lab (FE) | 4 |
| PHY 2054 and PHY 2054L | University Physics II and University Physics II Lab | 4 |
| Upper-Division Requirements |  |  |
| EGR 3014 | Operating Systems | 4 |
| EGR 3023 | Software Engineering | 3 |
| EGR 3053 and EGR 3053L | Analog Electronics and Analog Electronics Lab | 3 |
| EGR 3073 | Networking and Security | 3 |
| EGR 3093 and EGR 3093L | Digital Electronics and Digital Electronics Lab | 3 |
| 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 |
| MTH 3063 or MTH 3083 | Calculus Based Statistics with R Mathematical Probability and Statistics | 3 |

## Total Units

## Recommended:

## Code Title

Units
EGR 4042
and EGR 4042L
MTH 3043

Embedded Systems and Robotics

## General Engineering: Electrical

 Engineering, B.S.E. Program Learning Outcomes
## Graduates of the program will demonstrate:

- an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
- an ability to communicate effectively with a range of audiences.
- Students will effectively communicate complicated technical information in writing.
- Students will effectively communicate complicated technical information orally.
- Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
- an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
- an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
- an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Code Title Un
Lower-Division Requirements
EGR 1012 Introduction to Engineering I 2
and EGR 1012L and Introduction to Engineering I Lab
EGR 1023 Introduction to Engineering II
3
and EGR 1023L and Introduction to Engineering II Lab
EGR 1043 Introduction to Computer Programming 3
and EGR 1043L and Introduction to Computer Programming Lab
EGR $1054 \quad$ Objects and Elementary Data Structures 4
and EGR 1054L and Objects and Elementary Data Structures Lab
EGR 2014 Engineering Mechanics: Statics 4
and EGR 2014L and Engineering Mechanics: Statics Lab
and EGR 2024L
and Circuit Analysis Lab
MTH $1064 \quad$ Calculus I (FE)
4
and MTH 1064L
and Calculus I Lab (FE)
MTH 1074 Calculus II
4
and MTH 1074L and Calculus II Lab
MTH 2074 Calculus III 4
PHY $2044 \quad 4$
$\begin{array}{lll}\text { and PHY 2044L } & \text { and University Physics I Lab (FE) } & \\ \text { PHY } 2054 & \text { University Physics II } & 4\end{array}$
and PHY 2054L and University Physics II Lab
Upper-Division Requirements
EGR $3013 \quad$ Nuclear Physics 3
and EGR 3013L and Nuclear Physics Lab
EGR 3053 Analog Electronics
3
and EGR 3053L and Analog Electronics Lab
EGR 3063 Electricity, Magnetism, and Waves I 3
EGR 3083 Electricity, Magnetism, and Waves II 3
EGR 3093 Digital Electronics 3
and EGR 3093L and Digital Electronics Lab
EGR 4042 Embedded Systems and Robotics
2
and EGR 4042L and Embedded Systems and Robotics Lab
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 |
| MTH 3063 | Calculus Based Statistics with R | 3 |
| or MTH 3083 | Mathematical Probability and Statistics |  |

Total Units
Total Units for Degree: 78 (70 without FE)

## General Engineering: Mechanical Engineering Physics, B.S.E.

Program Learning Outcomes

## Graduates of the program will demonstrate:

- an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
- an ability to communicate effectively with a range of audiences.
- Students will effectively communicate complicated technical information in writing.
- Students will effectively communicate complicated technical information orally.
- Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
- an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
- an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
- an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| EGR 1012 and EGR 1012L | Introduction to Engineering I and Introduction to Engineering I Lab | 2 |
| EGR 1023 and EGR 1023L | Introduction to Engineering II and Introduction to Engineering II Lab | 3 |
| EGR 1043 and EGR 1043L | Introduction to Computer Programming and Introduction to Computer Programming Lab | 3 |
| EGR 1054 and EGR 1054L | Objects and Elementary Data Structures and Objects and Elementary Data Structures Lab | 4 |
| EGR 2014 and EGR 2014L | Engineering Mechanics: Statics and Engineering Mechanics: Statics Lab | 4 |



Total Units

## Total Units for Degree: 78 (70 without FE)

## Recommended:

| Code | Title | Units |
| :--- | :--- | ---: |
| CHE 1052 | General Chemistry I (FE) | 5 |
| and CHE 1052L | and General Chemistry I Lab (FE) |  |
| MTH 2033 | Linear Algebra | 3 |

## Physics, B.A.

## Program Learning Outcomes

## Graduates of the program will demonstrate:

- an ability to identify, formulate, and solve complex problems by applying principles of science and mathematics.
- an ability to apply physical principles, mathematical reasoning, and computational techniques to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
- an ability to communicate effectively with a range of audiences.
- Students will effectively communicate complicated technical information in writing.
- Students will effectively communicate complicated technical information orally.
- Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
- an ability to recognize ethical and professional responsibilities and make informed judgments, which must consider the impact of scientific solutions in global, economic, environmental, and societal contexts.
- an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use scientific judgment to draw conclusions.
- an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

| Code |  | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| CHE 1052 and CHE 1052L | General Chemistry I (FE) and General Chemistry I Lab (FE) | 5 |
| EGR 1012 and EGR 1012L | Introduction to Engineering I and Introduction to Engineering I Lab | 2 |
| EGR 1023 and EGR 1023L | Introduction to Engineering II and Introduction to Engineering II Lab | 3 |
| EGR 1043 <br> and EGR 1043L | Introduction to Computer Programming and Introduction to Computer Programming Lab | 3 |
| MTH 1064 and MTH 1064L | Calculus I (FE) and Calculus I Lab (FE) | 4 |
| MTH 1074 and MTH 1074L | Calculus II and Calculus II Lab | 4 |
| MTH 2074 | Calculus III | 4 |
| PHY 2044 and PHY 2044L | University Physics I (FE) and University Physics I Lab (FE) | 4 |
| PHY 2054 and PHY 2054L | University Physics II and University Physics II Lab | 4 |
| Upper-Division Requirements |  |  |
| MTH 3033 | Differential Equations | 3 |
| PHY 3004 and PHY 3004L | Modern Physics and Modern Physics Lab | 4 |
| 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 I | 2 |
| Elective Courses |  |  |
| Choose one (1) | urse from the following: | 3 |
| PHY 3013 <br> and PHY 3013L | Nuclear Physics and Nuclear Physics Lab |  |
| PHY 3083 | Electricity, Magnetism, and Waves II |  |
| PHY 4063 | Solid State Physics |  |
| Total Units |  | 57 |
| Recommended: |  |  |
| Code | Title | Units |
| CHE 1053 and CHE 1053L | General Chemistry II and General Chemistry II Lab | 4 |


| EGR 1054 <br> and EGR 1054L | Objects and Elementary Data Structures <br> and Objects and Elementary Data Structures Lab | 4 |
| :--- | :--- | :--- |
| MTH 2033 | Linear Algebra | 3 |
| PHY 4082 | Senior Project II | 2 |

## Physics, B.A. for Associates 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 FE).

## Program Learning Outcomes

## Graduates of the program will demonstrate:

- an ability to identify, formulate, and solve complex problems by applying principles of science and mathematics.
- an ability to apply physical principles, mathematical reasoning, and computational techniques to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
- an ability to communicate effectively with a range of audiences.
- Students will effectively communicate complicated technical information in writing.
- Students will effectively communicate complicated technical information orally.
- Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
- an ability to recognize ethical and professional responsibilities and make informed judgments, which must consider the impact of scientific solutions in global, economic, environmental, and societal contexts.
- an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use scientific judgment to draw conclusions.
- an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| Twenty four (24) units of transferred Mathematics ${ }^{1}$ |  | 24 |
| Upper-Division Requirements |  |  |
| PHY 3004 and PHY 3004L | Modern Physics and Modern Physics Lab | 4 |
| 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 I | 2 |
| MTH 3033 | Differential Equations | 3 |
| Elective Courses |  |  |
| Choose a minim | m of eleven (11) units from the following: | 11 |


| PHY 3013 <br> and <br> PHY 3013L | Nuclear Physics <br> and Nuclear Physics Lab |
| :--- | :--- |
| PHY 3083 | Electricity, Magnetism, and Waves II |
| PHY 4063 | Solid State Physics |
| CHE 1052 | General Chemistry I (FE) |
| and | and General Chemistry I Lab (FE) |
| CHE 1052L |  |
| EGR 1043 <br> and <br> EGR 1043L | androduction to Computer Programming |

Total Units
1 Transferred in from the community college; 8 units are FE.

## Total Units for the Degree: 57 (49 without FE)

Note(s): Associate Degree for Transfer (ADT) (p. 227) students only.

## Physics, B.S.

## Program Learning Outcomes

## Graduates of the program will demonstrate:

- an ability to identify, formulate, and solve complex problems by applying principles of science and mathematics.
- an ability to apply physical principles, mathematical reasoning, and computational techniques to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
- an ability to communicate effectively with a range of audiences.
- Students will effectively communicate complicated technical information in writing.
- Students will effectively communicate complicated technical information orally.
- Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
- an ability to recognize ethical and professional responsibilities and make informed judgments, which must consider the impact of scientific solutions in global, economic, environmental, and societal contexts.
- an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use scientific judgment to draw conclusions.
- an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

| Code | Title | Units |
| :--- | :--- | ---: |
| Lower-Division Requirements |  |  |
| CHE 1052 <br> and CHE 1052L | General Chemistry I (FE) <br> and General Chemistry I Lab (FE) | 5 |
| EGR 1012 <br> and EGR 1012L | Introduction to Engineering I <br> and Introduction to Engineering I Lab | 2 |
| EGR 1023 <br> and EGR 1023L | Introduction to Engineering II <br> and Introduction to Engineering II Lab | 3 |


| EGR 1043 <br> and EGR 1043L | Introduction to Computer Programming and Introduction to Computer Programming Lab | 3 |
| :---: | :---: | :---: |
| MTH 1064 and MTH 1064L | Calculus I (FE) and Calculus I Lab (FE) | 4 |
| MTH 1074 and MTH 1074L | Calculus II and Calculus II Lab | 4 |
| MTH 2074 | Calculus III | 4 |
| PHY 2044 and PHY 2044L | University Physics I (FE) and University Physics I Lab (FE) | 4 |
| PHY 2054 and PHY 2054L | University Physics II and University Physics II Lab | 4 |
| Upper-Division Requirements |  |  |
| MTH 3033 | Differential Equations | 3 |
| PHY 3004 and PHY 3004L | Modern Physics and Modern Physics Lab | 4 |
| 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 4072 | Senior Project I | 2 |
| PHY 4082 | Senior Project II | 2 |
| Choose one (1) course from the following: |  | 3 |
| $\begin{aligned} & \text { PHY } 3013 \\ & \text { and } \\ & \text { PHY } 3013 \mathrm{~L} \end{aligned}$ | Nuclear Physics and Nuclear Physics Lab |  |
| PHY 4063 | Solid State Physics |  |
| Elective Courses |  |  |
| Complete one (1) of the following courses and the associated lab: |  | 4 |
| $\begin{aligned} & \text { EGR } 2014 \\ & \text { and } \\ & \text { EGR } 2014 \text { L } \end{aligned}$ | Engineering Mechanics: Statics and Engineering Mechanics: Statics Lab |  |
| EGR 2024 <br> and EGR 2024L | Circuit Analysis and Circuit Analysis Lab |  |
| EGR 3034 <br> and EGR 3034L | Mechanics of Materials and Mechanics of Materials Lab |  |

## Total Units

66

## Recommended:

Code Title Units

CHE $1053 \quad$ General Chemistry II 4
and CHE 1053L and General Chemistry II Lab
CHE 2094 Organic Chemistry I 4
and CHE 2094L and Organic Chemistry I Lab
EGR 1054
and EGR 1054L
MTH 2033
Objects and Elementary Data Structures 4 and Objects and Elementary Data Structures Lab Linear Algebra

## Computational Science Minor Physics (Physics and Engineering)

3 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

## Physics Major ${ }^{1}$

| Code | Title |
| :---: | :---: |
| Lower-Division Requirements |  |
| CSC 1043 and CSC 1043L | Introduction to Computer Programming and Introduction to Computer Programming Lab |
| MTH 1064 and MTH 1064L | Calculus I (FE) and Calculus I Lab (FE) |
| PHY 2044 and PHY 2044L | University Physics I (FE) and University Physics I Lab (FE) |
| PHY 2054 and PHY 2054L | University Physics II and University Physics II Lab |
| Upper-Division Requirements |  |
| CSC 3002 | UNIX and Python Scripting for Computational Science |
| MTH 3063 or MTH 3083 | Calculus Based Statistics with R <br> Mathematical Probability and Statistics |


\left.| Physics Major - Required Courses |  |  |
| :--- | :--- | :--- |
| CSC 1054 | Objects and Elementary Data Structures |  |
| and CSC 1054L | and Objects and Elementary Data Structures Lab |  |$\right] 4$

Project
Choose at least three (3) units from the following:

| CSC 4133 | Service Learning in Computer Science |
| :--- | :--- |
| HON 4098 | Honors Project I |
| and HON 4099 | and Honors Project II |
| MTH 4133 | Service Learning in Mathematics |

Total Units
${ }^{1}$ Minor Total for PHY Majors: 35 (11 units distinct from the major)

## Electrical Engineering or Mechanical Engineering Physics Major ${ }^{1}$

| Code | Title | Units |
| :--- | :--- | ---: |
| Lower-Division Requirements |  |  |
| CSC 1043 Introduction to Computer Programming <br> and CSC 1043L and Introduction to Computer Programming Lab | 3 |  |
| MTH 1064 | Calculus I (FE) | 4 |
| and MTH 1064L and Calculus I Lab (FE) |  |  |
| PHY 2044 University Physics I (FE) <br> and PHY 2044L and University Physics I Lab (FE) |  |  |
| PHY 2054 University Physics II <br> and PHY 2054L and University Physics II Lab <br> Upper-Division Requirements  | 4 |  |


| CSC 3002 | UNIX and Python Scripting for Computational Science | 2 |
| :---: | :---: | :---: |
| MTH 3063 or MTH 3083 | Calculus Based Statistics with R Mathematical Probability and Statistics | 3 |
| Electrical Engineering or Mechanical Engineering Physics Major Required Courses |  |  |
| CSC 1054 and CSC 1054L | Objects and Elementary Data Structures and Objects and Elementary Data Structures Lab | 4 |
| CSC 2052 and CSC 2052L | Data Structures in C++ and Data Structures in C++ Lab | 2 |
| CSC 3022 | Data Management for Computational Science | 2 |
| EGR 1012 and EGR 1012L | Introduction to Engineering I and Introduction to Engineering I Lab | 2 |
| Choose one (1) cour | urse from the following: | 3-4 |
| $\begin{aligned} & \text { EGR/PHY } \\ & 4013 \end{aligned}$ | Thermodynamics |  |
| $\begin{aligned} & \text { PHY } 3004 \\ & \text { and } \\ & \text { PHY } 3004 \mathrm{~L} \end{aligned}$ | Modern Physics and Modern Physics Lab |  |
| Project |  |  |
| Choose at least th | hree (3) units from the following: | 3 |
| CSC 4133 | Service Learning in Computer Science |  |
| HON 4098 and HON 4099 | Honors Project I and Honors Project II |  |
| MTH 4133 | Service Learning in Mathematics |  |
| Total Units |  | 36-37 |
| 1 Minor Total for EGR Majors: 33 (9 units distinct from the major) |  |  |
| Computer Sci | ence Majors ${ }^{1}$ |  |

Code Title Units
Lower-Division Requirements
CSC 1043 Introduction to Computer Programming 3 and CSC 1043L and Introduction to Computer Programming Lab
MTH 1064 Calculus I (FE) 4
and MTH 1064L and Calculus I Lab (FE)
PHY 2044 University Physics I (FE) 4
and PHY 2044L and University Physics I Lab (FE)
PHY 2054 University Physics II4
and PHY 2054L and University Physics II Lab

## Upper-Division Requirements

| CSC 3002 | UNIX and Python Scripting for Computational <br> Science | 2 |
| :---: | :--- | :---: |
| MTH 3063 | Calculus Based Statistics with R | 3 |
| or MTH 3083 | Mathematical Probability and Statistics |  |

Computer Science Majors - Required Courses

| ISS 4014 | Data Base Systems and Web Integration | 4 |
| :--- | :--- | :--- |
| CSC 3011 | Machine Learning and Multivariate Modeling in R | 1 |

or CSC 3031 Data Visualization and Communication with R

## Project

Choose at least three (3) units from the following:
3
CSC 4133 Service Learning in Computer Science
HON 4098 Honors Project I
and HON 4099 and Honors Project II
MTH 4133 Service Learning in Mathematics

## Total Units

${ }^{1}$ Minor Total for Computer Science Majors: 28 (12 units distinct from the major)

## Mathematics Majors ${ }^{1}$

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| $\begin{aligned} & \text { CSC } 1043 \\ & \text { and CSC } 1043 \text { L } \end{aligned}$ | Introduction to Computer Programming and Introduction to Computer Programming Lab | 3 |
| MTH 1064 and MTH 1064L | Calculus I (FE) and Calculus I Lab (FE) | 4 |
| PHY 2044 and PHY 2044L | University Physics I (FE) and University Physics I Lab (FE) | 4 |
| PHY 2054 and PHY 2054L | University Physics II and University Physics II Lab | 4 |
| Upper-Division Requirements |  |  |
| CSC 3002 | UNIX and Python Scripting for Computational Science | 2 |
| MTH 3063 or MTH 3083 | Calculus Based Statistics with R <br> Mathematical Probability and Statistics | 3 |

Mathematics Majors - Required Courses

| CSC 3022 | Data Management for Computational Science | 2 |
| :--- | :--- | :---: |
| PHY 3004 | Modern Physics | 4 |
| and PHY 3004L | and Modern Physics Lab |  |
| CSC 3011 | Machine Learning and Multivariate Modeling in R | 1 |
| or CSC 3031 | Data Visualization and Communication with R |  |

## Project

Choose at least three (3) units fromt the following:
CSC 4133 Service Learning in Computer Science
HON 4098 Honors Project I
and HON 4099 and Honors Project II
MTH 4133 Service Learning in Mathematics
Total Units
${ }^{1}$ Minor Total for Mathematics Majors: 32 (12 units distinct from the major)

## Physics Minor

| Code | Title | Units |
| :---: | :---: | :---: |
| Required Courses |  |  |
| PHY 2044 and PHY 2044L | University Physics I (FE) and University Physics I Lab (FE) | 4 |
| PHY 2054 <br> and PHY 2054L | University Physics II and University Physics II Lab | 4 |
| PHY 3004 and PHY 3004L | Modern Physics and Modern Physics Lab | 4 |
| Choose eight (8) additional upper-division units in Physics or Engineering |  | 8 |

Total 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 onethird 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

Chair - Kendra Oakes Mueller, Ph.D.
Alexandra Bitter, Ph.D.
University of Wyoming
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.
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
To view requirements for majors, minors, and certificates, see the Degree Program Information (p. 244) page.

- Psychology B.A. (p. 159)
- Computational Science Minor - Psychology (Psychology) (p. 160)
- Pre-Therapeutic Psychology Minor (p. 160)


## Psychology

PSY 1001 Psychology of Personal Development - First Year Experience (FE) (3 Units)
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 grade.
PSY 1003 General Psychology (FE) (3 Units)
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 Units)
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.
May be repeated up to a total of six (6) units. Credit/No Credit.
Prerequisite(s): Consent of instructor and approval of departmental faculty.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.

## PSY 3000 Personality and Adult Development (4 Units)

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 Units)
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 Units)
A systematic study of the physical, cognitive, social, and emotional development of the individual from birth through adolescence.

## PSY 3015 Positive Psychology (3 Units)

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 grade.
Pre or Corequisite(s): PSY 1003 or consent of instructor.

## PSY 3020 Social Psychology (3 Units)

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 Units)

Study of etiology, assessment, diagnosis, and treatment of various forms of abnormal behavior from various psychological perspectives.
Prerequisite(s): One of CHD 1050, PSY 1003, PSY 3008, or consent of instructor.

## PSY 3025 Clinical and Community Interventions (4 Units)

This course provides an overview of the fields of clinical and community psychology. It focuses on individual, family and systems, socialcommunity, bio-psycho-social, and health interventions. Career directions within the mental health professions are introduced. Theories and interventions include cognitive-behavioral, humanistic-existential, psycho-dynamic-psychoanalytic, and systems. Focus is on how therapists apply therapeutic knowledge in a variety of settings.
PSY 3030 Moral Psychology and Cultural Values (4 Units)
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 Units)

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 a total of six (6) units.
Prerequisite(s): Consent of instructor.

## PSY 3045 Group Dynamics (3 Units)

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 Units)

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 fianc,.
Letter grade.
Prerequisite(s): Consent of instructor.
PSY 3050 Clinical and Research Assessment (3 Units)
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 Units)
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 Units) 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 Units)
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 Units)
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.
Prerequisite(s): PSY 1003 and PSY 3090 or consent of instructor. This course must be taken in the semester immediately following PSY 3090.
PSY 4000 History and Contemporary Issues in Psychology (2 Units) 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 and PSY 1003
PSY 4009 Psychology of Cognition and Learning (4 Units)
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 Units) 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 Units)
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): BIB 1001 or BIB 1002 and PSY 1001 or PSY 1003. Senior standing or consent of instructor.

## PSY 4040 Psychology of Religion (4 Units)

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.
Recommended: PSY 3030 is strongly recommended.
PSY 4070 Fieldwork in Psychology (2-4 Units)
Students are placed in local mental health or social service agencies to obtain training in specific psychological skills.
May be repeated up to a total of twelve (12) units. Credit/No Credit.
Prerequisite(s): Consent of instructor and approval of departmental faculty.
"C" Designation is for California Internships. " $E$ " Designation is for Out of State Internships.

## PSY 4090 Special Studies in Psychology (1-4 Units)

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 Units)

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 (12) units.
Prerequisite(s): Consent of instructor and approval of departmental faculty.

## Psychology B.A. <br> 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:

- Character, Morality, and Culture (p. 159)
- General Psychology (p. 159)
- Therapeutic and Community Psychology (p. 159)

| Character, Morality, and Culture Concentration |  |  |
| :---: | :---: | :---: |
| Code | Title U | Units |
| Lower-Division Requirements |  |  |
| PSY 1001 | Psychology of Personal Development - First Year Experience (FE) | 3 |
| PSY 1003 | General Psychology (FE) | 3 |
| 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 |
| Concentration Courses |  |  |
| PSY 3015 | Positive Psychology | 3 |
| PSY 3030 | Moral Psychology and Cultural Values | 4 |
| $\begin{aligned} & \text { PSY } 4010 \\ & \text { or PSY } 4040 \end{aligned}$ | Issues in Psychotherapy-Theology Integration ${ }^{1}$ Psychology of Religion | 3 |
| Choose three (3) additional units of upper-division Psychology electives ${ }^{2}$ |  |  |${ }^{1}$ If PSY 4010 is selected, must also take PSY 3025.

${ }^{2}$ May substitute MTH 3063 or MTH 3083 for Psychology elective.

## General Psychology Concentration

| Code | Title | Units |
| :--- | :--- | ---: |
| Lower-Division Requirements |  |  |$\quad$| PSY 1001 | Psychology of Personal Development - First Year <br> Experience (FE) |
| :--- | :--- |
| PSY 1003 | General Psychology (FE) |


| Upper-Division Requirements |  |  |
| :--- | :--- | :--- |
| PSY 3000 | Personality and Adult Development | 4 |
| PSY 3008 | Developmental Psychology - Birth Through <br> Adolescence | 4 |
|  | PSY 3021 | Abnormal Psychology |

## Concentration Courses

Choose 15 units of upper-division Psychology electives ${ }^{1} \quad 15$
Total Units ..... 50
${ }^{1}$ May substitute MTH 3063 or MTH 3083 for Psychology elective.

## Therapeutic and Community Psychology Concentration

Code Title Units
Lower-Division Requirements

| PSY 1001 | Psychology of Personal Development - First Year Experience (FE) | 3 |
| :---: | :---: | :---: |
| PSY 1003 | General Psychology (FE) | 3 |
| 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 |

## Concentration Courses

| 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 | $\mathbf{3}$ |
| Total Units |  | $\mathbf{5 2}$ |

## Recommended:

| Code | Title | Units |
| :--- | :--- | ---: |
| PSY 3015 | Positive Psychology | 3 |
| PSY 3041 | Group Counseling | $1-3$ |
| PSY 3045 | Group Dynamics ${ }^{1}$ | 3 |

[^2]
## 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

## Psychology Majors

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| CSC 1043 <br> and CSC 1043L | Introduction to Computer Programming and Introduction to Computer Programming Lab | 3 |
| PSY 1003 | General Psychology (FE) | 3 |
| Upper-Division Requirements |  |  |
| CSC 3002 | UNIX and Python Scripting for Computational Science | 2 |
| PSY 3020 | Social Psychology | 3 |
| $\begin{aligned} & \text { PSY } 3001 \\ & \text { or PSY } 4009 \end{aligned}$ | Physiological and Neuropsychology Psychology of Cognition and Learning | 4 |
| $\begin{aligned} & \text { CSC } 3011 \\ & \text { or CSC } 3031 \end{aligned}$ | Machine Learning and Multivariate Modeling in R Data Visualization and Communication with R | 1 |
| Project |  |  |
| Choose at least three (3) units from the following: ${ }^{1}$ |  | 3 |
| CSC 4133 | Service Learning in Computer Science |  |
| HON 4098 <br> and HON 4099 | Honors Project I and Honors Project II |  |
| MTH 4133 | Service Learning in Mathematics |  |
| Psychology Majors - Required Courses |  |  |
| CSC 3022 | Data Management for Computational Science | 2 |
| MTH 1044 | Calculus with Applications (FE) | 4 |
| MTH 3063 | Calculus Based Statistics with R | 3 |
| Total Units |  | 28 |

${ }^{1}$ Any project must have a computational science emphasis.
Computer Science Majors

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| CSC 1043 <br> and CSC 1043L | Introduction to Computer Programming and Introduction to Computer Programming Lab | 3 |
| PSY 1003 | General Psychology (FE) | 3 |
| Upper-Division Requirements |  |  |
| CSC 3002 | UNIX and Python Scripting for Computational Science | 2 |
| PSY 3020 | Social Psychology | 3 |
| $\begin{aligned} & \text { PSY } 3001 \\ & \text { or PSY } 4009 \end{aligned}$ | Physiological and Neuropsychology Psychology of Cognition and Learning | 4 |
| CSC 3011 | Machine Learning and Multivariate Modeling in R | 1 |


| or CSC 3031 | Data Visualization and Communication with R |  |
| :---: | :---: | :---: |
| Project |  |  |
| Choose at least three (3) units from the following: ${ }^{1}$ |  | 3 |
| CSC 4133 | Service Learning in Computer Science |  |
| HON 4098 and HON 4099 | Honors Project I and Honors Project II |  |
| MTH 4133 | Service Learning in Mathematics |  |
| Computer Science Majors - Required Courses |  |  |
| ISS 4014 | Data Base Systems and Web Integration | 4 |
| MTH 1064 and MTH 1064L | Calculus I (FE) and Calculus I Lab (FE) | 4 |
| MTH 3063 or MTH 3083 | Calculus Based Statistics with R <br> Mathematical Probability and Statistics | 3 |
| Total Units |  | 30 |
| 1 Any project must have a computational science emphasis. |  |  |
| Mathematics Majors |  |  |
| Code | Title | Units |
| Lower-Division Requirements |  |  |
| $\begin{aligned} & \text { CSC } 1043 \\ & \text { and CSC 1043L } \end{aligned}$ | Introduction to Computer Programming and Introduction to Computer Programming Lab | 3 |
| PSY 1003 | General Psychology (FE) | 3 |
| Upper-Division Requirements |  |  |
| CSC 3002 | UNIX and Python Scripting for Computational Science | 2 |
| PSY 3020 | Social Psychology | 3 |
| $\begin{aligned} & \text { PSY } 3001 \\ & \text { or PSY } 4009 \end{aligned}$ | Physiological and Neuropsychology Psychology of Cognition and Learning | 4 |
| $\begin{aligned} & \text { CSC } 3011 \\ & \text { or CSC } 3031 \end{aligned}$ | Machine Learning and Multivariate Modeling in R Data Visualization and Communication with $R$ | 1 |
| Project |  |  |
| Choose at least three (3) units from the following: ${ }^{1}$ |  | 3 |
| CSC 4133 | Service Learning in Computer Science |  |
| HON 4098 and HON 4099 | Honors Project I and Honors Project II |  |
| MTH 4133 | Service Learning in Mathematics |  |
| Mathematics Majors - Required Courses |  |  |
| CSC 3022 | Data Management for Computational Science | 2 |
| MTH 1064 and MTH 1064L | Calculus I (FE) and Calculus I Lab (FE) | 4 |
| MTH 3083 | Mathematical Probability and Statistics | 3 |
| Total Units |  | 28 |

${ }^{1}$ Any project must have a computational science emphasis.

## 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.

| Code | Title U | Units |
| :---: | :---: | :---: |
| Required Courses |  |  |
| PSY 3021 | Abnormal Psychology | 3 |
| PSY 1001 | Psychology of Personal Development - First Year Experience (FE) | 3 |
| or PSY 1003 | General Psychology (FE) |  |
| PSY 3025 | Clinical and Community Interventions | 3-4 |
| or PSY 3080 | Family Development and Family Therapies |  |
| PSY 3008 | Developmental Psychology - Birth Through Adolescence | 3-4 |
| or CHD 1050 | Human Development |  |
| Choose three (3) units from the following: |  | 3 |
| PSY 3015 | Positive Psychology |  |
| PSY 3020 | Social Psychology |  |
| PSY 3041 | Group Counseling (Must be taken for 3 units) |  |
| PSY 3045 | Group Dynamics ${ }^{1}$ |  |
| PSY 3049 | Intimate Couples (Must take with fiance or spouse) |  |
| PSY 3060 | Human Sexuality |  |
| PSY 4010 | Issues in Psychotherapy-Theology Integration | 3-4 |
| or PSY 4020 | Pursuing Goodness: The Science of Moral Change (Senior Capstone) |  |

## Total Units

${ }^{1}$ PSY 3041 is a pre-requisite.

## 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 to understand evidencebased science, to promote a healthy lifestyle, and interact with patients and clients. Graduates will learn how to evaluate patients' nutrition and health needs, and hone the ability to prevent and treat many types of conditions and diseases. Guidance and resources are given to successfully pursue internships and Master degree programs to become a registered dietitian.
- A major in Nutrition 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 community nutrition, counseling healthy individuals, and metabolism.
- A concentration in Food builds upon the core Nutrition 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 Counseling builds upon the core Nutrition curriculum and prepares the graduate by studying the social impact of how psychology impacts our nutritional health.
- A concentration in Sport Fitness builds upon the core Nutrition curriculum and prepares the graduate by studying fitness assessment, exercise physiology, and kinesiology.
- 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 CaliforniaBerkeley, 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

Co-Chairs - Susan DeCristofaro Rogers, M.A. and Kevin Modesto, Ph.D.
Kellye Carroll, A.B.D.
Grand Canyon University
Susan DeCristofaro Rogers, M.A.
Point Loma Nazarene University
Academic Director-Early Childhood Learning Center
James Gates, Ph.D.
University of Florida
Kevin Modesto, Ph.D.
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
To view requirements for majors, minors, and certificates, see the Degree Program Information (p. 244) page.

- Child and Adolescent Development, B.A. (p. 167)
- Dietetics, B.S. (p. 168)
- Nutrition, B.A. (p. 170)
- Social Work, B.A. (p. 171)
- Sociology, B.A. (p. 172)
- Child Development Minor (p. 173)
- Criminal Justice Minor (p. 173)
- Nutrition Minor (p. 174)
- Sociology Minor (p. 174)


## Family and Consumer Sciences

CHD 1020 Child and Adolescent Development (4 Units)
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 Units)
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 Units)
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 infanttoddler 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 Units)
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 Units) 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 Units)
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 Units)
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 Units) 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 4060 Administration and Supervision in Early Childhood

## Education (4 Units)

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 Units)
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 (2-4 Units)

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.
For two (2) units of credit, 80 hours of work experience is required; for four (4) units, 160 hours of work experience is required. May be repeated up to a total of four (4) units. Credit/No Credit.
Prerequisite(s): Senior standing in the Department of Sociology, Social Work, and Family Sciences; CHD 1020 and consent of department chair. "C" Designation is for California Internships. "E" Designation is for Out of State Internships.
CHD 4090 Special Studies in Child Development (1-4 Units)
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 (4) units.
Prerequisite(s): Senior standing in the Department of Sociology, Social Work, and Family Sciences and consent of department chair.

## CHD 4097 Senior Seminar (2 Units)

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.

SWF 3015 Health and Well-Being (FE) (2 Units)
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.

## Nutrition

NUT 1001 Introduction to Nutrition (2 Units)
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 Units)

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 Units)
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 Units)
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 Units)
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 Units)
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(s): BIO 1040 and NUT 3065

## NUT 3030 Community Nutrition (3 Units)

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 Unit)
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
Corequisite(s): NUT 3030 (required)
Concurrent: Must enroll concurrently in NUT 3030.
NUT 3035 Nutrition Research Through the Life Cycle (3 Units)
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 Units)
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 Units)

Theories integrated from physiology, biochemistry and nutrition. An indepth study of nutrients and their role in human metabolism. Current research on human metabolic processes is analyzed.
Laboratory applications.
Prerequisite(s): BIO 1030, CHE 2094, and NUT 2025
NUT 4014 Practices in Nutrition Education and Dietary Counseling (2 Units)
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 Units)
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): BIO 1040 and NUT 3065
Corequisite(s): NUT 4017 (required)
NUT 4017 Medical Nutrition Therapy Practicum (1 Unit)
Case studies, medical chart notation practice, opportunity to interact with dietetic professionals working in clinical fields.
Prerequisite(s): BIO 1040 and NUT 3065
Corequisite(s): NUT 4015 (required)
Concurrent: Must enroll concurrently in NUT 4015.

NUT 4025 Child and Adolescent Nutrition and Health (3 Units)
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): FCS 3005 or NUT 2025
NUT 4035 Food Service Management (2 Units)
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 Units)
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 Units)

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): CHE 2094 and NUT 1010
NUT 4080 Internship in Nutrition (2-4 Units)
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.
For two (2) units of credit, 80 hours of work experience is required; for four (4) units, 160 hours of work experience is required. May be repeated up to a total of four (4) units. Credit/No Credit.
Prerequisite(s): Senior standing in the Department of Sociology, Social
Work, and Family Sciences and consent of department chair.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.

## NUT 4090 Special Studies in Nutrition (1-4 Units)

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 (4) units.
Prerequisite(s): Senior standing in the Department of Sociology, Social
Work, and Family Sciences and consent of department chair.

## NUT 4097 Senior Seminar (2 Units)

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.

## Sociology

SOC 1001 Introduction to Sociology (FE) (3 Units)
An introduction to sociology, basic concepts, theories, development as a discipline, and the tools of social investigation.
SOC 2001 Cultural Anthropology (FE) (3 Units)
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 Units)
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 Unit) 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 student s 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 Units)
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 Units)

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 Units)
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. Concurrent: SOC 1001 or SOC 2001 or consent of instructor.

SOC 3010 Criminology (3 Units)
The study of crime and criminal behavior, the role of law, efforts at prevention and control.
Concurrent: SOC 1001 or SOC 2001 or consent of instructor.

SOC 3014 Juvenile Delinquency (3 Units)
A study of the youthful offender including theories of cause, the role of law and authority, and current trends.
Concurrent: SOC 1001 or SOC 2001 or consent of instructor.

## SOC 3016 Sociology of Aging (3 Units)

Analysis of aging within social contexts: the aging process, death, and dying, and the impact of psychological, economic, physiological, and social factors.
Concurrent: SOC 1001 or SOC 2001 or consent of instructor.

## SOC 3020 Social Psychology (3 Units)

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 Units)
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.
Also offered as PHL 3021.
Prerequisite(s): PHL 2001 or PHL 2011
SOC 3030 The Development of Feminist Thought (WS) (4 Units)
A survey of the development of various strands of feminist thought, and engagement in current conversations within and about feminism.
SOC 3035 Civil Rights Pilgrimage (3 Units)
This course examines the complex social dynamics and historical legacies of the American Civil Rights Movement (1954-1968). Guest speakers provide interdisciplinary perspectives, while students travel to key sites in the American South.
SOC 3050 Urban Sociology (3 Units)
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 instructor.
SOC 3060 Race and Ethnicity (3 Units)
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 Units)

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 Units)

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 Units) 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 instructor.

## SOC 4015 Social Theory (3 Units)

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 instructor.
SOC 4020 Social Change (3 Units)
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 Units)
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 instructor.

## SOC 4035 Environmental Sociology (3 Units)

A study of the relationship between human societies and ecosystems, from how individuals define "nature" and "sustainability" as well as how institutions such as the market and the government work together or against each other that impact communities.

## SOC 4044 Globalization and Culture (3 Units)

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 Units)
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): SOC 1001 or SOC 2001 or SWF 1000 or consent of instructor.

## SOC 4070 Medical Sociology (3 Units)

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 Units)

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.
May be repeated for up to a total of six (6) units of credit. Students may receive credit for a maximum of six (6) units for internship whether SOC 4071 or SOC 4072. Credit/No Credit.
Prerequisite(s): Consent of instructor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.
SOC 4072 Internship in Criminal Justice (2-4 Units)
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.
May be repeated for up to a total of six (6) units of credit. Students may receive credit for a maximum of six (6) units for internship whether SOC 4071 or SOC 4072. Credit/No Credit.
Prerequisite(s): Consent of instructor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.
SOC 4075 Sociology of Education (3 Units)
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 Units)
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 Units)
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 Units)

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 (6) units. Students wishing to earn more than six (6) 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 Units)
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 (6) units.
Prerequisite(s): Consent of instructor.

SWF 1000 Living Justly in Contemporary Society (FE) (3 Units)
This is a Foundational Explorations 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 Units)
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 Units)

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 Units)

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 Units)
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 Units)
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 Units)

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 Units)
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 Units)
Intended for seniors in social work only. The student completes direct practice in an approved field setting, supervised by professional social workers. One (1) unit of credit is given for each 50 hours of approved practice. A minimum total of 200 hours ( 4 units) is required to be completed. Students may take the course for a minimum of two (2) units each semester.
May be repeated up to a total of five (5) units.
Also offered as SWK 4071.
Prerequisite(s): SWK 3070 and SWK 3071 or consent of the Director of Social Work.
SWK 4071 Social Work Practicum (2-5 Units)
Intended for seniors in social work only. The student completes direct practice in an approved field setting, supervised by professional social workers. One (1) unit of credit is given for each 50 hours of approved practice. A minimum total of 200 hours ( 4 units) is required to be completed. Students may take the course for a minimum of two (2) units each semester.
May be repeated up to a total of five (5) units.
Also offered as SWK 4070.
Prerequisite(s): SWK 3070 and SWK 3071 or consent of the Director of Social Work.

## SWK 4072 Seminar in Social Work I (2 Units)

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 Units)
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 Units)

Selected topics of current interest in depth.
May be repeated for up to a total of six (6) units. Students wishing to earn more than six (6) 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 Units)
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 (6) units.
Prerequisite(s): Consent of instructor.

## 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.

| Code | Title | Units |
| :--- | :--- | ---: |
| 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 (FE) | 3 |
| Upper-Division Requirements | 3 |  |
| CHD 3003 | Infant and Toddler Development | 4 |
| CHD 3010 | Early Childhood Education | 2 |
| 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 4070 | Practicum in Child Development | $2-4$ |
| or CHD 4075 | Internship in Child Development | 2 |
| CHD 4097 | Senior Seminar | 3 |
| LIT 3025 | Children's Literature | 3 |
| NUT 4025 | Child and Adolescent Nutrition and Health | 3 |
| PSY 3021 | Abnormal Psychology | 3 |
| SWF 3006 | Research Basics | 2 |
| SWF 3015 | Health and Well-Being (FE) | 6 |
| Choose six (6) | units from the following: |  |
| ART 3019 | Visual Arts in the Classroom I |  |
| CHD 4060 | Administration and Supervision in Early Childhood |  |
| CHD 4075 | Education | Internship in Child Development |
| EDU 3002 | Foundations of Education and Learning Theory |  |
| EDU 3006 | Principles of Language Acquisition |  |
| EDU 4004 | Foundations of Special Education |  |
| KIN 3008 | Methods of Teaching Physical Education |  |
| MUE 3041 | Music Skills for the Elementary Classroom Teacher |  |


| PSY 3008 | Developmental Psychology - Birth Through <br> Adolescence |
| :--- | :--- |
| PSY 3025 | Clinical and Community Interventions |
| SOC 3060 | Race and Ethnicity |
| SWK 3040 | Child Welfare |

Total Units
54-56

## 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) (p. 227)


## Dietetics, B.S.

## Program Learning Outcomes

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

1. Demonstrate how to locate, interpret, evaluate, and use professional literature to make ethical, evidence-based practice decisions.
2. Use current information technologies to locate and apply evidencebased guidelines and protocols.
3. Apply critical thinking skills.
4. Demonstrate effective and professional oral and written communication and documentation.
5. Describe the governance of nutrition and dietetics practice, such as the Scope of Nutrition and Dietetics Practice and the Code of Ethics for the Profession of Nutrition and Dietetics, and describe interprofessional relationships in various practice settings.
6. Assess the impact of a public policy position on nutrition and dietetics practice.
7. Discuss the impact of health care policy and different health care delivery systems on food and nutrition services.
8. Identify and describe the work of interprofessional teams and the roles of others with whom the registered dietitian nutritionist collaborates in the delivery of food and nutrition services.
9. Demonstrate an understanding of cultural competence/sensitivity.
10. Demonstrate identification with the nutrition and dietetics profession through activities such as participation in professional organizations and defending a position on issues impacting the nutrition and dietetics profession.
11. Demonstrate an understanding of the importance and expectations of a professional in mentoring and precepting others.
12. Use the Nutrition Care Process to make decisions, identify nutritionrelated problems, and determine and evaluate nutrition interventions.
13. Develop an educational session or program/educational strategy for a target population.
14. Demonstrate counseling and education methods to facilitate behavior change and enhance wellness for diverse individuals and groups.
15. Explain the processes involved in delivering quality food and nutrition services.
16. Describe basic concepts of nutritional genomics.
17. Apply management theories to the development of programs and services.
18. Evaluate a budget and interpret financial data.
19. Describe the regulation system related to billing and coding, what services are reimbursable by third-party payers, and how reimbursement may be obtained.
20. Apply the principles of human resource management to different situations.
21. Describe safety principles related to food, personnel, and consumers.
22. Analyze data for assessment and evaluate data to be used in decision-making for continuous quality.

| Code | Title U | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| ACC 2000 | Principles of Accounting for Non-Business Majors | 3 |
| BIO 1030 and BIO 1030L | Human Anatomy and Physiology I (FE) and Human Anatomy and Physiology I Laboratory (FE) | 4 |
| BIO 1040 and BIO 1040L | Human Anatomy and Physiology II and Human Anatomy and Physiology II Laboratory | 4 |
| BIO 2010 and BIO 2010L | Cell Biology and Biochemistry (FE) and Cell Biology and Biochemistry Laboratory (FE) | 4 |
| BIO 2020 and BIO 2020L | Microbiology of Infectious Diseases and Microbiology of Infectious Diseases Laboratory | 4 |
| CHE 1052 <br> and CHE 1052L | General Chemistry I (FE) and General Chemistry I Lab (FE) | 5 |
| CHE 1053 and CHE 1053L | General Chemistry II and General Chemistry II Lab | 4 |
| CHE 2094 and CHE 2094L | Organic Chemistry I and Organic Chemistry I Lab | 4 |
| 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 (FE) | 3 |
| SOC 2001 | Cultural Anthropology (FE) | 3 |
| SWF 1000 | Living Justly in Contemporary Society (FE) | 3 |


| Upper-Division Requirements |  |  |
| :--- | :--- | :--- |
| 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 | 3 |
| NUT 3065 | Advanced Nutrition | 3 |
| NUT 4014 | Practices in Nutrition Education and Dietary | 2 |
|  | Counseling | 3 |
| NUT 4015 | Medical Nutrition Therapy | 1 |
| NUT 4017 | Medical Nutrition Therapy Practicum | 2 |
| NUT 4035 | Food Service Management | 3 |
| NUT 4055 | Food Science | 2 |
| NUT 4097 | Senior Seminar | 3 |

SWF 3015
Health and Well-Being (FE)
Total Units

## Recommended:

| Code | Title | Units |
| :--- | :--- | ---: |
| NUT 3040 | Nutrition in Women's Wellbeing | 2 |
| MKT 3032 | Principles of Marketing | 3 |
| KIN 3040 | Physiology of Exercise | 3 |

## Additional Information

The major in Dietetics requires 130 units to graduate, two (2) 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
Phone: 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 Foundational Explorations 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:

1. 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).
2. English proficiency: A 550 paper based TOEFL or 216 computer based TOEFL.
3. 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.)
4. Acceptance to PLNU
5. 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 where 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:

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.

## Concentrations

Choose one required concentration from:

- Counseling (p. )
- Food (p. )
- Sports and Fitness (p. )


## Counseling Concentration

| Code | Title U | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| BIO 1030 and BIO 1030L | Human Anatomy and Physiology I (FE) and Human Anatomy and Physiology I Laboratory (FE) | 4 |
| BIO 1040 and BIO 1040L | Human Anatomy and Physiology II and Human Anatomy and Physiology II Laboratory | y 4 |
| BIO 2010 and BIO 2010L | Cell Biology and Biochemistry (FE) and Cell Biology and Biochemistry Laboratory (FE) | ) 4 |
| CHE 1003 and CHE 1003L | Introduction to General, Organic, and Biological Chemistry (FE) <br> and Introduction to General, Organic, and Biological Chemistry Lab (FE) | 5 |
| NUT 1010 | Fundamentals of Food | 2 |
| NUT 2025 | Fundamentals of Nutrition | 3 |
| PHL 2011 | Ethics (FE) | 3 |
| SWF 1000 | Living Justly in Contemporary Society (FE) | 3 |
| Upper-Division Requirements |  |  |
| NUT 3030 | Community Nutrition | 3 |
| NUT 3031 | Community Nutrition Practicum | 1 |
| NUT 3035 | Nutrition Research Through the Life Cycle | 3 |
| NUT 3065 | Advanced Nutrition | 3 |
| NUT 4014 | Practices in Nutrition Education and Dietary Counseling | 2 |
| NUT 4080 | Internship in Nutrition | 2-4 |
| NUT 4097 | Senior Seminar | 2 |
| SWF 3006 | Research Basics | 3 |
| SWF 3015 | Health and Well-Being (FE) | 2 |
| Concentration Courses |  |  |
| 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 Units |  | 63-67 |


| Recommended Courses for Counseling Concentration: |  |  |
| :--- | :--- | ---: |
| Code | Title | Units |
| NUT 3040 | Nutrition in Women's Wellbeing | 2 |
| NUT 4090 | Special Studies in Nutrition | $1-4$ |
| PSY 3045 | Group Dynamics | 3 |

## Food Concentration

| Code | Title U | nits |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| BIO 1030 and BIO 1030L | Human Anatomy and Physiology I (FE) and Human Anatomy and Physiology I Laboratory (FE) | 4 |
| BIO 1040 and BIO 1040L | Human Anatomy and Physiology II and Human Anatomy and Physiology II Laboratory | 4 $y$ |
| BIO 2010 and BIO 2010L | Cell Biology and Biochemistry (FE) and Cell Biology and Biochemistry Laboratory (FE) | ) 4 |
| CHE 1003 and CHE 1003L | Introduction to General, Organic, and Biological Chemistry (FE) and Introduction to General, Organic, and Biological Chemistry Lab (FE) | 5 |
| NUT 1010 | Fundamentals of Food | 2 |
| NUT 2025 | Fundamentals of Nutrition | 3 |
| PHL 2011 | Ethics (FE) | 3 |
| SWF 1000 | Living Justly in Contemporary Society (FE) | 3 |
| Upper-Division Requirements |  |  |
| NUT 3030 | Community Nutrition | 3 |
| NUT 3031 | Community Nutrition Practicum | 1 |
| NUT 3035 | Nutrition Research Through the Life Cycle | 3 |
| NUT 3065 | Advanced Nutrition | 3 |
| NUT 4014 | Practices in Nutrition Education and Dietary Counseling | 2 |
| NUT 4080 | Internship in Nutrition | 2-4 |
| NUT 4097 | Senior Seminar | 2 |
| SWF 3006 | Research Basics | 3 |
| SWF 3015 | Health and Well-Being (FE) | 2 |
| Concentration Courses |  |  |
| 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 Units |  | 62-64 |

Recommended Courses for Food Concentration:

| Code | Title | Units |
| :--- | :--- | ---: |
| NUT 3040 | Nutrition in Women's Wellbeing | 2 |
| NUT 4090 | Special Studies in Nutrition | $1-4$ |
| PSY 3025 | Clinical and Community Interventions | 4 |
| PSY 3045 | Group Dynamics | 3 |

Sports and Fitness Concentration

| Code | Title U | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| BIO 1030 and BIO 1030L | Human Anatomy and Physiology I (FE) and Human Anatomy and Physiology I Laboratory (FE) | y 4 |
| BIO 1040 and BIO 1040L | Human Anatomy and Physiology II and Human Anatomy and Physiology II Laboratory | 4 |
| BIO 2010 and BIO 2010L | Cell Biology and Biochemistry (FE) and Cell Biology and Biochemistry Laboratory (FE) | E) 4 |
| CHE 1003 and CHE 1003L | Introduction to General, Organic, and Biological Chemistry (FE) and Introduction to General, Organic, and Biological Chemistry Lab (FE) | 5 |
| NUT 1010 | Fundamentals of Food | 2 |
| NUT 2025 | Fundamentals of Nutrition | 3 |
| PHL 2011 | Ethics (FE) | 3 |
| SWF 1000 | Living Justly in Contemporary Society (FE) | 3 |
| Upper-Division Requirements |  |  |
| NUT 3030 | Community Nutrition | 3 |
| NUT 3031 | Community Nutrition Practicum | 1 |
| NUT 3035 | Nutrition Research Through the Life Cycle | 3 |
| NUT 3065 | Advanced Nutrition | 3 |
| NUT 4014 | Practices in Nutrition Education and Dietary Counseling | 2 |
| NUT 4080 | Internship in Nutrition | 2-4 |
| NUT 4097 | Senior Seminar | 2 |
| SWF 3006 | Research Basics | 3 |
| SWF 3015 | Health and Well-Being (FE) | 2 |
| Concentration Courses |  |  |
| Lower-Division Requirements: |  |  |
| KIN 2001 | Fundamentals of Fitness Assessment and Development | 2 |
| Upper-Division Requirements |  |  |
| KIN 3030 | Nutrition for Exercise and Sport Performance | 3 |
| KIN 3001 and KIN 3001L | Fitness Assessment and Exercise Prescription and Fitness Assessment and Exercise Prescription Lab | n 4 |
| KIN 3040 and KIN 3040L | Physiology of Exercise and Physiology of Exercise Lab | 4 |
| PSY 3021 | Abnormal Psychology | 3 |
| Total Units |  | 65-67 |

Recommended Courses for Sports and Fitness Concentration:

| Code | Title | Units |
| :--- | :--- | ---: |
| NUT 3040 | Nutrition in Women's Wellbeing | 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:

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.

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| BIO 1001 <br> and BIO 1001L | Human Biology and Bioethics (FE) and Human Biology and Bioethics Laboratory (FE) | ) 4 |
| PSY 1003 | General Psychology (FE) | 3 |
| SOC 2050 | Sociology of the Family | 3 |
| SWF 1000 | Living Justly in Contemporary Society (FE) | 3 |
| Choose one (1) course from the following: |  | 3 |
| ECO 1000 | Survey of Economics (FE) |  |
| ECO 1001 | Principles of Macroeconomics (FE) |  |
| ECO 1002 | Principles of Microeconomics (FE) |  |
| Upper-Division Requirements |  |  |
| SWF 3006 | Research Basics | 3 |
| SWF 3015 | Health and Well-Being (FE) | 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 |  |
| 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 Units |  | 50-56 |

## Recommended Electives:

| Code | Title | Units |
| :--- | :--- | ---: |
| SOC 3005 | Social Stratification | 3 |
| SOC 3030 | The Development of Feminist Thought | 4 |
| CHD 1050 | Human Development | 3 |


| PSY 3021 | Abnormal Psychology | 3 |
| :--- | :--- | :--- |
| PSY 3000 | Personality and Adult Development | 4 |

Note(s): Accepting Associate Degree for Transfer (ADT) (p. 227)

## Sociology, B.A.

## 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.

## Concentrations

- General Sociology (p. 172)
- Criminal Justice (p. 173)


## General Sociology Concentration

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Core Requirements |  |  |
| SWF 1000 | Living Justly in Contemporary Society (FE) | 3 |
| SOC 1001 | Introduction to Sociology (FE) | 3 |
| Upper-Division Core Requirements |  |  |
| SWF 3006 | Research Basics | 3 |
| SWF 3015 | Health and Well-Being (FE) | 2 |
| SOC 4015 | Social Theory | 3 |
| SOC 4060 | Applied Research Methods and Design | 3 |
| SOC 4076 | Senior Seminar in Sociology | 3 |
| Concentration Courses |  |  |
| SOC 4044 | Globalization and Culture | 3 |
| SOC 4071 | Internship in Sociology (4 units required) | 4 |
| Diversity: |  |  |
| $\begin{aligned} & \text { SOC } 3005 \\ & \text { or SOC } 3060 \end{aligned}$ | Social Stratification Race and Ethnicity | 3 |
| Institutions: |  |  |
| Choose one (1) course from the following: |  | 3 |
| SOC 2050 | Sociology of the Family |  |
| SOC 4030 | Sociology of Religion |  |
| SOC 4075 | Sociology of Education |  |
| Choose 12 units | from the following: | 12 |


| SOC 3010 | Criminology |
| :--- | :--- |
| SOC 3014 | Juvenile Delinquency |
| SOC 3016 | Sociology of Aging |
| SOC 3020 | Social Psychology |
| SOC 3021 | Justice, Politics, and the Social World |
| SOC 3030 | The Development of Feminist Thought |
| SOC 3050 | Urban Sociology |
| SOC 3060 | Race and Ethnicity |
| SOC 4020 | Social Change |
| SOC 4030 | Sociology of Religion |
| SOC 4035 | Environmental Sociology |
| SOC 4070 | Medical Sociology |
| SOC 4075 | Sociology of Education |
| SOC 4090 | Special Topics in Sociology |
| SOC 4091 | Independent Studies in Sociology |
| Total Units |  |

## Criminal Justice Concentration

Code Title Units
Lower-Division Core Requirements
SWF $1000 \quad$ Living Justly in Contemporary Society (FE)
SOC 1001 Introduction to Sociology (FE) 3

| Upper-Division Core Requirements |  |  |
| :--- | :--- | :--- |
| SWF 3006 | Research Basics | 3 |
| SWF 3015 | Health and Well-Being (FE) | 2 |
| SOC 4015 | Social Theory | 3 |
| SOC 4060 | Applied Research Methods and Design | 3 |
| SOC 4076 | Senior Seminar in Sociology | 3 |

## Concentration Courses

Lower-Division Requirements:

| SOC 2009 | Introduction to Criminal Justice | 3 |
| :--- | :--- | ---: |
| POL 1065 | U.S. Democracy (FE) | 4 |
| 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 (4 units required) | 4 |
| SOC 4080 | Restorative Justice | 3 |
| PSY 3021 | Abnormal Psychology | 3 |
| Total Units |  | 49 |

Note(s): Accepting Associate Degree for Transfer (ADT) (p. 227)

## 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.

| Code | Title | Units |
| :--- | :--- | ---: |
| Required Courses |  | 4 |
| CHD 1020 | Child and Adolescent Development | 4 |
| CHD 3010 | Early Childhood Education | 3 |
| CHD 3055 | Development of Special Needs Children |  |
| CHD 3085 | Parent Education and Family Development | 2 |
| CHD 4020 | Child Development in the Family and Community | 4 |
| Choose one (1) course from the following: | $2-4$ |  |


| CHD 3003 | Infant and Toddler Development |
| :--- | :--- |
| CHD 3013 | Adolescent Development in the Family Context |
| CHD 4060 | Administration and Supervision in Early Childhood <br> Education |
| SWF 3015 | Health and Well-Being (FE) |

Total Units 19-21
${ }^{1}$ 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.

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| SOC 1001 | Introduction to Sociology (FE) | 3 |
| SOC 2009 | Introduction to Criminal Justice | 3 |
| Upper-Division Requirements |  |  |
| $\begin{aligned} & \text { SOC } 3010 \\ & \text { or SOC } 3014 \end{aligned}$ | Criminology Juvenile Delinquency | 3 |
| SOC 3060 | Race and Ethnicity | 3 |
| $\begin{aligned} & \text { SOC } 4009 \\ & \quad \text { or SOC } 4010 \end{aligned}$ | Criminal Law <br> Constitutional Foundations of Criminal Justice | 3 |
| Choose one (1) course from the following: |  |  |
| SOC 3005 | Social Stratification |  |
| SOC 3020 | Social Psychology |  |
| SOC 3050 | Urban Sociology |  |
| SOC 4072 | Internship in Criminal Justice (4 Units required) |  |
| PSY 3021 | Abnormal Psychology |  |
| Total Units |  | 15 |

## 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.

| Code | Title | Units |
| :--- | :--- | ---: |
| Lower-Division Requirements |  |  |
| NUT 1010 | Fundamentals of Food | 2 |
| CHD 1050 | Human Development | 3 |
| NUT 2025 | Fundamentals of Nutrition | 3 |
| 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 | 2 |
| Choose one (1) course from the following: | $2-3$ |  |
| SWF 3015 | Health and Well-Being (FE) |  |
| NUT 4014 | Practices in Nutrition Education and Dietary |  |
| NUT 4025 | Child and Adolescent Nutrition and Health |  |

Total 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.

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| SOC 1001 | Introduction to Sociology (FE) | 3 |
| Upper-Division Requirements |  |  |
| SOC 4015 | Social Theory | 3 |
| Choose one (1) | urse from the following: ${ }^{1}$ | 3 |
| SOC 4060 | Applied Research Methods and Design |  |
| SWF 3006 | Research Basics |  |
| Choose at lea | (9) units from the following: | 9 |
| SOC 3003 | Urban Issues |  |
| SOC 3005 | Social Stratification |  |
| or SOC 3014 Juvenile Delinquency |  |  |
| SOC 3016 | Sociology of Aging |  |
| SOC 3020 | Social Psychology |  |
| SOC 3030 | The Development of Feminist Thought |  |
| SOC 3050 | Urban Sociology |  |
| SOC 3060 | Race and Ethnicity |  |
| SOC 4020 | Social Change |  |
| SOC 4030 | Sociology of Religion |  |
| SOC 4044 | Globalization and Culture |  |
| SOC 4070 | Medical Sociology |  |
| SOC 4075 | Sociology of Education |  |

SOC $4090 \quad$ Special Topics in Sociology ${ }^{2}$

Total Units

1 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.
2 No more than three (3) units of SOC 4090 may count toward the 12 units of upper-division course work required for the minor.

## Recommended

| Code | Title | Units |
| :--- | :--- | ---: |
| SOC 2001 | Cultural Anthropology (FE) | 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 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, Deloitte, 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 at 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 (p. 181)
- Business Administration, B.A. (p. 181)
- Finance, B.S. Business Administration (p. 182)
- Information Systems (Fermanian School of Business), B.S. (p. 182)
- International Development, B.S. Business Administration (p. 183)
- Management, B.S. Business Administration (p. 184)
- Marketing, B.S. Business Administration (p. 185)


## Faculty

Dean - Daniel Bothe, D.B.A

Daniel Bothe, D.B.A
Anderson University
Matt Boyne, Ed.D.
Pepperdine University
Stephen Christie, Ph.D.
Claremont Graduate University

Steven Cosentino, CPA, M.B.A
San Diego State University
Julia Dare, Ph.D
University of Southern California

Robert Gailey, Ph.D
University of San Diego

Carl Hammond III, CPA, M.B.A
San Diego State University
Carsten Hennings, D.B.A
Anderson University

Kimberly Hogelucht, Ph.D.
University of San Diego

Liz Holbrook, CPA, M.S.A
Liberty University

JC Hurtado-Prater, M.B.A.
Saint Joseph's College of Maine

Christina Kalberg, M.B.A
Point Loma Nazarene University
Frank Marshall, D.B.A
George Fox University
Mary Beth McCabe, D.B.A.
Alliant International University

Jamie Mcllwaine, D.B.A.
Nova Southeastern University

Mandy Morrell, D.B.A. Anderson University

Christopher Paik, Ph.D University of Miami

Randal Schober, Ed.D.
West Virginia University
Randy Waynick, Ph.D
Capella University

Michael Wiese, Ph.D
Loyola University of Chicago

Nick Wolf, M.B.A.
Point Loma Nazarene University

## 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

## 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.

To view requirements for majors, minors, and certificates, see the Degree Program Information (p. 244) page.

- Traditional Undergraduate Business (p. 180)
- Accounting, B.S. Business Administration (p. 181)
- Business Administration, B.A. (p. 181)
- Finance, B.S. Business Administration (p. 182)
- Information Systems (Fermanian School of Business), B.S. (p. 182)
- International Development, B.S. Business Administration (p. 183)
- Management, B.S. Business Administration (p. 184)
- Marketing, B.S. Business Administration (p. 185)
- Accounting Minor (p. 185)
- Business Administration Minor (p. 185)
- Computer Technology - Business Minor (Business Majors) (p. 186)
- Computer Technology - Marketing Minor (Business Majors) (p. 186)
- Economics Minor (p. 186)
- Finance Minor (p. 186)
- International Development Minor (p. 186)
- Marketing Minor (p. 187)
- Nonprofit Organization Management Minor (p. 187)
- Public Relations Minor (p. 187)
- Science-Business Minor (Business Majors) (p. 188)
- Science-Marketing Minor (Business Majors) (p. 189)
- Business Certificate (p. 190)


## Accounting

ACC 2000 Principles of Accounting for Non-Business Majors (3 Units) 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 Units)
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(s): BUS 1000
Recommended: Recommended for sophomores.
ACC 2002 Principles of Managerial Accounting (3 Units)
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(s): MTH 1053 or MTH 1073, or consent of instructor for non-majors.
Recommended: Recommended for sophomores.

## ACC 3050 Ethics in Accounting (3 Units)

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 Units)
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 Units)
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 Units)

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 decisionmaking. 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 Units)

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 Units)
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 Units)

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 Units)
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.
Also offered as FIN 4025.
Prerequisite(s): FIN 3035 and Senior standing only.
ACC 4060 Auditing (3 Units)
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; Senior standing only. Pre or Corequisite(s): ACC 4021 or consent of instructor.

## ACC 4089 Internship in Accounting (1-3 Units)

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.
May be repeated for a maximum of six (6) units. Credit/No Credit.
Prerequisite(s): BUS 3013, Junior or Senior Standing, and consent of instructor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.

ACC 4090 Special Topics in Accounting (3 Units)
Study in a special topic to be determined by the school.
May be repeated for a maximum of six (6) units.
Prerequisite(s): Consent of instructor.
Open to juniors and seniors only.

## ACC 4091 Independent Studies in Accounting (1-3 Units)

An intensive study of a selected topic under the direction of an instructor. May be repeated for a maximum of six (6) units.
Prerequisite(s): Consent of 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.

## Business

BUS 1000 Introduction to Business and Systems (3 Units)
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.
Prerequisite(s): Restricted to Freshmen and Sophomores or consent of instructor.
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 upperdivision ACC/BUS/ECO/FIN/MGT/MKT in lieu of the BUS 1000 course requirement, excluding courses numbered 4089 and 4091.

## BUS 2001 Legal Environment of Business (3 Units)

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 Business Communications (3 Units)
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 Units)

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 Units)

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 Units)

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 Units)

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.
May be repeated for a maximum of six (6) units. Credit/No Credit. Prerequisite(s): BUS 3013, Junior or Senior standing, and consent of instructor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.
BUS 4090 Special Topics in Business Administration (3 Units)
Study in a special topic to be determined by the school.
May be repeated for a maximum of six (6) units.
Prerequisite(s): Junior or Senior standing and consent of instructor.

BUS 4091 Independent Studies in Business Administration (1-3 Units) 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 (6) units.
Prerequisite(s): Consent of instructor.

## Economics

## ECO 1000 Survey of Economics (FE) (3 Units)

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 (FE) (3 Units)
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 (FE) (3 Units)
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 Units)

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 3080 Money and Banking (3 Units)

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 4040 The Economics of Race, Class, and Gender (WS) (3 Units) 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 4070 Contemporary Development Planning (3 Units)

This course explores the role of development planning in a Global South context. Topics include consideration of historic approaches to development planning, the United Nations' Sustainable Development Goals, current market-driven, innovative approaches to alleviate poverty, and ways businesses and nonprofits can support the involvement and voices of people at the localized, grass-roots level for planning purposes. The effectiveness of different strategies and approaches to development planning policies and programs are also explored.
Prerequisite(s): ECO 1001 and ECO 1002
ECO 4090 Special Studies in Economics (3 Units)
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 (6) units.
Prerequisite(s): Consent of instructor.
ECO 4091 Independent Studies in Economics (3 Units)
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 (6) units.
Prerequisite(s): Consent of instructor.

## Finance

FIN 3035 Business Finance (3 Units)
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 Units)
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 Units)

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 Units)

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.
Also offered as ACC 4025.
Prerequisite(s): FIN 3035 and Senior standing only.
FIN 4035 International Finance (3 Units)
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 Units)
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 (6) units
Prerequisite(s): Consent of instructor

## FIN 4091 Independent Studies In Finance (1-3 Units)

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 (6) units
Prerequisite(s): Consent of instructor

## Management

## MGT 2012 Principles of Management (3 Units)

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, decisionmaking, human resources and leadership.
Prerequisite(s): BUS 1000
MGT 3020 Organizational Behavior (3 Units)
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 Units)
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 a total of six (6) units.
Enrollment by application. Sophomore, Junior, or Senior standing only.

## MGT 3061 Sourcing Management (3 Units)

This course provides an understanding of the critical role that procurement and planning play in an organization's supply chain Students will explore the role of purchasing, order management, metrics, performance, contracts, the intelligent supply chain, and ethical/ sustainable sourcing. The overall impact of human capital and strategy in a supply chain will also be addressed.
Prerequisite(s): MGT 2012

## MGT 3062 Logistics Management (3 Units)

This course provides an understanding of the fundamentals of logistics in a supply chain. Students will learn about the full logistics life cycle including how transportation and warehousing contribute to organizational success. Students will also explore the role of distribution, quality control, material flow, IT systems, packaging and sustainability within a supply chain strategy.
Prerequisite(s): MGT 3061 or consent of instructor.
MGT 3074 Human Resource Management (3 Units)
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 Units)

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 Units)

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 Units)
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(s): MGT 3020

## MGT 4070 Nonprofit Organization Management (3 Units)

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 and Senior standing only.

## MGT 4084 Operations Management (3 Units)

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 and Senior standing only.
Pre or Corequisite(s): MGT 3020 and MGT 3074

## MGT 4088 Strategic Management (3 Units)

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(s): FIN 3035, MGT 4088L, and Senior standing.
MGT 4088L Strategic Management Lab (0 Units)
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(s): MGT 4088
MGT 4090 Special Topics in Management (3 Units)
Study in a special topic to be determined by the school. Open to juniors and seniors only.
May be repeated for up to a total of six (6) units.
Prerequisite(s): Consent of instructor.
MGT 4091 Independent Studies in Management (1-3 Units)
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 up to a total of six (6) units.
Prerequisite(s): Consent of instructor.

## Marketing

MKT 3032 Principles of Marketing (3 Units)
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 Units) 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 Communication (3 Units) 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 Units)

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 Units)

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 Units)

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 Units)
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 Units)
Study in a special topic to be determined by the school. Open to juniors and seniors only.
May be repeated for up to a total of six (6) units.
Prerequisite(s): Consent of instructor.
MKT 4091 Independent Studies in Marketing (1-3 Units)
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 up to a total of six (6) units.
Prerequisite(s): Consent of instructor.

## Traditional Undergraduate Business

## 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.

| Code | Title | Units |
| :---: | :---: | :---: |
| 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 (FE) | 3 |
| ECO 1002 | Principles of Microeconomics (FE) | 3 |
| MGT 2012 | Principles of Management | 3 |
| MTH 1053 | Mathematical Analysis for Business and Economics ${ }^{1}$ | 3 |
| or MTH 1073 | Business Calculus (FE) |  |
| MTH 2003 | Introduction to Statistics | 3 |
| 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 | Business Communications | 3 |
| BUS 4080 | International Business | 3 |
| BUS 4089 | Internship in Business (3 units required) ${ }^{2}$ | 3 |
| FIN 3035 | Business Finance | 3 |
| MGT 4088 and MGT 4088L | Strategic Management and Strategic Management Lab | 3 |
| MKT 3032 | Principles of Marketing | 3 |
| Total Units |  | 70 |

[^3]
## Recommended:

| Code | Title | Units |
| :--- | :--- | ---: |
| Cross-Cultural |  |  |
| ACP 3050 | Ethics in Accounting | 3 |
| MTH 1073 | Business Calculus (FE) | 3 |
| PHL 2011 | Ethics (FE) | 3 |

## 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.

| Code | Title | Units |
| :---: | :---: | :---: |
| 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 (FE) | 3 |
| ECO 1002 | Principles of Microeconomics (FE) | 3 |
| MTH 1053 | Mathematical Analysis for Business and Economics ${ }^{1}$ | 3 |
| or MTH 1073 | Business Calculus (FE) |  |
| MTH 2003 | Introduction to Statistics | 3 |
| MGT 2012 | Principles of Management | 3 |
| Upper-Division Requirements |  |  |
| BUS 3013 | Business Communications | 3 |
| BUS 4080 | International Business | 3 |
| BUS 4089 | Internship in Business (3 units required) | 3 |
| FIN 3035 | Business Finance | 3 |
| MKT 3032 | Principles of Marketing | 3 |
| MGT 4088 and MGT 4088L | Strategic Management and Strategic Management Lab | 3 |
| Upper-Division Electives |  |  |
| Choose six (6) un | its of upper-division electives ${ }^{2}$ | 6 |
| Total Units |  | 52 |
| ${ }^{1}$ MTH 1073 fulfills the Foundational Explorations Problem Solving Requirement, but MTH 1053 does not. |  |  |
| 2 Choose from Accounting, Business, Economics, Finance, Management, or Marketing (ACC/BUS/ECO/FIN/MGT/MKT 3000-4090) courses not included in the upper-division requirements. |  |  |

## Recommended:

| Code | Title | Units |
| :--- | ---: | ---: |
| Cross-Cultural | Experience |  |
| PHL 2011 | Ethics (FE) | 3 |

## 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.

| Code | Title | Units |
| :--- | :--- | :--- |
| 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 (FE) | 3 |
| ECO 1002 | Principles of Microeconomics (FE) | 3 |
| MGT 2012 | Principles of Management | 3 |
| MTH 1053 | Mathematical Analysis for Business and | 3 |
|  | Economics ${ }^{1}$ |  |

$\begin{array}{clc}\text { or MTH } 1073 & \text { Business Calculus (FE) } & \\ \text { MTH 2003 } & \text { Introduction to Statistics } & 3\end{array}$

| Upper-Division Requirements |  |  |
| :--- | :--- | :--- |
| BUS 3013 | Business Communications | 3 |
| BUS 4080 | International Business | 3 |
| BUS 4089 | Internship in Business (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 |
| and MGT 4088L | and Strategic Management Lab | 3 |
| MKT 3032 | Principles of Marketing | 3 |

Elective Courses
ACC 3070 Intermediate Accounting I 3

| or ACC 3075 | Managerial Cost Accounting |  |
| :---: | :--- | :---: |
| BUS 3040 | Real Estate Principles and Practices | 3 |
| or ECO 3080 | Money and Banking |  |

Total Units
64
${ }^{1}$ MTH 1073 recommended and fulfills the Foundational Explorations Problem Solving Requirement, but MTH 1053 does not.

## Recommended:

| Code | Title | Units |
| :--- | ---: | ---: |
| Cross-Cultural | Experience |  |
| PHL 2011 | Ethics (FE) | 3 |

## Information Systems (Fermanian School of Business), B.S.

## Program Learning Outcomes

## Students who complete the program in Information Systems 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.
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 values.
5. Collaborate effectively in teams.
6. Write correct and robust software.
7. Analyze the interaction between hardware and software.
8. Apply 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.

| Code | Title | Units |
| :---: | :---: | :---: |
| 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 |
| $\begin{aligned} & \text { CSC } 1043 \\ & \text { and CSC 1043L } \end{aligned}$ | Introduction to Computer Programming and Introduction to Computer Programming Lab | 3 |
| $\begin{aligned} & \text { CSC } 1054 \\ & \text { and CSC 1054L } \end{aligned}$ | Objects and Elementary Data Structures and Objects and Elementary Data Structures Lab | 4 |
| $\begin{aligned} & \text { CSC } 2052 \\ & \text { and CSC 2052L } \end{aligned}$ | Data Structures in C++ and Data Structures in C++ Lab | 2 |
| ECO 1002 | Principles of Microeconomics (FE) ${ }^{1}$ | 3 |
| MGT 2012 | Principles of Management | 3 |
| MTH 1073 | Business Calculus (FE) ${ }^{2}$ | 3 |
| MTH 2003 | Introduction to Statistics | 3 |


| Upper-Division Requirements |  |  |
| :--- | :--- | ---: |
| BUS 3013 | Business Communications | 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 |
| and MGT 4088L | and Strategic Management Lab | 3 |
| MKT 3032 | Principles of Marketing | 68 |

1 ECO 1001 and ECO 1002 may substitute for ECO 1000.
${ }^{2}$ MTH 1044 or MTH 1064 may substitute for MTH 1073.

## Recommended:

| Code | Title | Units |
| :--- | :---: | ---: |
| Cross-Cultural Experience |  |  |
| PHL 2011 | Ethics (FE) | 3 |

## 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.

| Code | Title | Units |
| :--- | :--- | ---: |
| 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 (FE) | 3 |


| ECO 1002 | Principles of Microeconomics (FE) | 3 |
| :---: | :---: | :---: |
| MGT 2012 | Principles of Management | 3 |
| MTH 1053 | Mathematical Analysis for Business and Economics ${ }^{1}$ | 3 |
| or MTH 1073 | Business Calculus (FE) |  |
| MTH 2003 | Introduction to Statistics | 3 |
| Upper-Division Requirements |  |  |
| BUS 3013 | Business Communications | 3 |
| BUS 4075 | Sustainability in Action | 3 |
| BUS 4080 | International Business | 3 |
| BUS 4089 | Internship in Business (3 units required) | 3 |
| ECO 3015 | Theories of Economic Development | 3 |
| ECO 4070 | Contemporary Development Planning | 3 |
| FIN 3035 | Business Finance | 3 |
| MGT 4070 | Nonprofit Organization Management | 3 |
| MGT 4088 and MGT 4088L | Strategic Management and Strategic Management Lab | 3 |
| MKT 3032 | Principles of Marketing | 3 |
| Choose two (2) cour | urses from the following: | 6 |
| ECO 4040 | The Economics of Race, Class, and Gender ${ }^{2}$ |  |
| ECO 4090 | Special Studies in Economics ${ }^{2}$ |  |
| FIN 4035 | International Finance ${ }^{2}$ |  |
| MGT 3081 | Creativity and Innovation ${ }^{3}$ |  |
| MGT 3082 | Applied Entrepreneurship ${ }^{3}$ |  |
| FRE 2050 and FRE 2051 | Intermediate French I and Intermediate French II ${ }^{4}$ |  |
| GER 2050 and GER 2051 | Intermediate German I and Intermediate German II ${ }^{4}$ |  |
| SPA 2050 and SPA 2051 | Intermediate Spanish Conversation I and Intermediate Spanish Conversation II ${ }^{4}$ |  |
| SOC 3060 | Race and Ethnicity ${ }^{5}$ |  |
| SOC 4044 | Globalization and Culture ${ }^{5}$ |  |
| MGT 3061 | Sourcing Management ${ }^{6}$ |  |
| MGT 3062 | Logistics Management ${ }^{6}$ |  |
| Required Off-Campus Program |  |  |
| Study Abroad or Internship ${ }^{7}$ |  |  |
| Comparative Analysis Paper ${ }^{8}$ |  |  |

## Total Units

${ }^{1}$ MTH 1073 fulfills the Foundational Explorations Problem Solving Requirement, but MTH 1053 does not.
${ }^{2}$ Recommended for students interested in studying graduate level Economics and/or Finance or pursuing careers involving the application of Economics in an International Development context.
3 Recommended for students interested in pursuing careers involving the application of Entrepreneurship or Social Entrepreneurship in an International Development context.
4 Recommended for students interested in careers of appropriate regional studies in a developing country where applicable language skills are required.
${ }^{5}$ Recommended for students interested in sociological perspective of the field of International Development.
6 Recommended for students interested in pursuing careers involving the application of Supply Chain in an International Development Context.

7 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.
8 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.

## Recommended:

## Code Title

Units
PHL 2011 Ethics (FE)

## Management, B.S. Business Administration

This major is diversified with the required choice of a concentration in Entrepreneurship or Supply Chain 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 Supply Chain will be able to:

1. Analyze the essential elements of a supply chain.

## Concentrations

- Entrepreneurship (p. 184)
- Supply Chain (p. 184)

| Entrepreneurship Concentration  <br> Code Title | Units |  |
| :--- | :--- | :---: |
| 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 (FE) | 3 |
| ECO 1002 | Principles of Microeconomics (FE) | 3 |
| MGT 2012 | Principles of Management | 3 |


| MTH 1053 | Mathematical Analysis for Business and Economics ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| or MTH 1073 | Business Calculus (FE) |  |
| MTH 2003 | Introduction to Statistics | 3 |
| Upper-Division Requirements |  |  |
| BUS 3013 | Business Communications | 3 |
| BUS 4080 | International Business | 3 |
| BUS 4089 | Internship in Business (3 units required) | 3 |
| FIN 3035 | Business Finance | 3 |
| MGT 3020 | Organizational Behavior | 3 |
| MGT 3074 | Human Resource Management | 3 |
| MGT 4012 | Leadership Theory and Practice | 3 |
| MGT 4084 | Operations Management | 3 |
| MGT 4088 and MGT 4088L | Strategic Management and Strategic Management Lab | 3 |
| MKT 3032 | Principles of Marketing | 3 |
| Concentration Courses |  |  |
| MGT 3081 | Creativity and Innovation |  |
| MGT 3082 | Applied Entrepreneurship |  |
| Total Units |  | 58 |
| ${ }^{1}$ MTH 1073 fulfil Requirement, b | s the Foundational Explorations Problem ut MTH 1053 does not. |  |

## Supply Chain Concentration

Code Title Units

| 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 (FE) | 3 |
| ECO 1002 | Principles of Microeconomics (FE) | 3 |
| MGT 2012 | Principles of Management | 3 |
| MTH 1053 | Mathematical Analysis for Business and | 3 |
| or MTH 1073 | Economics 1 | Business Calculus (FE) |
| MTH 2003 | Introduction to Statistics | 3 |


| Upper-Division Requirements |  |
| :--- | :--- |
| BUS 3013 | Business Communications |

BUS 4080 International Business 3
BUS 4089 Internship in Business (3 units required) 3
FIN 3035 Business Finance 3
MGT 3020 Organizational Behavior 3
MGT 3074 Human Resource Management 3
MGT 4012 Leadership Theory and Practice 3
MGT 4088 Strategic Management 3
and MGT 4088L and Strategic Management Lab

| and MGT 4088L | and Strategic Management Lab | 3 |
| :--- | :--- | :--- |

MGT 3061 Sourcing Management

[^4]MTH 1073 fulfills the Foundational Explorations Problem Solving Requirement, but MTH 1053 does not.3333

MGT 4084 Operations Management 3MGT $4088 \quad 3$

## Concentration Courses

Total Units
${ }^{1}$ MTH 1073 fulfills the Foundational Exploration Problem Solving requirement, but MTH 1053 does not.

## Recommended:

## Code Title Units

PHL 2011 Ethics (FE)

## 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.

| Code | Title | Units |
| :--- | :--- | :--- |
| 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 (FE) | 3 |
| ECO 1002 | Principles of Microeconomics (FE) | 3 |
| MGT 2012 | Principles of Management | 3 |
| MTH 1053 | Mathematical Analysis for Business and | 3 |
| or MTH 1073 | Economics ${ }^{\text {1 }}$ | Business Calculus (FE) |
| MTH 2003 | Introduction to Statistics |  |
| Upper-Division | Requirements | 3 |
| BUS 3013 | Business Communications | 3 |
| BUS 4080 | International Business | 3 |
| BUS 4089 | Internship in Business (3 units required) | 3 |
| 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 Communication | 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 and MGT 4088L and Strategic Management Lab

Total Units 64
${ }^{1}$ MTH 1073 fulfills the Foundational Explorations Problem Solving Requirement, but MTH 1053 does not.

## Recommended:

| Code | Title | Units |
| :--- | ---: | ---: |
| Cross-Cultural | Experience |  |
| PHL 2011 | Ethics (FE) | 3 |

## 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.

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| ACC 2001 | Principles of Financial Accounting | 4 |
| ACC 2002 | Principles of Managerial Accounting | 3 |
| Upper-Division Requirements |  |  |
| ACC 3070 | Intermediate Accounting I | 3 |
| ACC 3071 | Intermediate Accounting II | 3 |
| Choose two (2) courses from the following: |  | 6 |
| ACC 3075 | Managerial Cost Accounting |  |
| ACC 4010 | Federal Tax Accounting I |  |
| ACC 4021 | Advanced Accounting |  |
| ACC 4025 | Financial Statement Analysis and Valuation |  |
| ACC 4060 | Auditing |  |
| Total Units |  | 19 |

## 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 upperdivision courses designed to acquaint the student with disciplines essential to business success.

| Code | Title U | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| ACC 2000 | Principles of Accounting for Non-Business Majors 1 | S 3 |
| MGT 2012 | Principles of Management | 3 |
| Choose one (1) course from the following: |  | 3 |
| ECO 1000 | Survey of Economics (FE) |  |
| ECO 1001 | Principles of Macroeconomics (FE) |  |
| ECO 1002 | Principles of Microeconomics (FE) |  |
| Upper-Division Requirements |  |  |
| MKT 3032 | Principles of Marketing | 3 |
| Choose nine (9) units from any upper-division course in Business, Accounting, Marketing, Management, Finance or Economics |  |  |
| Total Units |  | 21 |

1 ACC 2001 and ACC 2002 sequence may be substituted for ACC 2000.

## 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.

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| ACC 2001 | Principles of Financial Accounting | 4 |
| CSC 1043 <br> and CSC 1043L | Introduction to Computer Programming and Introduction to Computer Programming Lab | 3 |
| CSC 1054 and CSC 1054L | Objects and Elementary Data Structures and Objects and Elementary Data Structures Lab | 4 |
| CSC 2052 <br> and CSC 2052L | Data Structures in C++ and Data Structures in C++ Lab | 2 |
| MGT 2012 | Principles of Management | 3 |
| 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 (1) additional course from BUS or MGT 3000-4099 |  | 3 |
| Total Units |  | 28 |

## 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.

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| ACC 2001 | Principles of Financial Accounting | 4 |
| $\begin{aligned} & \text { CSC } 1043 \\ & \text { and CSC 1043L } \end{aligned}$ | Introduction to Computer Programming and Introduction to Computer Programming Lab | 3 |
| CSC 1054 and CSC 1054L | Objects and Elementary Data Structures and Objects and Elementary Data Structures Lab | 4 |
| CSC 2052 <br> and CSC 2052L | Data Structures in C++ and Data Structures in C++ Lab | 2 |
| 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 (2) additional courses from MKT 3000-4059 6

Total 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.

| Code | Title | Units |
| :--- | :--- | ---: |
| Lower-Division Requirements |  |  |
| ECO 1001 | Principles of Macroeconomics (FE) | 3 |
| ECO 1002 | Principles of Microeconomics (FE) | 3 |
| Upper-Division Requirements | Theories of Economic Development | 3 |
| ECO 3015 | Money and Banking | 3 |
| ECO 3080 | The Economics of Race, Class, and Gender | 3 |
| ECO 4040 | Contemporary Development Planning | 3 |
| ECO 4070 |  | $\mathbf{1 8}$ |
| Total 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.

| Code | Title U | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| ACC 2000 | Principles of Accounting for Non-Business Majors 1 | 3 |
| Choose one (1) course from the following: |  | 3 |
| ECO 1000 | Survey of Economics (FE) |  |
| ECO 1001 | Principles of Macroeconomics (FE) |  |
| ECO 1002 | Principles of Microeconomics (FE) |  |
| Upper-Division Requirements |  |  |
| FIN 3035 | Business Finance | 3 |
| Choose three (3) courses from the following: |  | 9 |
| FIN 3085 | Intermediate Finance |  |
| FIN 4015 | Investments |  |
| FIN 4025 | Financial Statement Analysis and Valuation |  |
| FIN 4035 | International Finance |  |

Total Units
${ }^{1}$ ACC 2001 and ACC 2002 sequence may be substituted for ACC 2000.

## 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.

| Code | Title | Units |
| :--- | :--- | ---: |
| Lower-Division Requirements |  |  |
| SOC 2001 | Cultural Anthropology (FE) | 3 |

Choose one (1) course from the following:

| ECO 1000 | Survey of Economics (FE) |
| :--- | :--- |
| ECO 1001 | Principles of Macroeconomics (FE) |
| ECO 1002 | Principles of Microeconomics (FE) |


| 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) | course from the following: | $3-4$ |


| ECO 3080 | Money and Banking |
| :--- | :--- |
| ECO 4040 | The Economics of Race, Class, and Gender |
| ECO 4070 | Contemporary Development Planning |
| ECO 4090 | Special Studies in Economics |
| MGT 3082 | Applied Entrepreneurship |
| MGT 4012 | Leadership Theory and Practice |
| POL 3001 | Transitions to Democracy |
| POL 3070 | Comparative Politics |
| POL 4020 | United States Foreign Policy |
| POL 4035 | Global Governance |
| SOC 3060 | Race and Ethnicity |
| SOC 4044 | Globalization and Culture |
| SWF 3015 | Health and Well-Being (FE) |
| Total 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.


## Total 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.

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| Choose two (2) courses from the following: |  |  |
| ACC 2000 | Principles of Accounting for Non-Business Majors 1 |  |
| ECO $1000 \quad$ Survey of Economics (FE)or ECO 1001 Principles of Macroeconomics (FE)or ECO 1002 Principles of Microeconomics (FE) |  |  |
|  |  |  |
|  |  |  |

MGT 2012 Principles of Management

| 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) | course from the following: | 3 |


| ECO 3015 | Theories of Economic Development |
| :--- | :--- |
| ECO 4040 | The Economics of Race, Class, and Gender |
| MGT 3020 | Organizational Behavior |
| MGT 3074 | Human Resource Management |
| MGT 3082 | Applied Entrepreneurship |
| SOC 3060 | Race and Ethnicity |
| SOC 4044 | Globalization and Culture |

Total Units
18
${ }^{1}$ ACC 2001 and ACC 2002 sequence may be substituted for ACC 2000.

## 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.

| Code | Title | Units |
| :--- | :--- | ---: |
| Required Courses |  |  |
| 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 |
| Total Units |  | $\mathbf{2 1}$ |

${ }^{1}$ ACC 2001 and ACC 2002 sequence may be substituted for ACC 2000.

## 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:

- Chemistry Emphasis
- Ecology Emphasis
- Molecular Emphasis


## Emphases

- Chemistry (p. 188)
- Ecology (p. 188)
- Molecular (p. 188)

Science-Business Minor with Chemistry Emphasis

| Code | Title U | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| ACC 2001 | Principles of Financial Accounting | 4 |
| CHE 1052 and CHE 1052L | General Chemistry I (FE) and General Chemistry I Lab (FE) | 5 |
| CHE 1053 and CHE 1053L | General Chemistry II and General Chemistry II Lab | 4 |
| CHE 2013 | Analytical Chemistry | 3 |
| CHE 2094 and CHE 2094L | Organic Chemistry I and Organic Chemistry I Lab | 4 |
| MGT 2012 | Principles of Management | 3 |
| Choose one (1) course from the following: |  | 4 |
| BIO 1001 and BIO 1001L | Human Biology and Bioethics (FE) and Human Biology and Bioethics Laboratory (FE) |  |
| BIO 1003 and BIO 1003L | Introduction to Biology (FE) and Introduction to Biology Laboratory (FE) |  |
| BIO 2010 <br> and BIO 2010L | Cell Biology and Biochemistry (FE) and Cell Biology and Biochemistry Laboratory (FE) |  |
| Choose one (1) course from the following: |  | 3-4 |
| MTH 1044 | Calculus with Applications (FE) |  |
| MTH 1064 | Calculus I (FE) |  |
| MTH 1073 | Business Calculus (FE) |  |
| Upper-Division Requirements |  |  |
| MKT 3032 | Principles of Marketing | 3 |
| Choose three (3) additional courses from BUS or MGT 3000-4099 for nine (9) units |  |  |

## Total Units

## Science-Business Minor with Ecology Emphasis

Code Title

## Lower-Division Requirements

ACC 2001
Principles of Financial Accounting 4
BIO 2011 Ecological and Evolutionary Systems (FE) 4
and BIO 2011L and Ecological and Evolutionary Systems Laboratory (FE) ${ }^{1}$

| BIO 2012 <br> and BIO 2012L | Organismal Biology and Organismal Biology Laboratory | 4 |
| :---: | :---: | :---: |
| MGT 2012 | Principles of Management | 3 |
| Choose one (1) course from the following: |  | 4-5 |
| CHE 1001 | Chemistry and Society (FE) |  |
| CHE 1003 and CHE 1003L | Introduction to General, Organic, and Biological Chemistry (FE) and Introduction to General, Organic, and Biological Chemistry Lab (FE) |  |
| CHE 1052 <br> and <br> CHE 1052L | General Chemistry I (FE) and General Chemistry I Lab (FE) |  |
| Choose one (1) course from the following: |  | 3-4 |
| MTH 1044 | Calculus with Applications (FE) |  |
| MTH 1064 | Calculus I (FE) |  |
| MTH 1073 | Business Calculus (FE) |  |
| Upper-Division Requirements |  |  |
| BIO 3063 and BIO 3063L | Conservation Ecology and Conservation Ecology Laboratory | 4 |
| 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: ${ }^{2}$ |  | 3-4 |
| BIO 3012 | Applied Plant Biology |  |
| BIO 3015 | Microbiology |  |
| BIO 3015L | Microbiology Laboratory |  |
| BIO 3023 | Introduction to Oceanography |  |
| BIO 3023L | Introduction to Oceanography Laboratory |  |
| BIO 3033 | Marine Biology |  |
| BIO 3033L | Marine Biology Laboratory |  |
| BIO 3040 | Field Biology: Neotropical Ecology |  |
| BIO 4010 | Vertebrate Biology |  |
| BIO 4010L | Vertebrate Biology Laboratory |  |
| BIO 4023 | Advanced Human Physiology |  |
| BIO 4023L | Advanced Human Physiology Laboratory |  |
| BIO 4030 | Animal Behavior |  |
| BIO 4030L | Animal Behavior Laboratory |  |
| EVS 3096 | Advanced Biology ${ }^{3}$ |  |
| EVS 3097 | Advanced Ecology ${ }^{3}$ |  |
| EVS 3098 | Advanced Ecological Applications ${ }^{3}$ |  |
| Total Units |  | 35-38 |
| ${ }^{1}$ BIO 1005 and BIO 1005L may be substituted with the permission of the Biology Department <br> ${ }^{2}$ Courses and their corresponding lab (if applicable) must be taken concurrently. <br> ${ }^{3}$ Can be taken at Au Sable or Costa Rica with our sister school (prior permission is required for any substitutions) and used to transfer in these units. |  |  |
|  |  |  |
| Science-Business Minor with Molecular Emphasis |  |  |
| Code | Title U | Units |
| Lower-Division Requirements |  |  |
| ACC 2001 | Principles of Financial Accounting | 4 |


| BIO 2010 <br> and BIO 2010L | Cell Biology and Biochemistry (FE) <br> and Cell Biology and Biochemistry Laboratory (FE) | 4 |
| :--- | :--- | ---: |
| BIO 2011 |  |  |
| and BIO 2011L |  |  | | Ecological and Evolutionary Systems (FE) |
| :--- | :--- |
| and Ecological and Evolutionary Systems |
| Laboratory (FE) |$\quad 4$


| Total Units | $39-41$ |
| :--- | :--- |

## 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:

- Chemistry Emphasis
- Ecology Emphasis
- Molecular Emphasis


## Emphases

- Chemistry (p. 189)
- Ecology (p. 189)
- Molecular (p. 190)


## Science-Marketing Minor with Chemistry Emphasis

| Code | Title | Units |
| :--- | :--- | ---: |
| Lower-Division Requirements |  |  |
| ACC 2001 | Principles of Financial Accounting | 4 |
| CHE 1052 <br> and CHE 1052L | General Chemistry I (FE) <br> and General Chemistry I Lab (FE) | 5 |
| CHE 1053 | General Chemistry II |  |
| and CHE 1053L | and General Chemistry II Lab | 4 |
| CHE 2013 | Analytical Chemistry | 3 |
| CHE 2094 <br> and CHE 2094L | Organic Chemistry I <br> Choose one (1) course from the following: | 4 |

BIO 1001 Human Biology and Bioethics (FE) 4
and BIO 1001L and Human Biology and Bioethics Laboratory (FE)
BIO 1003 Introduction to Biology (FE)
and BIO 1003L and Introduction to Biology Laboratory (FE)
BIO $2010 \quad$ Cell Biology and Biochemistry (FE)
and BIO 2010L and Cell Biology and Biochemistry Laboratory (FE)
Choose one (1) course from the following: 3-4
MTH 1044 Calculus with Applications (FE)
MTH 1064 Calculus I (FE)
MTH 1073 Business Calculus (FE)
Upper-Division Requirements
MKT $3032 \quad 3$
Choose three (3) additional courses from MKT 3000-4059 for nine (9) 9
units

| Total Units | $39-40$ |
| :--- | :--- |

## Science-Marketing Minor with Ecology Emphasis

Code Title Units
Lower-Division Requirements

| ACC 2001 | Principles of Financial Accounting | 4 |
| :--- | :--- | ---: |
| BIO 2011 <br> and BIO 2011L | Ecological and Evolutionary Systems (FE) <br> and Ecological and Evolutionary Systems <br> Laboratory (FE) 1 | 4 |
| BIO 2012 | Organismal Biology <br> and BIO 2012L <br> and Organismal Biology Laboratory | 4 |
| Choose one (1) course from the following: | $4-5$ |  |

CHE 1001 Chemistry and Society (FE)
CHE 1003 Introduction to General, Organic, and Biological
and
CHE 1003L and Introduction to General, Organic, and Biological Chemistry Lab (FE)
CHE 1052 General Chemistry I (FE)
and and General Chemistry I Lab (FE)

| Choose one (1) course from the following: |  | 3-4 |
| :---: | :---: | :---: |
| MTH 1044 | Calculus with Applications (FE) |  |
| MTH 1064 | Calculus I (FE) |  |
| MTH 1073 | Business Calculus (FE) |  |
| Upper-Division Requirements |  |  |
| BIO 3063 and BIO 3063L | Conservation Ecology and Conservation Ecology Laboratory | 4 |
| MKT 3032 | Principles of Marketing | 3 |
| Choose two (2) additional courses from MKT 3000-4059 for six (6) units |  | 6 |
| Choose 3-4 units of the following courses: ${ }^{2}$ |  | 3-4 |
| BIO 3012 | Applied Plant Biology |  |
| BIO 3015 | Microbiology |  |
| BIO 3015L | Microbiology Laboratory |  |
| BIO 3023 | Introduction to Oceanography |  |
| BIO 3023L | Introduction to Oceanography Laboratory |  |
| BIO 3033 | Marine Biology |  |
| BIO 3033L | Marine Biology Laboratory |  |
| BIO 3040 | Field Biology: Neotropical Ecology |  |
| BIO 4010 | Vertebrate Biology |  |
| BIO 4010L | Vertebrate Biology Laboratory |  |
| BIO 4030 | Animal Behavior |  |
| BIO 4030L | Animal Behavior Laboratory |  |
| EVS 3096 | Advanced Biology ${ }^{3}$ |  |
| EVS 3097 | Advanced Ecology ${ }^{3}$ |  |
| EVS 3098 | Advanced Ecological Applications ${ }^{3}$ |  |
| Total Units |  | -38 |

${ }^{1}$ BIO 1005 and BIO 1005L may be substituted with the permission of the Biology Department
${ }^{2}$ Courses and their corresponding lab (if applicable) must be taken concurrently.
${ }^{3}$ Can be taken at Au Sable or Costa Rica with our sister school (prior permission is required for any substitutions) and used to transfer in these units.

## Science-Marketing Minor with Molecular Emphasis

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| ACC 2001 | Principles of Financial Accounting | 4 |
| $\begin{aligned} & \text { BIO } 2010 \\ & \text { and BIO 2010L } \end{aligned}$ | Cell Biology and Biochemistry (FE) and Cell Biology and Biochemistry Laboratory (FE) | ) 4 |
| BIO 2011 and BIO 2011L | Ecological and Evolutionary Systems (FE) and Ecological and Evolutionary Systems Laboratory (FE) | 4 |
| Choose one (1) course from the following: |  | 4-5 |
| CHE 1001 | Chemistry and Society (FE) |  |
| CHE 1003 <br> and <br> CHE 1003L | Introduction to General, Organic, and Biological Chemistry (FE) <br> and Introduction to General, Organic, and Biological Chemistry Lab (FE) |  |
| CHE 1052 <br> and CHE 1052L | General Chemistry I (FE) and General Chemistry I Lab (FE) |  |
| Choose one (1) | urse from the following: | 3-4 |


| MTH 1044 | Calculus with Applications (FE) |
| :--- | :--- |
| MTH 1064 | Calculus I (FE) |
| MTH 1073 | Business Calculus (FE) |

Upper-Division Requirements
BIO 3045 Genetics 4
and BIO 3045L and Genetics Laboratory
BIO 3052 Research Methodology 3

MKT $3032 \quad 3$
Choose two (2) additional courses from MKT 3000-4059 for six (6) 6
units
Choose one (1) course from the following: ${ }^{1} 4$

| BIO 3015 | Microbiology |
| :--- | :--- |
| BIO 3015L | Microbiology Laboratory |
| BIO 3050 | Advanced Cell Biology |
| BIO 3050L | Advanced Cell Biology Laboratory |
| BIO 3080 | Molecular Biology |
| BIO 3080L | Molecular Biology Laboratory |
| BIO 3090 | Immunology |
| BIO 3090L | Immunology Laboratory |
| BIO 4000 | Developmental Biology |
| BIO 4000L | Developmental Biology Laboratory |
| BIO 4010 | Vertebrate Biology |
| BIO 4010L | Vertebrate Biology Laboratory |
| BIO 4050 | Advanced Biochemistry |
| BIO 4050L | Advanced Biochemistry Laboratory |
| Total Units |  |
| Courses and their corresponding lab (if applicable) must be taken |  |
| concurrently. |  |

## 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.

Code Title Units
Required Courses

| ACC 2000 | Principles of Accounting for Non-Business Majors | 3 |
| :--- | :--- | :--- |
| MGT 2012 | Principles of Management | 3 |
| MKT 3032 | Principles of Marketing | 3 |
| Choose one (1) course from the following: | 3 |  |

ECO 1000 Survey of Economics (FE)

ECO 1001 Principles of Macroeconomics (FE)
ECO 1002 Principles of Microeconomics (FE)
Total Units
${ }^{1}$ ACC 2001 and ACC 2002 sequence may be substituted for ACC 2000.

## School of Education

## Purposes

Point Loma Nazarene University's undergraduate School of Education offers one Bachelor's degree of academic rigor in an environment of vital Christianity in the Wesleyan tradition: Cross Disciplinary Studies: Teacher 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 (California CTC) leading to the following preliminary teaching credentials: Multiple Subject and Single Subject. The School of Education also offers a preliminary teaching credential in Educational Specialist Mild to Moderate and Extensive Support Needs, which could be pursued through post-graduate coursework. 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 collaborates 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 degree is 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. 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 satisfactory completion of the Basic Skills Requirement. 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 both the Multiple Subject and Single Subjects Credential candidates, this decision is often made during the candidate's sophomore enrollment at the university. 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 credential analyst acts as a liaison between the candidate and the California Commission on Teacher Credentialing.

## Faculty

Dean - Deborah Erickson, Ed.D.
Kimberly Athans, Ed.D.
Sam Houston State University
Heather Bertrand, M.A.
Point Loma Nazarene University
Elizabeth Chamberlain, Ed.D.
Azusa Pacific University
Michael Corke, Ph.D.
Claremont Graduate University
Deborah Erickson, Ed.D.
University of the Pacific
Grace Fantaroni, Ed.D.
Alliant International University
Jill Hamilton-Bunch, Ph.D., Associate Dean-Bakersfield Campus
University of California, Santa Barbara
Lori Kall, Ph.D.
California Coast University
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

Patricia Maruca, Ed.D.
Northern Arizona University
Yazmin Pineda Zapata, Ed.D.
San Diego State University
Ray Posey, Ph.D.
Vanderbilt University
Dione Brooks Taylor, Ed.D.
Northern Arizona University
Rachelle Wong, Ed.D.
Concordia University
To view requirements for majors, minors, and certificates, see the Degree Program Information (p. 244) page.

- Traditional Undergraduate Education (p. 198)
- Cross Disciplinary Studies: Teacher Education, B.A. (p. 198)
- 4-Year Credential Track: Single Subject Teaching Credential (p. 206)
- Post-Baccalaureate Multiple Subjects Teaching Credentials
(p. 207)


## Education

EDU 3002 Foundations of Education and Learning Theory (3 Units)
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 (20) fieldwork hours are required.
Also offered as EDU 6000.
Candidates are responsible for transportation to and from the school site. Task-stream registration is required.

## EDU 3006 Principles of Language Acquisition (3 Units)

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.
Also offered as EDU 6001.
Prerequisite(s): EDU 3002 and EDU 4004
Candidates are responsible for transportation to and from the school site. Task-stream registration is required.

## EDU 3024 Differentiated Mathematics Instruction for All Learners (3 Units)

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.
Also offered as EDU 6012.
Prerequisite(s): EDU 3002, EDU 3006, EDU 4004, and MTH 2023
Candidates are responsible for transportation to and from the school site. Task-stream registration required.

## EDU 4004 Foundations of Special Education (3 Units)

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 (20) fieldwork hours are required when taken on the undergraduate campus.
Also offered as EDU 6002.
Prerequisite(s): EDU 3002
Task-stream registration required.
EDU 4009 Classroom Assessment and Research Practices (3 Units)
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 4010 Methods of Teaching Reading and Writing (3 Units)
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 Units)
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 grade.
Prerequisite(s): EDU 3002 and EDU 4004 or consent of instructor; Senior standing.
EDU 4020 Literacy Instruction for Secondary Teachers (3 Units) 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 Units)
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.
Also offered as EDU 6021.
It is through this course that each candidate completes the CaITPA task "Designing Instruction" as a performance-based measure of the knowledge and skills taught in this course.

## EDU 4022 Interdisciplinary Approaches to Teaching in the Content Areas (3 Units)

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 4032 Methods of Teaching Secondary Language Arts (3 Units) This methodology course is designed to prepare prospective secondarylevel (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 sixtrait 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 Units) 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 graduatelevel elective for the MAT degree.)
Also offered as EDU 6023.

## EDU 4034 Methods of Teaching Secondary Science (3 Units)

This methodology course is designed to prepare prospective secondarylevel (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 Units) This methodology course is designed to prepare prospective secondarylevel (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 stateadopted 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 Units)
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 Units)

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 Units)

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 Units) 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 4040 Elementary Clinical Practice I (4 Units)

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. The Clinical Practice experience contributes to the candidates' preparation to complete the Teaching Performance Assessment (TPA) required for credential completion. Credit/No Credit.

## Also offered as EDU 6030.

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

## EDU 4050 Secondary Clinical Practice I (4 Units)

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. The Clinical Practice experience contributes to the candidates' preparation to complete the Teaching Performance Assessment (TPA) required for credential completion. Credit/No Credit.
Also offered as EDU 6040.
Corequisite(s): EDU 40CP3

## EDU 4053 Organization and Management for Success in the Moderate/ Severe Classroom (3 Units)

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 Units)

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 4055 Secondary Clinical Practice II (4 Units)

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. The Clinical Practice experience contributes to candidates' preparation to complete the Teaching Performance Assessment (TPA) required for credential completion. Credit/No Credit.
Also offered as EDU 6044.
Corequisite(s): EDU 40CP4

## EDU 4060 Elementary Clinical Practice II (4 Units)

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. The Clinical Practice experience contributes to candidates' preparation to complete the Teaching Performance Assessment (TPA) required for credential completion. Credit/No Credit.
Also offered as EDU 6034.
Prerequisite(s): Successful completion of Clinical Practice I and completion of all Teacher Education admission requirements.
Corequisite(s): EDU 40CP2

## EDU 4070M Special Education Mild/Moderate Clinical Practice I (4 Units)

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 (4

 Units)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 Units)

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 (4

## Units)

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 4090 Special Studies in Education (1-3 Units)
Intensive study in a special topic in education under the direction of faculty member.
May be repeated up to a total of six (6) units.

## EDU 4092 Assessment and Services for Students with Disabilities (3 Units)

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 EDU 6050.

## EDU 4093 Curricular and Instructional Adaptations for Students with Mild/Moderate Disabilities (3 Units)

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 EDU 6051.

## EDU 4094 Collaboration and Consultation for IEP Implementation, Evaluation, and Program Involvement (3 Units)

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 EDU 6052.

## EDU 4096 Principles of Language Acquisition for Students with Moderate/Severe Disabilities (3 Units)

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.
EDU 4099 Research in Education (1-3 Units)
Open to candidates of proven ability.
May be repeated up to a total of six (6) units.
Prerequisite(s): Consent of the dean of the School of Education and instructor.

EDU 40CP1 Elementary Clinical Practice Seminar I (1 Unit)
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.
Also offered as EDU 6CP1.
Corequisite(s): EDU 4040
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.

## EDU 40CP2 Elementary Clinical Practice Seminar II (1 Unit)

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.

Also offered as EDU 6CP2.
Corequisite(s): EDU 4060
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.

## EDU 40CP3 Secondary Clinical Practice Seminar I (1 Unit)

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.
Also offered as EDU 6CP2.
Corequisite(s): EDU 4050
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.

EDU 40CP4 Secondary Clinical Practice Seminar II (1 Unit)
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.
Credit/No Credit.
Also offered as EDU 6CP2.
Corequisite(s): EDU 4055
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.

## Traditional Undergraduate Education Cross Disciplinary Studies: Teacher Education, B.A.

## 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

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 Foundational Explorations requirements, that may have been satisfied.

- Reading, Language, and Literature (p. 198)
- History and Social Science (p. 199)
- Human Development (p. 200)
- Math (p. 202)
- Physical Education/Health (p. 202)
- Science (p. 204)
- Visual and Performing Arts (p. 205)

Reading, Language, and Literature Concentration
Code Units

| Lower-Division Requirements |  |  |
| :--- | :--- | :--- |
| BIB 1001 | Old Testament History and Religion (FE) | 2 |
| BIB 1002 | New Testament History and Religion (FE) | 3 |
| BIO 1003 | Introduction to Biology (FE) | 4 |
| and BIO 1003L | and Introduction to Biology Laboratory (FE) |  |
| COM 1000 | Principles of Human Communication (FE) | 3 |
| HIS 1010 | World Civilizations I (FE) | 3 |
| HIS 1020 | United States History from Early America to the | 3 |
|  | Twentieth Century |  |


| LIT 2000 | Literature and Culture (FE) | 2 |
| :--- | :--- | :--- |
| MTH 1013 | College Algebra (or passing placement exam <br> scores) | 3 |

MTH 2013 Fundamentals of Elementary Mathematics I 3
MTH 2023 Fundamentals of Elementary Mathematics II 3
PHL 2001 Introduction to Philosophy (FE) 3

| or PHL 2011 | Ethics (FE) |
| :--- | :--- | :--- |
| POL 1090 | The Politics of Race, Class, and Gender (FE) 3-4 |

or SOC 2001 Cultural Anthropology (FE)
PSC $1014 \quad$ Physical Science for Teachers (FE) 4
PSC 1023 Earth and Space Science for Teachers 3

PSY 1001 Psychology of Personal Development - First Year 3
Experience (FE)
or PSY 1003 General Psychology (FE)
TRE $1001 \quad$ Introduction to Theatre (FE) 2

WRI $1010 \quad$ College Composition: Writing and Research - First 2-4 Year Experience (FE) ${ }^{1}$
or WRI 1016 College Composition: Research - First Year Experience (FE)
Choose one (1) course from the following: 2

| KIN 1000 | Fitness Through Movement (FE) |  |
| :--- | :--- | :--- |
| KIN 2000 | Optimal Health (FE) |  |
| SWF 3015 | Health and Well-Being (FE) |  |
| Choose one (1) course from the following: | $2-3$ |  |


| ART 1000 | Introduction to Art (FE) |
| :--- | :--- |
| ART 1002 | Fundamentals of Art (FE) |
| ART 2000 | History of Art I (FE) |
| ART 2001 | History of Art II (FE) |
| MUH 1000 | Introduction to Music (FE) |
| Choose one (1) of the following sequences: |  |

FRE 1001 Elementary French I (FE)
and FRE 1002 and Elementary French II (FE)
GER 1001 Elementary German I (FE)
and GER 1002 and Elementary German II (FE)
SPA 1001 Elementary Spanish I (FE)
and SPA 1002 and Elementary Spanish II (FE)
Upper-Division Requirements
ART 3019 Visual Arts in the Classroom I 3

| or PSY 3008 | Developmental Psychology - Birth Through Adolescence |  | Spanish Emphasis: |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | SPA 2051 | Intermediate Spanish Conversation II |
| HIS 3070 | California History | 4 | SPA 3000 | Civic Engagement: Conversation, Culture, and |
| KIN 3008 | Methods of Teaching Physical Education | 3 |  | Community |
| LIT 3025 | Children's Literature | 3 | SPA 3002 | Advanced Grammar and Reading |
| MUE 3041 | Music Skills for the Elementary Classroom Teacher | 3 | Choose one (1) course from the following: |  |
| Choose one (1) course from the following: |  | 3 | SPA 3010 | Latin American Culture and Civilization |
| CHU 3040 | Women in the Christian Tradition (FE) |  | SPA 3015 | Culture and Civilization of Spain |
| CHU 3095 | The Christian Tradition (FE) |  | SPA 3020 | Mexican American Literature and Culture |
| THE 3005 | Christian Faith and the Natural Sciences (FE) |  | SPA 3080 | Genre/Period Studies in Hispanic Literature or Film |
| THE 3060 | Christian Life as Vocation (FE) |  | Total Units | 116-121 |
| THE 3070 | Global Christianity (FE) |  |  |  |
| Choose one (1) course from the following: |  | 3 |  |  |
| LIT 3050 | Diverse Voices of World Literature (FE) |  | writing requ | ent or received 3 units of AP English Language credit. |
| LIT 3051 | Diverse Voices of Cinema (FE) |  |  |  |
| LIT 3052 | Diverse Voices of American Literature (FE) |  | Each course | this section has prerequisites and requires 20 hours in |
| LIT 3053 | Diverse Voices of Women Writers (FE) |  | a field place | in order to meet the required field hours toward the |
| Choose one (1) course from the following: |  | 3-4 |  | minary Teaching Credential. See Notes. |
| MTH 1044 | Calculus with Applications (FE) |  |  | Teacher Education candidates who complete these 14 units of Education coursework required for their bachelor's degree may |
| MTH 1064 <br> and <br> MTH 1064L | Calculus I (FE) and Calculus I Lab (FE) |  | 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. |  |
| MTH 3003 | Problem Solving (FE) |  |  |  |
| Upper-Division Requirements in Education ${ }^{\text {2,3 }}$ |  |  | Candidates who take additional Education courses would apply as a graduate student to finish their credential coursework and then seek a |  |
| EDU 3002 | Foundations of Education and Learning Theory | 3 |  |  |
| EDU 3006 | Principles of Language Acquisition | 3 | Master of Arts | in Education degree in their concentration of choice. |
| EDU 3024 | Differentiated Mathematics Instruction for All Learners | 3 | ${ }^{4}$ Choose one (1) <br> ${ }^{5}$ NOT to includ | Emphasis within the concentration. LIT 3025. |
| EDU 4004 | Foundations of Special Education | 3 |  | History and Social Science Concentration |
| EDU 4017 | Teaching and Learning Capstone: Contemporary Issues in the Vocation of Education | 2 | History and Code | ocial Science Concentration <br> Title |
| Concentration Courses ${ }^{4}$ |  | 12 | Lower-Division Requirements |  |
| English Emphasis: |  |  | BIB 1001 | Old Testament History and Religion (FE) |
| LIT 3000 | Literary Analysis |  | BIB 1002 | New Testament History and Religion (FE) |
| Choose one (1) of the following lower-division Literature courses: |  |  | BIO 1003 and BIO 1003L | Introduction to Biology (FE) |
| LIT 2052 | World Literatures: Ancient and Medieval Literatures |  |  | and Introduction to Biology Laboratory (FE) |
|  |  |  | COM 1000 | Principles of Human Communication (FE) 3 |
| LIT 2054 | British Writers I |  | HIS 1010 | World Civilizations I (FE) |
| LIT 2055 | British Writers II |  | HIS 1020 | United States History from Early America to the Twentieth Century |
| LIT 2056 | American Writers I |  |  |  |
| LIT 2057 | American Writers II |  | LIT 2000 | Literature and Culture (FE) 2 |
| Choose one (1) of the following Linguistics and Writing courses: |  |  | MTH 1013 | College Algebra (or passing placement exam scores) |
| LIN 3012 | Introduction to Linguistics |  |  |  |
| LIN 3065 | English Grammar and Usage |  | MTH 2013 | Fundamentals of Elementary Mathematics I |
| WRI 4000 | Writing for the Community |  | MTH 2023 | Fundamentals of Elementary Mathematics II |
| Choose one (1) upper-division Literature course ${ }^{5}$ |  |  | $\begin{aligned} & \text { PHL } 2001 \\ & \quad \text { or PHL } 2011 \end{aligned}$ | Introduction to Philosophy (FE) |
| French Emphasis: |  |  |  | Ethics (FE) |
| FRE 2050 | Intermediate French I |  | $\begin{aligned} & \text { POL } 1090 \\ & \text { or SOC } 2001 \end{aligned}$ | The Politics of Race, Class, and Gender (FE) 3-4 |
| FRE 2051 | Intermediate French II |  |  | Cultural Anthropology (FE) |
| FRE 3003 French Conversationor FRE 3015 French Culture and Civilization |  |  | PSC 1014 | Physical Science for Teachers (FE) |
|  |  |  | PSC 1023 | Earth and Space Science for Teachers |
| FRE 3020 or FRE 302 | Survey of French Literature Francophone Literature |  | PSY 1001 | Psychology of Personal Development - First Year Experience (FE) |

WRI 1016 is for students who have transferred the first half of the FE writing requirement or received 3 units of AP English Language credit. It is a supplemental 2-unit research course, which fulfills the second
${ }^{2}$ 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
${ }^{3}$ Teacher Education candidates who complete these 14 units of Education coursework required for their bachelor's degree may complete the remainder of the teaching credential within the Master Ars in Teaching degree, specialy choosing to also add the Reading 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.
${ }^{4}$ Choose one (1) Emphasis within the concentration.
${ }^{5}$ NOT to include LIT 3025.

## History and Social Science Concentration

| or PSY 1003 | General Psychology (FE) |  |
| :---: | :---: | :---: |
| TRE 1001 | Introduction to Theatre (FE) | 2 |
| WRI 1010 | College Composition: Writing and Research - First 2 Year Experience (FE) ${ }^{1}$ | 2-4 |
| or WRI 1016 | College Composition: Research - First Year Experience (FE) |  |
| Choose one (1) course from the following: |  | 2 |
| KIN 1000 | Fitness Through Movement (FE) |  |
| KIN 2000 | Optimal Health (FE) |  |
| SWF 3015 | Health and Well-Being (FE) |  |
| Choose one (1) course from the following: |  | 2-3 |
| ART 1000 | Introduction to Art (FE) |  |
| ART 1002 | Fundamentals of Art (FE) |  |
| ART 2000 | History of Art I (FE) |  |
| ART 2001 | History of Art II (FE) |  |
| MUH 1000 | Introduction to Music (FE) |  |
| Choose one (1) of the following sequences: |  | 8 |
| FRE 1001 and FRE 1002 | Elementary French I (FE) and Elementary French II (FE) |  |
| GER 1001 and GER 1002 | Elementary German I (FE) and Elementary German II (FE) |  |
| SPA 1001 and SPA 1002 | Elementary Spanish I (FE) <br> and Elementary Spanish II (FE) |  |
| Upper-Division Requirements |  |  |
| ART 3019 | Visual Arts in the Classroom I | 3 |
| CHD 1020 | Child and Adolescent Development | 4 |
| or PSY 3008 | Developmental Psychology - Birth Through Adolescence |  |
| HIS 3070 | California History | 4 |
| KIN 3008 | Methods of Teaching Physical Education | 3 |
| LIT 3025 | Children's Literature | 3 |
| MUE 3041 | Music Skills for the Elementary Classroom Teacher | 3 |
| Choose one (1) course from the following: |  | 3 |
| CHU 3040 | Women in the Christian Tradition (FE) |  |
| CHU 3095 | The Christian Tradition (FE) |  |
| THE 3005 | Christian Faith and the Natural Sciences (FE) |  |
| THE 3060 | Christian Life as Vocation (FE) |  |
| THE 3070 | Global Christianity (FE) |  |
| Choose one (1) course from the following: |  | 3 |
| LIT 3050 | Diverse Voices of World Literature (FE) |  |
| LIT 3051 | Diverse Voices of Cinema (FE) |  |
| LIT 3052 | Diverse Voices of American Literature (FE) |  |
| LIT 3053 | Diverse Voices of Women Writers (FE) |  |
| Choose one (1) course from the following: |  | 3-4 |
| MTH 1044 | Calculus with Applications (FE) |  |
| MTH 1064 <br> and <br> MTH 1064L | Calculus I (FE) and Calculus I Lab (FE) |  |
| MTH 3003 | Problem Solving (FE) |  |
| Upper-Division Requirements in Education ${ }^{\text {2,3 }}$ |  |  |
| 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 |
| Concentration Courses ${ }^{4}$ |  | 12 |
| American Studies Emphasis: |  |  |
| HIS 3070 | California History |  |
| Choose two (2) courses from the following: |  |  |
| HIS 3016 | Colonial and Revolutionary America |  |
| HIS 3020 | United States History, 1815-1914 |  |
| HIS 4025 | United States Since 1914 |  |
| HIS 4035 | Asian-American History: 1800 to the Present |  |
| HIS 4077 | Gender and Law in the U.S. |  |
| POL 1065 | U.S. Democracy (FE) |  |
| POL 3041 | Campaigns and Elections |  |
| POL 3060 | Urban Politics |  |
| POL 3080 | Congress and the Presidency |  |
| POL 4041 | Issues in Public Policy |  |
| International Studies Emphasis: |  |  |
| Choose one (if 4 units) or two (2) courses from the following: |  |  |
| POL 2030 | Introduction to International Relations |  |
| POL 2090 | World Regional Geography |  |
| SOC 2001 | Cultural Anthropology (FE) |  |
| Choose two (2) courses from the following: |  |  |
| HIS 3055 | Modern Middle East |  |
| HIS 3065 | Modern Japan and Korea |  |
| HIS 4015 | Europe and the World |  |
| HIS 4036 | America in East Asia: 1800 to the Present |  |
| POL 4035 | Global Governance |  |
| POL 4055 | Protest and Social Movements in World Politics |  |

## Total Units

${ }^{1}$ WRI 1016 is for students who have transferred the first half of the FE 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 FE writing requirement.
2 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.
3 Teacher Education candidates who complete these 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.
4 Choose one (1) Emphasis within the concentration.

## Human Development

Code Title

Lower-Division Requirements
BIB 1001 Old Testament History and Religion (FE)
BIB 1002 New Testament History and Religion (FE) 3

| BIO 1003 <br> and BIO 1003L | Introduction to Biology (FE) <br> and Introduction to Biology Laboratory (FE) | 4 |
| :---: | :---: | :---: |
| COM 1000 | Principles of Human Communication (FE) | 3 |
| HIS 1010 | World Civilizations I (FE) | 3 |
| HIS 1020 | United States History from Early America to the Twentieth Century | 3 |
| LIT 2000 | Literature and Culture (FE) | 2 |
| MTH 1013 | College Algebra (or passing placement exam scores) | 3 |
| MTH 2013 | Fundamentals of Elementary Mathematics I | 3 |
| MTH 2023 | Fundamentals of Elementary Mathematics II | 3 |
| PHL 2001 or PHL 2011 | Introduction to Philosophy (FE) <br> Ethics (FE) | 3 |
| $\begin{aligned} & \text { POL } 1090 \\ & \text { or SOC } 2001 \end{aligned}$ | The Politics of Race, Class, and Gender (FE) Cultural Anthropology (FE) | 3-4 |
| PSC 1014 | Physical Science for Teachers (FE) | 4 |
| PSC 1023 | Earth and Space Science for Teachers | 3 |
| PSY 1001 | Psychology of Personal Development - First Year Experience (FE) | 3 |
| or PSY 1003 | General Psychology (FE) |  |
| TRE 1001 | Introduction to Theatre (FE) | 2 |
| WRI 1010 | College Composition: Writing and Research - First Year Experience (FE) ${ }^{1}$ | 2-4 |
| or WRI 1016 | College Composition: Research - First Year Experienc (FE) |  |
| Choose one (1) course from the following: |  | 2 |
| KIN 1000 | Fitness Through Movement (FE) |  |
| KIN 2000 | Optimal Health (FE) |  |
| SWF 3015 | Health and Well-Being (FE) |  |
| Choose one (1) course from the following: |  | 2-3 |
| ART 1000 | Introduction to Art (FE) |  |
| ART 1002 | Fundamentals of Art (FE) |  |
| ART 2000 | History of Art I (FE) |  |
| ART 2001 | History of Art II (FE) |  |
| MUH 1000 | Introduction to Music (FE) |  |
| Choose one (1) of the following sequences: |  | 8 |
| FRE 1001 and FRE 1002 | Elementary French I (FE) <br> and Elementary French II (FE) |  |
| GER 1001 and GER 1002 | Elementary German I (FE) and Elementary German II (FE) |  |
| SPA 1001 and SPA 1002 | Elementary Spanish I (FE) and Elementary Spanish II (FE) |  |
| Upper-Division Requirements |  |  |
| ART 3019 | Visual Arts in the Classroom I | 3 |
| $\begin{aligned} & \text { CHD } 1020 \\ & \text { or PSY } 3008 \end{aligned}$ | Child and Adolescent Development Developmental Psychology - Birth Through Adolescence | 4 |
| HIS 3070 | California History | 4 |
| KIN 3008 | Methods of Teaching Physical Education | 3 |
| LIT 3025 | Children's Literature | 3 |
| MUE 3041 | Music Skills for the Elementary Classroom Teacher | 3 |
| Choose one (1) course from the following: |  | 3 |
| CHU 3040 | Women in the Christian Tradition (FE) |  |
| CHU 3095 | The Christian Tradition (FE) |  |


| THE 3005 | Christian Faith and the Natural Sciences (FE) |  |
| :---: | :---: | :---: |
| THE 3060 | Christian Life as Vocation (FE) |  |
| THE 3070 | Global Christianity (FE) |  |
| Choose one (1) course from the following: |  | 3 |
| LIT 3050 | Diverse Voices of World Literature (FE) |  |
| LIT 3051 | Diverse Voices of Cinema (FE) |  |
| LIT 3052 | Diverse Voices of American Literature (FE) |  |
| LIT 3053 | Diverse Voices of Women Writers (FE) |  |
| Choose one (1) course from the following: |  | 3-4 |
| MTH 1044 | Calculus with Applications (FE) |  |
| MTH 1064 <br> and <br> MTH 1064L | Calculus I (FE) and Calculus I Lab (FE) |  |
| MTH 3003 | Problem Solving (FE) |  |
| Upper-Division Requirements in Education ${ }^{\text {2,3 }}$ |  |  |
| 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 |
| Concentration Courses |  | 13-15 |
| $\begin{aligned} & \text { CHD } 1020 \\ & \text { or CHD } 105 \end{aligned}$ | Child and Adolescent Development Human Development |  |
| $\begin{aligned} & \text { CHD } 4020 \\ & \text { or PSY } 308 \end{aligned}$ | Child Development in the Family and Community Family Development and Family Therapies |  |
| PSY 3008 | Developmental Psychology - Birth Through Adolescence |  |
| $\begin{aligned} & \text { PSY } 3020 \\ & \text { or SOC } 205 \end{aligned}$ | Social Psychology <br> Sociology of the Family |  |

## Total Units

${ }^{1}$ WRI 1016 (https://catalog.pointloma.edu/preview_program.php? catoid $=58 \&$ poid $=4548 \&$ returnto $=3232 \# \mathrm{tt} 6931$ ) is for students who have transferred the first half of the FE 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 FE writing requirement.
${ }^{2}$ 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.
${ }^{3}$ Teacher Education candidates who complete these 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.

Math Concentration

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| BIB 1001 | Old Testament History and Religion (FE) | 2 |
| BIB 1002 | New Testament History and Religion (FE) | 3 |
| BIO 1003 and BIO 1003L | Introduction to Biology (FE) and Introduction to Biology Laboratory (FE) | 4 |
| COM 1000 | Principles of Human Communication (FE) | 3 |
| HIS 1010 | World Civilizations I (FE) | 3 |
| HIS 1020 | United States History from Early America to the Twentieth Century | 3 |
| LIT 2000 | Literature and Culture (FE) | 2 |
| MTH 1013 | College Algebra (or passing placement exam scores) | 3 |
| MTH 2013 | Fundamentals of Elementary Mathematics I | 3 |
| MTH 2023 | Fundamentals of Elementary Mathematics II | 3 |
| $\begin{aligned} & \text { PHL } 2001 \\ & \text { or PHL } 2011 \end{aligned}$ | Introduction to Philosophy (FE) <br> Ethics (FE) | 3 |
| $\begin{aligned} & \text { POL } 1090 \\ & \text { or SOC } 2001 \end{aligned}$ | The Politics of Race, Class, and Gender (FE) Cultural Anthropology (FE) | 3-4 |
| PSC 1014 | Physical Science for Teachers (FE) | 4 |
| PSC 1023 | Earth and Space Science for Teachers | 3 |
| PSY 1001 | Psychology of Personal Development - First Year Experience (FE) | 3 |
| or PSY 1003 | General Psychology (FE) |  |
| TRE 1001 | Introduction to Theatre (FE) | 2 |
| WRI 1010 | College Composition: Writing and Research - First Year Experience (FE) ${ }^{1}$ | 2-4 |
| or WRI 1016 | College Composition: Research - First Year Experi (FE) | ience |

Choose one (1) course from the following: 2

| KIN 1000 | Fitness Through Movement (FE) |  |
| :--- | :--- | ---: |
| KIN 2000 | Optimal Health (FE) |  |
| SWF 3015 | Health and Well-Being (FE) | $2-3$ |
| Choose one (1) | course from the following: |  |
| ART 1000 | Introduction to Art (FE) |  |
| ART 1002 | Fundamentals of Art (FE) |  |
| ART 2000 | History of Art I (FE) |  |
| ART 2001 | History of Art II (FE) |  |
| MUH 1000 | Introduction to Music (FE) |  |
| Choose one (1) of the following sequences: | 8 |  |

FRE 1001 Elementary French I (FE)
and FRE 1002 and Elementary French II (FE)
GER 1001 Elementary German I (FE)
and GER 1002 and Elementary German II (FE)
SPA 1001 Elementary Spanish I (FE)
and SPA 1002 and Elementary Spanish II (FE)

## Upper-Division Requirements

| ART 3019 | Visual Arts in the Classroom I | 3 |
| :--- | :--- | ---: |
| CHD 1020 | Child and Adolescent Development | 4 |
| HIS PSY 3008 | Developmental Psychology - Birth Through <br> Adolescence | 4 |
| KIN 3008 | California History | 3 |


| LIT 3025 | Children's Literature | 3 |
| :---: | :---: | :---: |
| MUE 3041 | Music Skills for the Elementary Classroom Teacher | 3 |
| Choose one (1) course from the following: |  | 3 |
| CHU 3040 | Women in the Christian Tradition (FE) |  |
| CHU 3095 | The Christian Tradition (FE) |  |
| THE 3005 | Christian Faith and the Natural Sciences (FE) |  |
| THE 3060 | Christian Life as Vocation (FE) |  |
| THE 3070 | Global Christianity (FE) |  |
| Choose one (1) course from the following: |  | 3 |
| LIT 3050 | Diverse Voices of World Literature (FE) |  |
| LIT 3051 | Diverse Voices of Cinema (FE) |  |
| LIT 3052 | Diverse Voices of American Literature (FE) |  |
| LIT 3053 | Diverse Voices of Women Writers (FE) |  |
| Choose one (1) course from the following: |  | 3-4 |
| MTH 1044 | Calculus with Applications (FE) |  |
| MTH 1064 <br> and <br> MTH 1064L | Calculus I (FE) and Calculus I Lab (FE) |  |
| MTH 3003 | Problem Solving (FE) |  |
| Upper-Division Requirements in Education ${ }^{2,3}$ |  |  |
| 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 |

Concentration Courses ..... 12
Individualized programs will be designed with a Math advisor beginning with the sophomore year

## Total Units

116-121
${ }^{1}$ WRI 1016 (https://catalog.pointloma.edu/preview_program.php? catoid=58\&poid=4548\&returnto=3232\#tt6931) is for students who have transferred the first half of the FE 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 FE writing requirement.
${ }^{2}$ 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.
${ }^{3}$ Teacher Education candidates who complete these 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.

## Physical Education/Health Concentration

| Code | Title | Units |
| :--- | :--- | ---: |
| Lower-Division | Requirements |  |
| BIB 1001 | Old Testament History and Religion (FE) | 2 |


| BIB 1002 | New Testament History and Religion (FE) | 3 |
| :---: | :---: | :---: |
| BIO 1003 and BIO 1003L | Introduction to Biology (FE) and Introduction to Biology Laboratory (FE) | 4 |
| COM 1000 | Principles of Human Communication (FE) | 3 |
| HIS 1010 | World Civilizations I (FE) | 3 |
| HIS 1020 | United States History from Early America to the Twentieth Century | 3 |
| LIT 2000 | Literature and Culture (FE) | 2 |
| MTH 1013 | College Algebra (or passing placement exam scores) | 3 |
| MTH 2013 | Fundamentals of Elementary Mathematics I | 3 |
| MTH 2023 | Fundamentals of Elementary Mathematics II | 3 |
| $\begin{aligned} & \text { PHL } 2001 \\ & \quad \text { or PHL } 2011 \end{aligned}$ | Introduction to Philosophy (FE) <br> Ethics (FE) | 3 |
| $\begin{aligned} & \text { POL } 1090 \\ & \quad \text { or SOC } 2001 \end{aligned}$ | The Politics of Race, Class, and Gender (FE) Cultural Anthropology (FE) | 3-4 |
| PSC 1014 | Physical Science for Teachers (FE) | 4 |
| PSC 1023 | Earth and Space Science for Teachers | 3 |
| PSY 1001 | Psychology of Personal Development - First Year Experience (FE) | 3 |
| or PSY 1003 | General Psychology (FE) |  |
| TRE 1001 | Introduction to Theatre (FE) | 2 |
| WRI 1010 | College Composition: Writing and Research - First Year Experience (FE) ${ }^{1}$ | 2-4 |
| or WRI 1016 | College Composition: Research - First Year Experienc (FE) |  |
| Choose one (1) co | ourse from the following: | 2 |
| KIN 1000 | Fitness Through Movement (FE) |  |
| KIN 2000 | Optimal Health (FE) |  |
| SWF 3015 | Health and Well-Being (FE) |  |
| Choose one (1) co | ourse from the following: | 2-3 |
| ART 1000 | Introduction to Art (FE) |  |
| ART 1002 | Fundamentals of Art (FE) |  |
| ART 2000 | History of Art I (FE) |  |
| ART 2001 | History of Art II (FE) |  |
| MUH 1000 | Introduction to Music (FE) |  |
| Choose one (1) of | f the following sequences: | 8 |
| FRE 1001 and FRE 1002 | Elementary French I (FE) and Elementary French II (FE) |  |
| GER 1001 and GER 1002 | Elementary German I (FE) and Elementary German II (FE) |  |
| SPA 1001 and SPA 1002 | Elementary Spanish I (FE) and Elementary Spanish II (FE) |  |
| Upper-Division Requid | equirements |  |
| ART 3019 | Visual Arts in the Classroom I | 3 |
| $\begin{aligned} & \text { CHD } 1020 \\ & \text { or PSY } 3008 \end{aligned}$ | Child and Adolescent Development Developmental Psychology - Birth Through Adolescence | 4 |
| HIS 3070 | California History | 4 |
| KIN 3008 | Methods of Teaching Physical Education | 3 |
| LIT 3025 | Children's Literature | 3 |
| MUE 3041 | Music Skills for the Elementary Classroom Teacher | 3 |
| Choose one (1) course from the following: |  | 3 |
| CHU 3040 | Women in the Christian Tradition (FE) |  |


| CHU 3095 | The Christian Tradition (FE) |  |
| :---: | :---: | :---: |
| THE 3005 | Christian Faith and the Natural Sciences (FE) |  |
| THE 3060 | Christian Life as Vocation (FE) |  |
| THE 3070 | Global Christianity (FE) |  |
| Choose one (1) course from the following: |  | 3 |
| LIT 3050 | Diverse Voices of World Literature (FE) |  |
| LIT 3051 | Diverse Voices of Cinema (FE) |  |
| LIT 3052 | Diverse Voices of American Literature (FE) |  |
| LIT 3053 | Diverse Voices of Women Writers (FE) |  |
| Choose one (1) course from the following: |  | 3-4 |
| MTH 1044 | Calculus with Applications (FE) |  |
| MTH 1064 <br> and <br> MTH 1064L | Calculus I (FE) and Calculus I Lab (FE) |  |
| MTH 3003 | Problem Solving (FE) |  |
| Upper-Division Requirements in Education ${ }^{2,3}$ |  |  |
| 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 |

Concentration Courses

| KIN 2000 | Optimal Health (FE) |
| :--- | :--- |
| KIN 2020 | Team Sports Fundamentals and Strategies (FE) |
| KIN 3012 | Motor Learning and Motor Development |
| SWF 3015 | Health and Well-Being (FE) |
| or PSY 3060 Human Sexuality |  |
| 2-3 units of an approved Education, Kinesiology, or Physical <br> Education course |  |

## Total Units

115-122
1 WRI 1016 (https://catalog.pointloma.edu/preview_program.php? catoid=58\&poid=4548\&returnto=3232\#tt6931) is for students who have transferred the first half of the FE 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 FE writing requirement.
2 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.
${ }^{3}$ Teacher Education candidates who complete these 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.

## Science Concentration

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| BIB 1001 | Old Testament History and Religion (FE) | 2 |
| BIB 1002 | New Testament History and Religion (FE) | 3 |
| COM 1000 | Principles of Human Communication (FE) | 3 |
| HIS 1010 | World Civilizations I (FE) | 3 |
| HIS 1020 | United States History from Early America to the Twentieth Century | 3 |
| LIT 2000 | Literature and Culture (FE) | 2 |
| MTH 1013 | College Algebra (or passing placement exam scores) | 3 |
| MTH 2013 | Fundamentals of Elementary Mathematics I | 3 |
| MTH 2023 | Fundamentals of Elementary Mathematics II | 3 |
| PHL 2001 or PHL 2011 | Introduction to Philosophy (FE) <br> Ethics (FE) | 3 |
| $\begin{aligned} & \text { POL } 1090 \\ & \text { or SOC } 2001 \end{aligned}$ | The Politics of Race, Class, and Gender (FE) Cultural Anthropology (FE) | 3-4 |
| PSC 1014 | Physical Science for Teachers (FE) | 4 |
| PSC 1023 | Earth and Space Science for Teachers | 3 |
| PSY 1001 | Psychology of Personal Development - First Year Experience (FE) | 3 |
| or PSY 1003 | General Psychology (FE) |  |
| TRE 1001 | Introduction to Theatre (FE) | 2 |
| WRI 1010 | College Composition: Writing and Research - First Year Experience (FE) ${ }^{1}$ | 2-4 |
| or WRI 1016 | College Composition: Research - First Year Experi (FE) | ience |

Choose one (1) course from the following: 2

| KIN 1000 | Fitness Through Movement (FE) |
| :--- | :--- |
| KIN 2000 | Optimal Health (FE) |
| SWF 3015 | Health and Well-Being (FE) |
| Choose one (1) course from the following: |  |

Choose one (1) course from the following:

| ART 1000 | Introduction to Art (FE) |
| :--- | :--- |
| ART 1002 | Fundamentals of Art (FE) |
| ART 2000 | History of Art I (FE) |
| ART 2001 | History of Art II (FE) |
| MUH 1000 | Introduction to Music (FE) |
| Choose one (1) of the following sequences: |  |

FRE 1001 Elementary French I (FE)
and FRE 1002 and Elementary French II (FE)
GER 1001 Elementary German I (FE)
and GER 1002 and Elementary German II (FE)
SPA 1001 Elementary Spanish I (FE)
and SPA 1002 and Elementary Spanish II (FE)

## Upper-Division Requirements

| ART 3019 | Visual Arts in the Classroom I | 3 |
| ---: | :--- | ---: |
| CHD 1020 <br> or PSY 3008 | Child and Adolescent Development <br> Developmental Psychology - Birth Through | 4 |
|  | Adolescence |  |

MUE 3041 Music Skills for the Elementary Classroom Teacher 3
Choose one (1) course from the following: 3

| CHU 3040 | Women in the Christian Tradition (FE) |
| :--- | :--- |
| CHU 3095 | The Christian Tradition (FE) |
| THE 3005 | Christian Faith and the Natural Sciences (FE) |
| THE 3060 | Christian Life as Vocation (FE) |
| THE 3070 | Global Christianity (FE) |
| Choose one (1) course from the following: |  |


| LIT 3050 | Diverse Voices of World Literature (FE) |  |
| :---: | :---: | :---: |
| LIT 3051 | Diverse Voices of Cinema (FE) |  |
| LIT 3052 | Diverse Voices of American Literature (FE) |  |
| LIT 3053 | Diverse Voices of Women Writers (FE) |  |
| Choose one (1) course from the following: |  | 3-4 |
| MTH 1044 | Calculus with Applications (FE) |  |
| MTH 1064 and MTH 1064L | Calculus I (FE) and Calculus I Lab (FE) |  |
| MTH 3003 | Problem Solving (FE) |  |
| Upper-Division Requirements in Education ${ }^{\text {2,3 }}$ |  |  |
| 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 |

Concentration Courses

BIO 2010 Cell Biology and Biochemistry (FE)
and BIO 2010L and Cell Biology and Biochemistry Laboratory (FE)
BIO 2011 Ecological and Evolutionary Systems (FE)
and BIO 2011L and Ecological and Evolutionary Systems
Laboratory (FE)
Choose one (1) sequence from the following:
CHE 1003 Introduction to General, Organic, and Biological
and Chemistry (FE)
CHE 1003L and Introduction to General, Organic, and Biological Chemistry Lab (FE)
CHE 1052 General Chemistry I (FE)
and and General Chemistry I Lab (FE)
CHE 1052L

## Total Units

${ }^{1}$ WRI 1016 (https://catalog.pointloma.edu/preview_program.php? catoid=58\&poid=4548\&returnto=3232\#tt6931) is for students who have transferred the first half of the FE 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 FE writing requirement.
${ }^{2}$ 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.
${ }^{3}$ Teacher Education candidates who complete these 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.

## Visual and Performing Arts Concentration

| Code | Title | Units |
| :---: | :---: | :---: |
| Lower-Division Requirements |  |  |
| BIB 1001 | Old Testament History and Religion (FE) | 2 |
| BIB 1002 | New Testament History and Religion (FE) | 3 |
| BIO 1003 and BIO 1003L | Introduction to Biology (FE) and Introduction to Biology Laboratory (FE) | 4 |
| COM 1000 | Principles of Human Communication (FE) | 3 |
| HIS 1010 | World Civilizations I (FE) | 3 |
| HIS 1020 | United States History from Early America to the Twentieth Century | 3 |
| LIT 2000 | Literature and Culture (FE) | 2 |
| MTH 1013 | College Algebra (or passing placement exam scores) | 3 |
| MTH 2013 | Fundamentals of Elementary Mathematics I | 3 |
| MTH 2023 | Fundamentals of Elementary Mathematics II | 3 |
| $\begin{aligned} & \text { PHL } 2001 \\ & \text { or PHL } 2011 \end{aligned}$ | Introduction to Philosophy (FE) Ethics (FE) | 3 |
| $\begin{aligned} & \text { POL } 1090 \\ & \text { or SOC } 2001 \end{aligned}$ | The Politics of Race, Class, and Gender (FE) Cultural Anthropology (FE) | 3-4 |
| PSC 1014 | Physical Science for Teachers (FE) | 4 |
| PSC 1023 | Earth and Space Science for Teachers | 3 |
| PSY 1001 | Psychology of Personal Development - First Year Experience (FE) | 3 |
| or PSY 1003 | General Psychology (FE) |  |
| TRE 1001 | Introduction to Theatre (FE) | 2 |
| WRI 1010 | College Composition: Writing and Research - First Year Experience (FE) ${ }^{1}$ | 2-4 |
| or WRI 1016 | College Composition: Research - First Year Experi (FE) | ience |

Choose one (1) course from the following: 2

| KIN 1000 | Fitness Through Movement (FE) |  |
| :--- | :--- | :--- |
| KIN 2000 | Optimal Health (FE) |  |
| SWF 3015 | Health and Well-Being (FE) |  |
| Choose one (1) course from the following: | $2-3$ |  |


| ART 1000 | Introduction to Art (FE) |
| :--- | :--- |
| ART 1002 | Fundamentals of Art (FE) |
| ART 2000 | History of Art I (FE) |
| ART 2001 | History of Art II (FE) |
| MUH 1000 | Introduction to Music (FE) |
| Choose one (1) of the following sequences: | 8 |

FRE 1001 Elementary French I (FE)
and FRE 1002 and Elementary French II (FE)
GER 1001 Elementary German I (FE)
and GER 1002 and Elementary German II (FE)
SPA 1001 Elementary Spanish I (FE)
and SPA 1002 and Elementary Spanish II (FE)

## Upper-Division Requirements

| ART 3019 | Visual Arts in the Classroom I | 3 |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { CHD } 1020 \\ & \text { or PSY } 3008 \end{aligned}$ | Child and Adolescent Development Developmental Psychology - Birth Through Adolescence | 4 |
| HIS 3070 | California History | 4 |
| KIN 3008 | Methods of Teaching Physical Education | 3 |
| LIT 3025 | Children's Literature | 3 |
| MUE 3041 | Music Skills for the Elementary Classroom Teacher | 3 |
| Choose one (1) course from the following: |  | 3 |
| CHU 3040 | Women in the Christian Tradition (FE) |  |
| CHU 3095 | The Christian Tradition (FE) |  |
| THE 3005 | Christian Faith and the Natural Sciences (FE) |  |
| THE 3060 | Christian Life as Vocation (FE) |  |
| THE 3070 | Global Christianity (FE) |  |
| Choose one (1) course from the following: |  | 3 |
| LIT 3050 | Diverse Voices of World Literature (FE) |  |
| LIT 3051 | Diverse Voices of Cinema (FE) |  |
| LIT 3052 | Diverse Voices of American Literature (FE) |  |
| LIT 3053 | Diverse Voices of Women Writers (FE) |  |
| Choose one (1) course from the following: |  | 4 |
| MTH 1044 | Calculus with Applications (FE) |  |
| MTH 1064 <br> and <br> MTH 1064L | Calculus I (FE) <br> and Calculus I Lab (FE) |  |
| MTH 3003 | Problem Solving (FE) |  |
| Upper-Division Requirements in Education ${ }^{\text {2,3 }}$ |  |  |
| 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 |

Concentration Courses ${ }^{4}$ ..... 12
Art Emphasis:
ART 1004 Three-Dimensional Design: Composition and Space
or ART 1015 Drawing I
ART 3019 Visual Arts in the Classroom I
TRE 3054 Movement
Choose one (1) course from the following:
ART 3004 Modern Art History
ART 3005 Contemporary Art History
ART 3025 Non-Western Art History
ART 3035 Design History: Industrial Revolution to
Contemporary Design
Music Emphasis:
MUA 2012 Beginning Conducting
MUE 3041 Music Skills for the Elementary Classroom Teacher
TRE 3054 Movement
Private Lessons or Instrumental Band (2 units)
Choose one (1) course from the following

| MUH $1001 \quad$ Introduction to Listening (FE) |
| :--- |
| MUH $3034 \quad$ World Music |
| Theatre Emphasis: |
| ART $3019 \quad$ Visual Arts in the Classroom I |
| TRE $2070 \quad$ Acting |
| TRE $3050 \quad$ Musical Theatre |
| TRE $3054 \quad$ Movement |
| Total Units |
| 1 WRI 1016 (https://catalog.pointloma.edu/preview_program.php? |
| catoid=58\&poid=4548\&returnto=3232\#tt6931) is for students who |
| have transferred the first half of the FE 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 FE writing |
| requirement. |
| 2 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. |
| Teacher Education candidates who complete these 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. |
| Choose one (1) Emphasis within the concentration. |

## 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 non-EDU 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 the passage of FERPA training, prior to registration in any Education course.
- Passage of the California Basic Skills Test (CBEST) is required prior to registration in their third EDU course.
- 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-Teacher Education major in the 2016-17 academic year and beyond, and who fulfill all major requirements, are covered by the Elementary Subject Matter Competency Waiver and waived from the CSET exam toward the Multiple Subjects Teaching Credential. Candidates who fulfill major requirements listed in catalogs prior to 2016-17 must pass the Multiple Subjects CSET exam upon completion of 12 Education units.


## 4-Year Credential Track: Single Subject Teaching Credential <br> 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. (p. 25) (Single Subject Art California Teaching Credential)
- Biology, B.A. (p. 109) (Single Subject Science California Teaching Credential)
- Health and Human Performance, B.A. (p. 99) (Single Subject Physical Education California Teaching Credential)
- French, B.A. (p. 66) (Single Subject World Languages: French California Teaching Credential)
- History, B.A. (p. 45) (Single Subject Social Sciences Teaching Credential)
- Literature-English Education, B.A. (p. 67) (Single Subject English Teaching Credential)
- Mathematics, B.S. (p. 137) (Single Subject Mathematics Teaching Credential)
- Music Education, B.A. (p. 88) (Single Subject Music California Teaching Credential)
- Spanish, B.A. (p. 69) (Single Subject World Languages: Spanish California Teaching Credential)

For the 4 -year credential track, the following 3000 or 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 3rd credential course, meeting all program, university and state requirements for classroom observations and tests required prior to student teaching. Students will be vetted through a screening process, which may include a faculty interview, prior to being placed in student teaching. Candidates major in the academic discipline of their choice (e.g. Kinesiology) 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

| Code | Title | Units |
| :---: | :---: | :---: |
| EDU 3002 | Foundations of Education and Learning Theory ${ }^{1}$ | 3 |
| EDU 3006 | Principles of Language Acquisition ${ }^{1}$ | 3 |
| EDU 4004 | Foundations of Special Education ${ }^{1}$ | 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 ${ }^{1}$ | 3 |
| EDU 4021 | General Methods for Secondary Teachers ${ }^{1}$ | 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 |
| Choose one (1) course from the following based on major: |  | 3 |
| EDU 4033 | Methods for Teaching Secondary Mathematics (Mathematics Majors) |  |
| EDU 4034 | Methods of Teaching Secondary Science (Biology Major) ${ }^{2}$ |  |
| EDU 4035 | Methods of Teaching Secondary Social Science (History Majors) |  |
| EDU 4036 | Methods for Teaching Secondary Foreign Language (French/Spanish Majors) |  |
| EDU 4037 | Methods for Teaching Secondary Visual Arts (Art Education Majors) ${ }^{3}$ |  |
| EDU 4038 | Methods for Teaching Secondary Physical Education (Exercise and Sports Science Majors) |  |
| EDU 4039 | Content-Specific Pedagogy for Secondary Teachers (Music Education Majors) ${ }^{4}$ |  |

${ }^{1}$ Requires 20 hours of supervised field experience working with students in a classroom setting.
${ }^{2}$ BIO 4063 also satisfies this credential requirement.
3 ART 4055 also satisfies this credential requirement.
${ }^{4}$ MUE 4054 also satisfies this credential requirement.

## Post-Baccalaureate Multiple

 Subjects Teaching Credentials Multiple Subjects Teaching CredentialCross Disciplinary Studies: Teacher Education, B.A (p. 198). majors complete a 128-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 3000 or 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 128-unit undergraduate degree is fulfilled, the candidate would apply to the Graduate School of Education
and complete the remaining courses required for the credential postbaccalaureate.

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

| Code | Title | Units |
| :--- | :--- | ---: |
| EDU 4009 | Classroom Assessment and Research Practices | 3 |
| EDU 4010 | Methods of Teaching Reading and Writing (with <br> fieldwork) | 3 |
| EDU 4022 | Interdisciplinary Approaches to Teaching in the <br> 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 | $\mathbf{1}$ |
| Total Units |  | $\mathbf{1 9}$ |

${ }^{1}$ 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 (p. 198). majors have the option of adding additional units to the undergraduate degree in fulfillment of a Special Education Teaching Credential. This would serve as a second credential, added onto either a Multiple-Subjects Teaching Credential or a Single Subject 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 6000level credential courses, and cross listed courses cannot be repeated between the undergraduate and graduate programs. These courses represent the required course for the California Education SpecialistMild/Moderate Teaching Credential. At the point that the 128-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. [Note: The Special Education Teaching Credential-Moderate/Severe can also be pursued post-graduation.]

## Requirements

| Code | Title | Units |
| :--- | :--- | ---: |
| EDU 4092 | Assessment and Services for Students with | 3 |
|  | Disabilities |  |


| EDU 4093 | Curricular and Instructional Adaptations for <br> Students with Mild/Moderate Disabilities | 3 |
| :--- | :--- | :--- | :--- |
| EDU 4094 | Collaboration and Consultation for IEP <br> Implementation, Evaluation, and Program <br> Involvement | 3 |
| EDU 4070M | Special Education Mild/Moderate Clinical Practice <br> I | 4 |
| EDU 4074M | Special Education Mild/Moderate Clinical Practice <br> II | 4 |
| EDU 40CP1 | Elementary Clinical Practice Seminar I | 1 |
| EDU 40CP2 | Elementary Clinical Practice Seminar II | 1 |
| Total Units |  | 19 |

## 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 NSG 1050 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, the student may re-apply for the following academic year.

A minimum of $C$ or better must be earned by pre-nursing and nursing students for all co/pre-requisite and nursing courses. Students are allotted one repeat (i.e. earned grade less than C) of a co/pre-requisite or nursing course. Upon the need for a second repeat of any co/pre-requisite or nursing course the student will be disqualified for application in the Nursing major or unable to progress in the nursing program.

PLNU does not offer an accelerated nursing program.
For further information:

- http://www.pointloma.edu/nursing (http://www.pointloma.edu/ nursing/)
- (Office) 619-849-7803 or (email) nursing@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. Deadline is February 15.
- Cumulative Grade Point Average (GPA) of 3.000 or better on a fourpoint scale.
- Completion of NSG 1050 with a minimum grade of "B."
- Caring Faithfully; Intro to Nursing (2 semester units - PLNU prenursing 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 and background check.
- Submission of documentation for requirements per clinical sites (e.g. vaccinations, TB screening, etc.)


## 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, etc. Being a PLNU student and meeting the eligibility requirements does not guarantee admission into the nursing program as admission is competitive and clinical space in nursing courses is limited. If a student is not selected, the student may re-apply for the following academic year.

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 (e.g., COVID, Tdap, MMR, etc.) 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, and must be valid through May.


## 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 every semester to Sophomore, Junior, and Senior Nursing students.
- Students are required to purchase uniforms, watch with second hand, sphygmomanometer (adult blood pressure cuff), stethoscope, pen light and scissors, 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

Dean - Michelle Federe Riingen, DNP, RN, CNS-BC, PHN
Mary Adams, PhD, RN
Loyola University Chicago
Angelica Almonte, PhD, RN
University of San Diego
Carrie Black, RN, MSN, PHN
Program Director, RN-BSN
University of Phoenix
Heather Garcia, MSN, RN, CNS, CPN
Point Loma Nazarene University
Son Chae Kim, PhD, RN
Associate Dean, Graduate Programs
University of San Diego
Larry Rankin, PhD, RN, CNE
University of Michigan
Michelle Federe Riingen, DNP, RN, CNS-BC, PHN
Case Western Reserve University
Monique Sawyer, DNP, RN, PMHNP-BC
Associate Dean-Traditional Undergraduate Program
Arizona State University
Molly Sperry, DNP, RN, CNE, CPN
American Sentinel University

## Grand Canyon University

To view requirements for majors, minors, and certificates, see the Degree Program Information (p. 244) page.

- Traditional Undergraduate Nursing (p. 212)
- Nursing, B.S.N. (p. 212)


## Nursing

NSG 1050 Caring Faithfully: An Introduction to Nursing (2 Units)
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.
Prerequisite(s): Minimum grade of "C" in BIO 1030 and CHE 1003 and CHE 1003L.
Corequisite(s): BIO 1040, NSG 2050 (for transfer students)
Minimum grade of " B " required.

## NSG 2046 Transition to Nursing (2 Units)

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
NSG 2050 Nursing of Individuals: Adult Health I (3 Units)
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.
Corequisite(s): BIO 2020
Concurrent: NSG 2051; NSG 1050 (for transfer students)
NSG 2051 Nursing of Individuals: Clinical Practicum I (3 Units) 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.
Credit/No Credit.
Concurrent: NSG 2050
NSG 2055 Changing Minds, Changing Lives (1 Unit)
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 Units)
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): BIO 2020, NSG 2050, and NSG 2051
Corequisite(s): CHD 1050 (or NSG 4042) and NUT 2025
Concurrent: NSG 2061 and NSG 2070

NSG 2061 Nursing of Individuals: Clinical Practicum II (3 Units) 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.
Credit/No Credit.
Concurrent: NSG 2060
NSG 2070 Pharmacology in Nursing (2 Units)
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 Unit)
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 Unit)
Application of physical, psychological, cultural, and spiritual assessments of the individual and the family.
A clinical course which includes laboratory activities and independent practice. Credit/No Credit.
Prerequisite(s): Advanced placement and consent of instructor.
Concurrent: NSG 3000
NSG 3010 Nursing of Families: Child/Adolescent Focus (2 Units)
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 (2.5 Units)
Consists of opportunities for application of nursing theory and child development as it relates to the child, adolescent clients and their families.
Credit/No Credit.
Concurrent: NSG 3010
NSG 3030 Nursing of Families: The Childbearing Process (2 Units)
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: Childbearing Process Clinical

## Practicum (2.5 Units)

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.
Credit/No Credit.
Concurrent: NSG 3030
NSG 3040 Nursing of Families: Adult Health III (2 Units)
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 Units)
Nursing process is applied to adults experiencing multi-system failure. Emphasis is placed on assessment of individual and family needs in critical illness.
Credit/No Credit.
Concurrent: NSG 3040
NSG 3045 Transition to Professional Nursing (3 Units)
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 3055 Mindful Self-Compassion (1 Unit)

The Mindful Self-Compassion (MSC) course focuses on building the resources of mindfulness and self-compassion to promote psychological well-being and build resilience capacity in healthcare providers. Providing care to individuals living with physical, emotional, psychological, spiritual illnesses can be challenging physically, emotionally, and psychologically for the care provider. MSC offers care providers a holistic mechanism to maintain their own health and wellness.
NSG 3095 Clinical Nursing Internship (1-3 Units)
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 > 3.00 ) may apply for summer session only.
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.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.

## NSG 3099 Nursing Research (2 Units)

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): MTH 2003, WRI 1010 (or WRI 1015 /WRI 1016), and Junior standing in Nursing program.
Concurrent: NSG 3040 and NSG 3041
NSG 4041 Topics in Nursing (1-3 Units)
Offers concentrations of study in selected areas of nursing practice. Topics include a theory component and may include a clinical component.
May be repeated up to a total of nine (9) units.
Prerequisite(s): Consent of instructor.

NSG 4042 Health Promotion in Adult Development (2 Units)
Explores development of the individual from early adulthood to death. Biophysical and psychosocial issues are explored as they apply to early adulthood, middlescence 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 Units) 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 Units)

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 Units)
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 (2 Units)

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.
Credit/No Credit.
Concurrent: NSG 4050, NSG 4060, and NSG 4061
NSG 4060 Nursing of Communities: Community Health Focus (3 Units)
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 4050, NSG 4051, and NSG 4061
NSG 4061 Nursing of Communities: Community Health Focus Clinical Practicum (1 Unit)
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.
Credit/No Credit.
Concurrent: NSG 4060

NSG 4070 Leading Faithfully: A Synthesis and Transition to Professional Nursing Practice (3 Units)
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: Transitions to Practice (1 Unit) The exploration and analysis of milestones, concepts, and issues associated with transitioning from the role of student nurse to professional nurse.
Prerequisite(s): Senior standing in Nursing program.
Corequisite(s): NSG 4070 and NSG 4081
NSG 4081 Nursing Capstone Practicum (3 Units)
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 4070 and NSG 4080
NSG 4090 Special Studies in Nursing (1-2 Units)
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 up to a total of six (6) units.
Prerequisite(s): NSG 2060, NSG 2061, and NSG 2070; GPA of 3.000 in
Nursing program, and consent of instructor.
NSG 4091 Directed Clinical Studies in Nursing (1-3 Units) 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 up to a total of six (6) units. 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 Units)
See NSG 3095 for description.
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.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.

## Traditional Undergraduate Nursing

## Nursing, B.S.N. <br> 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.
Code

Lower-Division Requirements $\quad$| Title |
| :--- | Units

| PSY 1001 | Psychology of Personal Development - First Year Experience (FE) ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| Foundational Exploration units from The Social World |  | 3-4 |
| Upper-Division Requirements |  |  |
| NSG 3010 | Nursing of Families: Child/Adolescent Focus | 2 |
| NSG 3011 | Nursing of Families: Child/Adolescent Clinical Practicum | 2.5 |
| NSG 3030 | Nursing of Families: The Childbearing Process | 2 |
| NSG 3031 | Nursing of Families: Childbearing Process Clinical Practicum | . 5 |
| NSG 3040 | Nursing of Families: Adult Health III | 2 |
| NSG 3041 | Nursing of Families: Adult Health III Clinical Practicum | 3 |
| NSG 3055 | Mindful Self-Compassion | 1 |
| NSG 3099 | Nursing Research | 2 |
| NSG 4050 | Nursing of Communities: Mental Health Focus | 3 |
| NSG 4051 | Nursing of Communities: Mental Health Clinical Practicum | 2 |
| 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: Transitions to Practice | 1 |
| NSG 4081 | Nursing Capstone Practicum | 3 |
| PSY 3021 | Abnormal Psychology | 3 |
| SOC 3060 | Race and Ethnicity | 3 |
| Total Units |  | -89 |

${ }^{1}$ Prerequisite to Nursing program, i.e., admission to NSG 2050 and NSG 2051.
2 May be allowed to complete concurrent with first Nursing course.
3 A grade of at least "C" is required in BIO 2020, BIO 2020L, MTH 2003, and WRI 1010.
${ }^{4}$ Must be completed by the end of the sophomore year.
${ }^{5}$ 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.

Note(s): A minimum of $C$ or better must be earned by pre-nursing and nursing students for all prerequisite, corequisite, and nursing courses. Students are allotted one repeat (i.e. earned grade less than C) of a prerequisite, corequisite, or nursing course. Upon the need for a second repeat of any prerequisite, corequisite, or nursing course the student will be disqualified for application in the Nursing major or unable to progress in the nursing program.

## 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."
- To prepare students to apply principles of Christian formation for the practice of ministry.


## 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, articles in scholarly journals, books, and resources for pastors and Church leaders. 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 seminary or 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, up to six units can be earned through the summer ministries program by working in a local church, urban mission, or summer camp.

## Faculty

Dean - Mark Maddix, Ph.D.
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.
Trinity Evangelical Divinity School
Mark Mann, Ph.D.
Boston University
Stephanie Matthews, Ph.D.
Vanderbilt University
Heather Ross, M.A.
De Paul University
Robert Thompson, Ph.D.

## University of Oklahoma

Montague Williams, Ph.D.
Boston University
To view requirements for majors, minors, and certificates, see the Degree Program Information (p. 244) page.

- Traditional Undergraduate Theology and Christian Ministry (p. 217)
- Christian Studies, B.A. (p. 217)
- Philosophy, B.A. (p. 221)
- Biblical Studies Minor (p. 222)
- Christian Mission \& Intercultural Ministry Minor (p. 222)
- Christian Studies Minor (p. 222)
- Philosophy Minor (p. 223)
- Science and Christian Faith Minor (p. 223)
- Vocational Ministry Minor (p. 223)
- Worship Arts Minor (p. 223)
- Youth and Family Ministries Minor (p. 223)
- Intercultural Ministries Certificate (p. 224)
- Leadership in Ministry Certificate (p. 224)
- Spiritual Formation Certificate (p. 224)


## Bible

BIB 1001 Old Testament History and Religion (FE) (2 Units)
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 (FE) (3 Units) 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 Units)

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 Units)
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 Units)
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 Units) 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 Units)
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 Units)
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 Units)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 Units)
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 Units)
An investigation of a topic in biblical studies not otherwise covered in the curriculum.
May be repeated up to a total of nine (9) units.
Prerequisite(s): Consent of the Dean of the School of Theology and Christian Ministry

## BIB 4095 Seminar in Biblical Literature (3 Units)

Advanced study in a topic in Bible.
May be repeated up to a total of six (6) units.
Prerequisite(s): BIB 1001 or BIB 1002 and consent of instructor.

## Church History

CHU 3040 Women in the Christian Tradition (FE) (3 Units)
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 (FE) (3 Units)
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

## Christian Ministry

CMI 1055 Christian Formation and Ministry (3 Units)
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 Units)
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 Units)
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 Units) Students will explore approaches to the discipleship ministries for youth in the local church and parachurch organizations.
CMI 3045 Enacting Worship (3 Units)
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 Units)
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 Units)
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 Units)
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 Units)
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 Units)
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 congregationallybased, direct-action approaches to local ministry.
Prerequisite(s): CMI 1055
CMI 4025 Youth and Family Ministry (3 Units)
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 Units)

Supervised on-site ministry to help students integrate theory and classroom experience with the practice of ministry.
May be repeated up to a total of six (6) units. Credit/No Credit.
Prerequisite(s): BIB 1001 or BIB 1002 and CMI 1055 and consent of instructor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.
CMI 4090 Special Studies in Christian Ministry (1-3 Units)
An investigation of a topic in Christian ministries not otherwise covered in the curriculum.
May be repeated up to a total of nine (9) units.
Prerequisite(s): Consent of the dean of the School of Theology and Christian Ministry

## Biblical Languages

GRK 2007 Biblical Greek I (FE) (4 Units)
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 (FE) (4 Units)

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 (FE) (4 Units)
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 (FE) (4 Units)

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

## Philosophy

PHL 2001 Introduction to Philosophy (FE) (3 Units)
A historical survey of selected philosophical ideas, systems, and methods, especially as these have developed in Western civilization.

## PHL 2011 Ethics (FE) (3 Units)

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 Units)
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. Agustine, 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 Units)
A study of the logical appraisal of arguments with attention given to formal and informal fallacies.

## PHL 3001 Plato and Aristotle (3 Units)

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 Units)
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 Units)
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.
Also offered as SOC 3021.
Prerequisite(s): PHL 2001 or PHL 2011
PHL 3031 Existential Philosophy and Literature (3 Units)
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 Units)
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 Units)
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 Units)
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 Units)
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 Units)
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 Units)
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 Units)
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 Units)
An investigation of a topic in philosophy not otherwise covered in the curriculum.
May be repeated up to a total of nine (9) units.
Prerequisite(s): Consent of the dean of the School of Theology and Christian Ministry.

## Theology

THE 2050 Introduction to Christian Theology (3 Units)
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 (FE) (3 Units)
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 Units)
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 Units) 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 Units)
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 Units) 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 Units)
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 Units)
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 (FE) (3 Units)
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 (FE) (3 Units)
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 Units)
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 Units)
This course will study traditions of Protestant theology in their historical origins, classic expressions, and contemporary manifestations.

THE 4090 Special Studies in Theology (1-3 Units)
An examination of a topic in theology not otherwise studied in the curriculum.
May be repeated up to a total of nine (9) 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 Units)
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.

## Traditional Undergraduate Theology and Christian Ministry 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

- Biblical Studies (p. 217)
- General Christian Studies (p. 218)
- Leadership (p. 219)
- Philosophy (p. 219)
- Theology (p. 220)
- Youth and Family (p. 221)


## Biblical Studies Concentration

| Code | Title | Units |
| :--- | :--- | ---: |
| Required Courses |  |  |
| BIB 1001 | Old Testament History and Religion (FE) | 2 |
| BIB 1002 | New Testament History and Religion (FE) | 3 |
| BIB 2040 | Reading Scripture Faithfully | 3 |
| CHU 3095 | The Christian Tradition (FE) | 3 |
| CMI 1055 | Christian Formation and Ministry | 3 |
| PHL 2001 | Introduction to Philosophy (FE) | 3 |
| or PHL 2011 | Ethics (FE) | 3 |
| PHL 2050 | God and Philosophy | 3 |


| THE 4095 | Justice in the Church: Gender, Households, and <br> Unity in the Body of Christ |
| :--- | :--- |
| Choose one (1) of the following sequences: |  |
| HEB 2005 <br> and HEB 2006 | Biblical Hebrew I (FE) <br> and Biblical Hebrew II (FE) |
| GRK 2007 | Biblical Greek I (FE) |
| and GRK 2008 | and Biblical Greek II (FE) |


| BIB 4090 | Special Studies in Bible |  |
| ---: | :--- | :--- |
| BIB 4095 | Seminar in Biblical Literature |  |
| Total Units |  | $\mathbf{5 8}$ |

## General Christian Studies Concentration

Code Title Units

## Required Courses

| BIB 1001 | Old Testament History and Religion (FE) | 2 |
| :--- | :--- | :--- |
| BIB 1002 | New Testament History and Religion (FE) | 3 |
| BIB 2040 | Reading Scripture Faithfully | 3 |
| CHU 3095 | The Christian Tradition (FE) | 3 |
| CMI 1055 | Christian Formation and Ministry | 3 |
| PHL 2001 | Introduction to Philosophy (FE) | 3 |
| or PHL 2011 | Ethics (FE) |  |
| PHL 2050 | God and Philosophy | 3 |
| THE 2050 | Introduction to Christian Theology | 3 |
| THE 4095 | Justice in the Church: Gender, Households, and <br> Unity in the Body of Christ | 3 |
| Choose one (1) of the following sequences: | 8 |  |

Choose one (1) of the following sequences: 8

HEB 2005 Biblical Hebrew I (FE)
and HEB 2006 and Biblical Hebrew II (FE)
GRK 2007 Biblical Greek I (FE)
and GRK 2008 and Biblical Greek II (FE)

## Concentration Courses

Choose eight (8) upper-division courses from the following: ${ }^{1} 24$
$\begin{array}{ll}\text { BIB } 3035 & \text { New Testament Books and Early Churches: } \\ & \text { Sermon, Letter, and Apocalypse }\end{array}$
BIB 3078 Old Testament Psalms and Wisdom Literature: Worship and Wisdom in a World of Suffering and Injustice
BIB 4001 Jesus and the Gospels: Four Portraits of One Christ
BIB 4002 The Letters of Paul: Faith, Hope, and Love Across Distance and Difference
BIB 4010 Biblical Theology
BIB 4013 Old Testament Torah and Israel's History: God's Story and God's People
BIB 4014 Old Testament Prophets and the Holy Imagination: Power, Gender, Justice, and Economics
BIB 4090 Special Studies in Bible
BIB 4095 Seminar in Biblical Literature
CMI 3000 Teaching and Preaching the Bible
CMI 3025 Christian Care of Souls
CMI 3040 Foundations for the Practice of Youth Ministry
CMI 3045 Enacting Worship
CMI $3050 \quad$ Church as a Witness to the World
CMI 4000 The Christian Gathering: Scripture, Baptism, and Eucharist
CMI 4010 Leading in Ministry
CMI 4015 The Church of the Nazarene: History and Polity
CMI 4020 Compassionate Ministry in Local Context
CMI 4025 Youth and Family Ministry
CMI 4090 Special Studies in Christian Ministry
PHL 2077 Logic

| PHL 3001 | Plato and Aristotle |
| :--- | :--- |
| PHL 3002 | Descartes Through Hegel |
| PHL 3021 | Justice, Politics, and the Social World |
| PHL 3031 | Existential Philosophy and Literature |
| PHL 3041 | Philosophy and Art |
| PHL 3060 | Philosophy and the Sciences |
| PHL 3071 | Education and the Ethical Life |
| PHL 3080 | Alienation, Transformation, and Reconciliation in <br>  <br> PHL 3081 |
| THE 3005 | Ethics, Responsibility, and Love |
| THE 3015 | Christian Faith and the Natural Sciences (FE) |
| THE 3020 | The World's Faith Traditions |
| THE 3025 | The Human Person and Theology and Psychology |
| THE 3030 | Christ and the Church |
| THE 3035 | Christian Ethics |
| THE 4010 | The Ministry and Sermons of John Wesley |
| THE 4015 | Three Traditions of Protestant Theology |

Total Units
${ }^{1}$ Student must take a minimum of one (1) course in each of the following: BIB, CMI, PHL, and THE.

## Leadership Concentration

| Code | Title | Units |
| :--- | :--- | ---: |
| Required Courses |  |  |
| BIB 1001 | Old Testament History and Religion (FE) | 2 |
| BIB 1002 | New Testament History and Religion (FE) | 3 |
| BIB 2040 | Reading Scripture Faithfully | 3 |
| CHU 3095 | The Christian Tradition (FE) | 3 |
| CMI 1055 | Christian Formation and Ministry | 3 |
| PHL 2001 | Introduction to Philosophy (FE) | 3 |
| or PHL 2011 | Ethics (FE) | 3 |
| PHL 2050 | God and Philosophy | 3 |
| THE 2050 | Introduction to Christian Theology | 3 |
| THE 4095 | Justice in the Church: Gender, Households, and |  |
| Choose one (1) of the following sequences: | 8 |  |


| HEB 2005 | Biblical Hebrew I (FE) |  |
| :--- | :--- | ---: |
| and HEB 2006 | and Biblical Hebrew II (FE) |  |
| GRK 2007 <br> and GRK 2008 | Biblical Greek I (FE) |  |
| and Biblical Greek II (FE) |  |  |
| Concentration Courses | 3 |  |
| 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 | 3 |
|  | Eucharist | 3 |
| CMI 4010 | Leading in Ministry | 3 |
| CMI 4015 | The Church of the Nazarene: History and Polity |  |
| CMI 4020 | Compassionate Ministry in Local Context | 3 |
| CMI 4050 | Internship | $1-3$ |
| Choose three (3) | upper-division courses from the following: ${ }^{2}$ | 9 |


| BIB 3035 | New Testament Books and Early Churches: Sermon, Letter, and Apocalypse |
| :---: | :---: |
| BIB 3078 | Old Testament Psalms and Wisdom Literature: Worship and Wisdom in a World of Suffering and Injustice |
| BIB 4001 | Jesus and the Gospels: Four Portraits of One Christ |
| BIB 4002 | The Letters of Paul: Faith, Hope, and Love Across Distance and Difference |
| BIB 4010 | Biblical Theology |
| BIB 4013 | Old Testament Torah and Israel's History: God's Story and God's People |
| BIB 4014 | Old Testament Prophets and the Holy Imagination: Power, Gender, Justice, and Economics |
| BIB 4090 | Special Studies in Bible |
| BIB 4095 | Seminar in Biblical Literature |
| PHL 3001 | Plato and Aristotle |
| PHL 3002 | Descartes Through Hegel |
| PHL 3021 | Justice, Politics, and the Social World |
| PHL 3031 | Existential Philosophy and Literature |
| PHL 3041 | Philosophy and Art |
| PHL 3060 | Philosophy and the Sciences |
| PHL 3071 | Education and the Ethical Life |
| PHL 3080 | Alienation, Transformation, and Reconciliation in Film |
| PHL 3081 | Ethics, Responsibility, and Love |
| THE 3005 | Christian Faith and the Natural Sciences (FE) |
| THE 3015 | Christian and Religious Themes in Literature |
| THE 3020 | The World's Faith Traditions |
| THE 3025 | The Human Person and Theology and Psychology |
| THE 3030 | Christ and the Church |
| THE 3035 | Christian Ethics |
| THE 4010 | The Ministry and Sermons of John Wesley |
| THE 4015 | Three Traditions of Protestant Theology |
| Choose three (3) interdisciplinary units from the following: |  |
| MGT 2012 | Principles of Management |
| MGT 3082 | Applied Entrepreneurship |
| MGT 4070 | Nonprofit Organization Management |

Total Units
68-70
${ }^{1}$ Required for students who are seeking to complete the educational requirement for ordination in the Church of the Nazarene.
2 Student must take a minimum of one (1) course in each of the following: BIB, PHL, and THE.

## Philosophy Concentration

| Code | Title | Units |
| :--- | :--- | ---: |
| Required Courses |  |  |
| BIB 1001 | Old Testament History and Religion (FE) | 2 |
| BIB 1002 | New Testament History and Religion (FE) | 3 |
| BIB 2040 | Reading Scripture Faithfully | 3 |
| CHU 3095 | The Christian Tradition (FE) | 3 |
| CMI 1055 | Christian Formation and Ministry | 3 |
| PHL 2001 | Introduction to Philosophy (FE) | 3 |


| or PHL 2011 | Ethics (FE) | 3 |
| :--- | :--- | ---: |
| PHL 2050 | God and Philosophy |  |
| THE 2050 | Introduction to Christian Theology | 3 |
| THE 4095 | Justice in the Church: Gender, Households, and <br> Unity in the Body of Christ | 3 |
| Choose one (1) of the following sequences: |  |  |
| HEB 2005 | Biblical Hebrew I (FE) |  |
| and HEB 2006 | and Biblical Hebrew II (FE) |  |


| PHL 3041 | Philosophy and Art |
| :--- | :--- |
| PHL 3060 | Philosophy and the Sciences |
| PHL 3071 | Education and the Ethical Life |

## Theology Concentration

Code Title Units

## Required Courses

| BIB 1001 | Old Testament History and Religion (FE) | 2 |
| :--- | :--- | :--- |
| BIB 1002 | New Testament History and Religion (FE) | 3 |
| BIB 2040 | Reading Scripture Faithfully | 3 |
| CHU 3095 | The Christian Tradition (FE) | 3 |
| CMI 1055 | Christian Formation and Ministry | 3 |
| PHL 2001 | Introduction to Philosophy (FE) | 3 |
| or PHL 2011 | Ethics (FE) |  |
| PHL 2050 | God and Philosophy | 3 |
| THE 2050 | Introduction to Christian Theology | 3 |
| THE 4095 | Justice in the Church: Gender, Households, and <br>  <br> Unity in the Body of Christ | 3 |
| Choose one (1) of the following sequences: | 8 |  |


| HEB 2005 | Biblical Hebrew I (FE) |
| :--- | :--- |
| and HEB 2006 | and Biblical Hebrew II (FE) |
| GRK 2007 | Biblical Greek I (FE) |
| and GRK 2008 | and Biblical Greek II (FE) |

## Concentration Courses

Choose three (3) upper-division courses from the following: 9

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


| CMI 4020 | Compassionate Ministry in Local Context |
| :---: | :---: |
| CMI 4025 | Youth and Family Ministry |
| CMI 4090 | Special Studies in Christian Ministry |
| PHL 3001 | Plato and Aristotle |
| PHL 3002 | Descartes Through Hegel |
| PHL 3021 | Justice, Politics, and the Social World |
| PHL 3031 | Existential Philosophy and Literature |
| PHL 3041 | Philosophy and Art |
| PHL 3060 | Philosophy and the Sciences |
| PHL 3071 | Education and the Ethical Life |
| PHL 3080 | Alienation, Transformation, and Reconciliation in Film |
| PHL 3081 | Ethics, Responsibility, and Love |
| Choose five (5) upper-division courses from the following: |  |
| THE 3005 | Christian Faith and the Natural Sciences (FE) |
| THE 3015 | Christian and Religious Themes in Literature |
| THE 3020 | The World's Faith Traditions |
| THE 3025 | The Human Person and Theology and Psychology |
| THE 3030 | Christ and the Church |
| THE 3035 | Christian Ethics |
| THE 4010 | The Ministry and Sermons of John Wesley |
| THE 4015 | Three Traditions of Protestant Theology |

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## Youth and Family Concentration

| Code | Title | Units |
| :--- | :--- | :---: |
| Required Courses |  |  |
| BIB 1001 | Old Testament History and Religion (FE) | 2 |
| BIB 1002 | New Testament History and Religion (FE) | 3 |
| BIB 2040 | Reading Scripture Faithfully | 3 |
| CHU 3095 | The Christian Tradition (FE) | 3 |
| CMI 1055 | Christian Formation and Ministry | 3 |
| PHL 2001 | Introduction to Philosophy (FE) | 3 |
| or PHL 2011 | Ethics (FE) | 3 |
| PHL 2050 | God and Philosophy | 3 |
| THE 2050 | Introduction to Christian Theology | 3 |
| THE 4095 | Justice in the Church: Gender, Households, and |  |
| Choose one (1) of the following sequences: | 8 |  |

$\begin{array}{ll}\text { HEB } 2005 & \text { Biblical Hebrew I (FE) } \\ \text { and HEB } 2006 & \text { and Biblical Hebrew II (FE) } \\ \text { GRK } 2007 & \text { Biblical Greek I (FE) }\end{array}$
and GRK 2008 and Biblical Greek II (FE)

## Concentration Courses

| 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 | 3 |
|  | Eucharist |  |
| CMI 4015 | The Church of the Nazarene: History and Polity ${ }^{1}$ | 3 |
| CMI 4025 | Youth and Family Ministry | 3 |
| CMI 4050 | Internship | $1-3$ |


| Choose three | upper-division courses from the following: ${ }^{2}$ | 9 |
| :---: | :---: | :---: |
| BIB 3035 | New Testament Books and Early Churches: Sermon, Letter, and Apocalypse |  |
| BIB 3078 | Old Testament Psalms and Wisdom Literature: Worship and Wisdom in a World of Suffering and Injustice |  |
| BIB 4001 | Jesus and the Gospels: Four Portraits of One Christ |  |
| BIB 4002 | The Letters of Paul: Faith, Hope, and Love Across Distance and Difference |  |
| BIB 4010 | Biblical Theology |  |
| BIB 4013 | Old Testament Torah and Israel's History: God's Story and God's People |  |
| BIB 4014 | Old Testament Prophets and the Holy Imagination: Power, Gender, Justice, and Economics |  |
| BIB 4090 | Special Studies in Bible |  |
| BIB 4095 | Seminar in Biblical Literature |  |
| PHL 2077 | Logic |  |
| PHL 3001 | Plato and Aristotle |  |
| PHL 3002 | Descartes Through Hegel |  |
| PHL 3021 | Justice, Politics, and the Social World |  |
| PHL 3031 | Existential Philosophy and Literature |  |
| PHL 3041 | Philosophy and Art |  |
| PHL 3060 | Philosophy and the Sciences |  |
| PHL 3071 | Education and the Ethical Life |  |
| PHL 3080 | Alienation, Transformation, and Reconciliation in Film |  |
| PHL 3081 | Ethics, Responsibility, and Love |  |
| THE 3005 | Christian Faith and the Natural Sciences (FE) |  |
| THE 3015 | Christian and Religious Themes in Literature |  |
| THE 3020 | The World's Faith Traditions |  |
| THE 3025 | The Human Person and Theology and Psychology |  |
| THE 3030 | Christ and the Church |  |
| THE 3035 | Christian Ethics |  |
| THE 4010 | The Ministry and Sermons of John Wesley |  |
| THE 4015 | Three Traditions of Protestant Theology |  |
| Choose 2-4 interdisciplinary units from the following: |  | 2-4 |
| CHD 3010 | Early Childhood Education |  |
| CHD 3013 | Adolescent Development in the Family Context |  |
| PSY 3008 | Developmental Psychology - Birth Through Adolescence |  |
| PSY 3021 | Abnormal Psychology |  |
| SOC 2050 | Sociology of the Family |  |
| Total Units 67 |  | -71 |

${ }^{1}$ Required for students who are seeking to complete the educational requirement for ordination in the Church of the Nazarene.
2 Student must take a minimum of one (1) course in each of the following: BIB, PHL, and THE.

## 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.


Recommended: Greek, German, or French should be used to fulfill the Foundational Explorations foreign language requirement.

Note(s): Accepting Associate Degree for Transfer (ADT) (p. 227)

## Biblical Studies Minor

| Code | Title | Units |
| :--- | :--- | ---: |
| Lower-Division Requirements |  |  |
| BIB 1001 | Old Testament History and Religion (FE) | 2 |
| BIB 1002 | New Testament History and Religion (FE) | 3 |
| BIB 2040 | Reading Scripture Faithfully | 3 |
| Upper-Division | Requirements |  |
| Choose four (4) | upper-division BIB courses |  |

${ }^{1}$ At least one focusing on the Old Testament and at least one focusing on the New Testament.

## Christian Mission \& Intercultural Ministry Minor

| Code | Title | Units |
| :--- | :--- | ---: |
| Lower-Division Requirements |  |  |
| CMI 1055 | Christian Formation and Ministry | 3 |
| SOC 2001 | Cultural Anthropology (FE) | 3 |
| 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 Units |  | $\mathbf{1 8}$ |

## Christian Studies Minor



| CMI 4025 | Youth and Family Ministry |
| :--- | :--- |
| CMI 4090 | Special Studies in Christian Ministry |
| PHL 2077 | Logic |
| PHL 3001 | Plato and Aristotle |
| PHL 3002 | Descartes Through Hegel |
| PHL 3021 | Justice, Politics, and the Social World |
| PHL 3031 | Existential Philosophy and Literature |
| PHL 3041 | Philosophy and Art |
| PHL 3060 | Philosophy and the Sciences |
| PHL 3071 | Education and the Ethical Life |
| PHL 3080 | Alienation, Transformation, and Reconciliation in |
| PHL 3081 | Ethics, Responsibility, and Love |
| THE 3005 | Christian Faith and the Natural Sciences (FE) |
| THE 3015 | Christian and Religious Themes in Literature |
| THE 3020 | The World's Faith Traditions |
| THE 3025 | The Human Person and Theology and Psychology |
| THE 3030 | Christ and the Church |
| THE 3035 | Christian Ethics |
| THE 4010 | The Ministry and Sermons of John Wesley |
| THE 4015 | Three Traditions of Protestant Theology |

## Total Units

## Philosophy Minor

| Code | Title | Units |
| :--- | :--- | ---: |
| Lower-Division Requirements |  |  |
| PHL 2001 | Introduction to Philosophy (FE) | 3 |
| Upper-Division Requirements |  |  |
| PHL 3001 | Plato and Aristotle | 3 |
| PHL 3002 | Descartes Through Hegel | 3 |
| Choose nine (9) additional units in PHL of which six (6) units must be | 9 |  |
| upper-division |  |  |

Total Units ..... 18
Science and Christian Faith Minor

| Code | Title | Units |
| :--- | :--- | ---: |
| Lower-Division Requirements |  |  |
| THE 2050 | Introduction to Christian Theology | 3 |
| Upper-Division Requirements |  |  |
| CHU 3095 | The Christian Tradition (FE) | 3 |
| THE 3005 | Christian Faith and the Natural Sciences (FE) | 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 BIB, CMI, or | 3 |  |

THE courses

## Total Units

# Vocational Ministry Minor 

| Code | Title | Units |
| :--- | :--- | ---: |
| Lower-Division | Requirements |  |
| BIB 2040 | Reading Scripture Faithfully | 3 |


| CMI 1055 | Christian Formation and Ministry | 3 |
| :--- | :--- | :--- |
| THE 2050 | Introduction to Christian Theology | 3 |

Upper-Division Requirements

| CMI 4000 | The Christian Gathering: Scripture, Baptism, and <br> Eucharist | 3 |
| :--- | :--- | ---: |
| CMI 4010 Leading in Ministry <br> or CMI 4020 Compassionate Ministry in Local Context | 3 |  |
| CMI 4050 | Internship (students take three) $^{1}$ | 3 |

Choose one (1) course from the following: 3

| CMI 3000 | Teaching and Preaching the Bible |
| :--- | :--- |
| CMI 3050 | Church as a Witness to the World |
| THE 3030 | Christ and the Church |

Choose one (1) course from the following: 3

| BIB 4001 | Jesus and the Gospels: Four Portraits of One <br> Christ |
| :---: | :--- |
| BIB 4002 | The Letters of Paul: Faith, Hope, and Love Across <br> Distance and Difference |
| BIB 4010 | Biblical Theology |
| BIB 4013 | Old Testament Torah and Israel's History: God's <br> Story and God's People |
| BIB 4014 | Old Testament Prophets and the Holy Imagination: <br> Power, Gender, Justice, and Economics |
| Total Units |  |

1 -unit internship annually is required for the minor.

## Worship Arts Minor

Code Title Units

| Lower-Division Requirements |  |  |
| :--- | :--- | :--- |
| CMI 1055 | Christian Formation and Ministry | 3 |
| MCM 3024 | Songwriting | 2 |
| or MTC 3027 | Digital Audio I |  |


| Upper-Division Requirements |  |  |
| :--- | :--- | :--- |
| CMI 3045 | Enacting Worship | 3 |
| CMI 4000 | The Christian Gathering: Scripture, Baptism, and <br> Eucharist | 3 |
| Choose two (2) courses from the following: |  |  |
| BIB 3078 | Old Testament Psalms and Wisdom Literature: <br> Worship and Wisdom in a World of Suffering and <br> Injustice | 6 |
| CMI 3000 | Teaching and Preaching the Bible |  |
| CMI 3025 | Christian Care of Souls |  |
| CMU 3014 | Music and Worship |  |
| THE 3030 | Christ and the Church | $\mathbf{1 7}$ |
| Total Units |  |  |

## Youth and Family Ministries Minor

Code Title Units
Lower-Division Requirements
CMI 1055 Christian Formation and Ministry 3
Upper-Division Requirements
CHD $3010 \quad$ Early Childhood Education 2-4

| or CHD 3013 | Adolescent Development in the Family Context |  |
| :--- | :--- | ---: |
| 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 |
| Total Units |  | $\mathbf{2 0 - 2 2}$ |

## 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 enagage in 20 hours of approved intercultural ministries experiences offered by the Office of Student Life and Formation.

| Code <br> Required Courses | Title | Units |
| :--- | :--- | ---: |
| CMI 1055 | Christian Formation and Ministry | 3 |
| Choose two (2) | courses from the following: | 6 |
| CMI 3050 | Church as a Witness to the World |  |
| CMI 4020 | Compassionate Ministry in Local Context |  |
| SOC 2001 | Cultural Anthropology (FE) |  |
| SOC 3050 | Urban Sociology |  |
| SOC 4044 | Globalization and Culture |  |
| MGT 4070 | Nonprofit Organization Management |  |
| THE 3020 | The World's Faith Traditions |  |
| PHL 3021 | Justice, Politics, and the Social World |  |

Complete 20 hours of intercultural service ${ }^{1}$

## Total Units

${ }^{1}$ Through approved off-campus intercultural service opportunities through the Office of Student Life and Formation (Love Works, Ministry with Mexico, Student Ministries).

## 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 Student Life and Formation.

| Code | Title | Units |
| :---: | :---: | :---: |
| Required Courses |  |  |
| MGT 2012 | Principles of Management | 3 |
| CMI 4010 | Leading in Ministry | 3 |
| Choose one (1) course from the following: |  | 3 |
| CMI 3040 | Foundations for the Practice of Youth Ministry |  |
| COM 3012 | Gender and Communication |  |
| ECO 4040 | The Economics of Race, Class, and Gender |  |
| MGT 4070 | Nonprofit Organization Management |  |
| NSG 4070 | Leading Faithfully: A Synthesis and Transition to Professional Nursing Practice |  |
| POL 1090 | The Politics of Race, Class, and Gender (FE) |  |
| POL 4015 | Women and Politics |  |
| PSY 3020 | Social Psychology |  |
| PSY 3041 | Group Counseling |  |
| SOC 4020 | Social Change |  |
| Complete 20 hours | s of approved leadership practicum ${ }^{1}$ |  |

Total Units
${ }^{1}$ From the Office of Student Life and Formation 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


## 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 Student Life and Formation.

| Code | Title | Units |
| :--- | :--- | ---: |
| Required Courses |  |  |
| CMI 1055 | Christian Formation and Ministry | 3 |


| CMI 3025 | Christian Care of Souls | 3 |
| :--- | :--- | ---: |
| Choose one (1) course from the following: | $3-4$ |  |
| BIB 2040 | Reading Scripture Faithfully |  |
| PSY 3030 | Moral Psychology and Cultural Values |  |

## Community Classroom Certificate in Intercultural Engagement

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.

| Code | Title | Units |
| :--- | :--- | ---: |
| Choose six (6) | units from the following: | 6 |
| CHU 3095 | The Christian Tradition (FE) |  |
| CMI 1055 | Christian Formation and Ministry |  |
| CMI 3050 | Church as a Witness to the World |  |
| LIT 2000 | Literature and Culture (FE) |  |
| PHL 2011 | Ethics (FE) |  |
| SOC 3060 | Race and Ethnicity |  |
| SPA 1001 | Elementary Spanish I (FE) |  |
| SPA 1002 | Elementary Spanish II (FE) |  |
| THE 3006 | The Life of Holiness |  |
| THE 3060 | Christian Life as Vocation (FE) |  |
| THE 3070 | Global Christianity (FE) |  |
| Total Units |  | $\mathbf{6}$ |

## 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 Traditional Undergraduate Student Handbook.


## Curricular Schedule

| Course | Title | Units |
| :--- | :--- | :--- |
| First Year |  |  |
| Fall | Introduction to Christian Scholarship (FE) |  |
| HON 1000 | Rhetoric: Critical Communication (FE) | 1 |
| HON 1001 | Foundations in Humanities I: Ancient/Medieval (FE) | 4 |
| HON 1020 | Units | 4 |
|  | Introduction to Philosophy (FE) | 9 |
| Spring | Foundations in Humanities II: Renaissance/ | 3 |
| HON 1002 | Enlightenment (FE) | 4 |
| HON 2020 | Units | $\mathbf{7}$ |
| Second Year | Old Testament History and Religion (FE) |  |
| Fall | New Testament History and Religion (FE) | 2 |
| HON 2001 | Foundations in Humanities III: 19th/20th Centuries | 3 |
| HON 2002 | (FE) | 4 |
| HON 3020 | Units | 9 |


| Spring |  |  |
| :--- | :--- | ---: |
| HON 1050 | Humanities Honors Abroad (FE) | 3 |
| HON 2010 | Politics of Race, Class, and Gender (FE) | 4 |
| HON 3010 | Christianity in Global Perspective (FE) | 3 |
| HON 3050 | Humanities Honors Integrative Seminar (FE) | 1 |
|  | Units | $\mathbf{1 1}$ |
|  | Total Units | $\mathbf{3 6}$ |


| Honors Scholar Program [Optional] <br> Course <br> Fourth Year | Title |  |
| :--- | :--- | :---: |
| Fall | Units |  |
| HON 4098 | Honors Project I |  |
|  | Units | 2 |
| Spring |  | $\mathbf{2}$ |
| HON 4099 | Honors Project II |  |
|  | Units | $\mathbf{1}$ |
|  | Total Units | $\mathbf{3}$ |

Students in the Humanities Honors Program must complete all Foundational Explorations requirements as outlined below.

## Humanities Honors Program Foundational Explorations Requirements

| Code | Title | Units |
| :---: | :---: | :---: |
| I. Humanities Core |  |  |
| Select two (2) - three (3) courses from the following: |  | 2-5 |
| HON 1000 | Introduction to Christian Scholarship (FE) |  |
| HON 1050 | Humanities Honors Abroad (FE) |  |
| HON 3050 | Humanities Honors Integrative Seminar (FE) |  |
| II. Responding to the Sacred |  |  |
| A. Biblical Foundations |  |  |
| HON 2001 | Old Testament History and Religion (FE) | 2 |
| HON 2002 | New Testament History and Religion (FE) | 3 |
| B. The Christian Tradition |  |  |
| HON 3010 | Christianity in Global Perspective (FE) | 3 |
| III. Developing Cognitive Abilities |  |  |
| A. Personal Development |  |  |
| PSY 1001 | Psychology of Personal Development - First Year Experience (FE) | 3 |
| B. Critical Thinking and Communication |  |  |
| HON 1001 | Rhetoric: Critical Communication (FE) | 4 |
| C. Problem Solving |  |  |
| Choose one (1) co | ourse from the following: | 3-4 |
| MTH 1044 | Calculus with Applications (FE) |  |
| MTH 1064 | Calculus I (FE) |  |
| MTH 1073 | Business Calculus (FE) |  |
| MTH 3003 | Problem Solving (FE) |  |
| IV. Exploring an Interdependent World |  |  |
| A. The Natural World |  |  |
| Select two (2) courses; one (1) from each group, and at least one (1) with a lab: |  | -8-9 |
| Biological Science |  |  |
| Choose one (1) course from the following: |  |  |
| BIO 1001 and BIO 1001L | Human Biology and Bioethics (FE) and Human Biology and Bioethics Laboratory (FE) |  |
| BIO 1002 | Environment and People (FE) |  |
| BIO 1003 and BIO 1003L | Introduction to Biology (FE) and Introduction to Biology Laboratory (FE) |  |
| BIO 1004 | Biotechnology and Society (FE) |  |
| BIO 1005 and BIO 1005L | Ecology and Conservation (FE) <br> and Ecology and Conservation Laboratory (FE) |  |
| BIO 1030 | Human Anatomy and Physiology I (FE) |  |


| BIO 2010 | Cell Biology and Biochemistry (FE) |  |
| :---: | :---: | :---: |
| BIO 2011 | Ecological and Evolutionary Systems (FE) |  |
| Physical Science |  |  |
| Choose one (1) course from the following: |  |  |
| CHE 1001 | Chemistry and Society (FE) |  |
| CHE 1002 and CHE 1002L | Chemistry in our Everyday Lives (FE) and Chemistry in our Everyday Lives Lab (FE) |  |
| CHE 1003 and CHE 1003L | Introduction to General, Organic, and Biological Chemistry (FE) and Introduction to General, Organic, and Biological Chemistry Lab (FE) |  |
| CHE 1052 | General Chemistry I (FE) |  |
| PHY 1044 | General Physics I (FE) |  |
| PHY 2044 | University Physics I (FE) |  |
| PSC 1004 | The Cosmos (FE) |  |
| B. Physical Fitness and Nutrition |  |  |
| Choose one (1) course from the following: |  | 2 |
| KIN 1000 | Fitness Through Movement (FE) |  |
| KIN 2000 | Optimal Health (FE) |  |
| SWF 3015 | Health and Well-Being (FE) |  |
| Select any one (1) unit activity course or one of the following: ${ }^{1}$ |  | 1-2 |
| KIN 2020 | Team Sports Fundamentals and Strategies (FE) |  |
| KIN 2025 | Individual and Dual Sports Fundamentals and Strategies (FE) |  |
| C. The Social World |  |  |
| HON 2010 | Politics of Race, Class, and Gender (FE) | 4 |
| V. Seeking Cultural Perspective |  |  |
| A. Foundations in Humanities |  |  |
| HON 1020 | Foundations in Humanities I: Ancient/Medieval (FE) | 4 |
| HON 2020 | Foundations in Humanities II: Renaissance/ Enlightenment (FE) | 4 |
| HON 3020 | Foundations in Humanities III: 19th/20th Centuries (FE) | 4 |
| B. Philosophy |  |  |
| HON 1002 | Introduction to Philosophy (FE) | 3 |
| C. Foreign Language |  |  |
| Choose two (2) courses from the following: |  | 8 |
| SPA 1001 | Elementary Spanish I (FE) |  |
| SPA 1002 | Elementary Spanish II (FE) |  |
| FRE 1001 | Elementary French I (FE) |  |
| FRE 1002 | Elementary French II (FE) |  |
| GER 1001 | Elementary German I (FE) |  |
| GER 1002 | Elementary German II (FE) |  |
| HEB 2005 | Biblical Hebrew I (FE) |  |
| HEB 2006 | Biblical Hebrew II (FE) |  |
| GRK 2007 | Biblical Greek I (FE) |  |
| GRK 2008 | Biblical Greek II (FE) |  |
| Total Units | 58- | 64 |
| ${ }^{1}$ Activity course numbered KIN 1002 - KIN 1084. |  |  |

## 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 (FE 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 FE will be satisfied (see exceptions below). Transfer equivalencies will be stretched to match IGETC of CSU GE areas.

## Remaining Foundational Explorations (FE) for ADT Students

| Code Title | Units |
| :---: | :---: |
| Religion: BIB (2-3 units) and Upper Division THE/CHU (3 units) | 5-6 |
| Upper Division Literature | 3 |
| Foreign Language ${ }^{1}$ | 8 |
| Total Units | 16-17 |
| ${ }^{1}$ Possible transfer |  |

## Participating Majors

Chemistry, B.S. (p. 120)
Child and Adolescent Development, B.A. (p. 167)
History, B.A. (p. 45)
Literature, B.A. (p. 67)
Multimedia Journalism, B.A. (p. 68)
Mathematics, B.A. for Associate Degree for Transfer (ADT) Students
(p. 136)

Music, B.A. (p. 90)
Philosophy, B.A. (p. 221)
Physics, B.A. for Associate Degree Transfer (ADT) Students (p. 153)
Political Science, B.A. (p. 51)
Social Work, B.A. (p. 171)
Sociology, B.A. (p. 172)
Visual Arts, B.A. (p. 29)

## 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 of units allowed is determined by the student's grade-point average as shown in the table below. Students may petition to the Vice Provost for Academic Administration to assume a course overload beyond the maximum units listed below.

| 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, and 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 (p. 228).

## Transcripts

A complete and official transcript is available by ordering through the Office of Records webpage (https://www.pointloma.edu/records (https://www.pointloma.edu/records/)) or by going to the National Student Clearinghouse (https://tsorder.studentclearinghouse.org/ school/ficecode/00126200/) website. Official transcripts cost \$5.00 each. 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 pick up; photo ID is required for pick up of transcripts. Unofficial transcripts are free and available through Workday as well as ordering through the Office of Records webpage (https:// www.pointloma.edu/records (https://www.pointloma.edu/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 provides course information in Workday along with any corresponding course fees and other details pertinent to these terms of study.

## Course Schedules

All schedules are posted in Workday. Current students, staff, and faculty should refer to the course schedule in Workday for the most up-todate information. The schedule of course offerings, complete with final examination times, are available each spring for the following fall semester's classes and each fall for the following spring semester'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 regrading; 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 Dean of Students 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
a. a repeated violation of academic honesty may result in probation, suspension or expulsion from the university, and/or
b. 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 Dean of Students 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 Dean of Students.
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 Dean of Students 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 Dean of Students, 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 Dean of Students 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 2022-2023 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.

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 (https:// www.pointloma.edu/current-students/) for appropriate dates.

## Compliance with COVID-19 Surveillance Testing

PLNU is not currently requiring all of its students to be vaccinated against COVID-19. Students who have not submitted proof of their fully COVID-19 vaccinated status via the QuickBase app are required to participate in testing surveillance.

If a student is non-compliant for the testing requirement, the following action will take place:

- Students who do not comply with onboard return to campus testing or general surveillance testing as instructed will be placed on Interim Probation and will receive a notification from the Vice Provost of Academic Studies.
- Throughout the semester, students who miss one surveillance testing appointment will be placed on Interim Probation status.
- Students may be removed from Interim Probation by completing the next instructed surveillance testing appointment.
- Students who do not comply for a two-week period will be moved from Interim Probation status to an Interim Suspension status and
- will be required to meet with the Vice Provost of Academic Studies,
- will not be allowed to attend their classes with a notification sent to their professors, and
- will be removed from their Residence Hall and placed into quarantine.
- Students may be removed from Interim Suspension by providing the Wellness Center a copy of a negative COVID-19 test result dated within 3 days of anticipated return to campus and a signed statement from the student regarding compliance with the surveillance testing.
- Students who have been on Interim Suspension status once and qualify for Suspension a second time will not be permitted to return to campus for the duration of the semester. Students will be dropped or withdrawn from classes based on the date of the suspension. Billing for the semester will be subject to the refund policy as stated in the Undergraduate Catalog.
- Students who have not complied ${ }^{1}$ with PLNU's surveillance testing by the drop deadline (see Last Day to Drop Semester Classes on the Undergraduate Calendar (https://drive.google.com/ file/d/1KmuoPevevNVZpNFloxouarW4Dx5rRcui/view/)) will be suspended for the remainder of the semester and dropped or withdrawn from all classes and removed from the residence hall. Billing will be subject to the refund policy as stated in the Traditional Undergraduate Catalog (p. 6).
${ }^{1}$ Noncompliance refers to remaining on Suspension or going on Suspension after the last day to drop a semester-long course.


## 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, courserelated 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 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 Dean of Students which, may further result in:
a. Filing of report and no further action.
b. Student meeting with VPAA, the Dean of Students and/or the Vice President of Student Life and Formation 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 Educational Access Center (EAC), located in the Bond Academic Center (EAC@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 which may be found on the EAC website (https://www.pointloma.edu/ offices/educational-access-center/).

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 EAC 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 academic support services. 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.

## 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 Advanced Placement (AP).

## [P] Pass

The grade utilized for designated courses which are graded only on a Pass/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.

## [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 gradepoint 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 (p. 234)."

## [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 "l" 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:

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 (https://drive.google.com/ open/?id=1FxY3d91YU2MvhWZJ3nDakfmjmeb3CWvw).

## Major and Minor Requirements

To view requirements for majors, minors, and certificates, see the Degree Program Information (p. 244) page.

## 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.
a. 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.
b. If the course is to satisfy Foundational Explorations 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 transcripted 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 that may be used if a student believes the syllabus was not followed in the grade calculation or that grading was done in a capricious or 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 submitted within eight (8) weeks of the grade being published. Appeals submitted after this deadline will not be considered.

Once an appeal has been made, there are up to four stages available in the process. The procedures are considered complete at each stage, unless the student requests the next stage to the Vice Provost for Academic Administration in writing within ten (10) days of completion of the previous stage. To submit an appeal, follow the procedures as outlined below.

- Stage 1: Consult with Instructor of Course
- As a first step, it is the responsibility of the student to express concern over a course grade first to the faculty member teaching the course. This informal step may be done verbally or in writing and must be completed within eight (8) weeks of the grade being published. This level of interchange is likely to resolve the matter in most cases. If, however, the concern is not resolved, the student may submit the Course Grade Appeal Form.
- Stage 2: Appeal to Academic Unit Leader
- Should the faculty member and the student not reach agreement on the grade, the student has ten (10) business days to request the Course Grade Appeal Form from the Vice Provost for Academic Administration, write up the grade concern, and formally submit the Course Grade Appeal Form with a
clear rationale to the academic unit leader. It is the student's responsibility to make the case that the grading was not in conformity with the course expectations as provided in the syllabus or was done in a capricious or arbitrary manner. The appeal should include (a) a description of the outcome of the informal process from Stage 1 and (b) all supporting documents and evidence. The best type of evidence includes documented items such as a course syllabus, assignment descriptions, formal evaluations from a class, the University catalog, or any other forms of written records pertaining to the course that were available to both the student and instructor. The Course Grade Appeal Form may be obtained from the Vice Provost for Academic Administration.
It is the faculty member's responsibility to provide a copy of the relevant grades, a syllabus, and a description of how the course grade was computed.
The academic unit leader may request additional materials from the student and/or faculty member. The academic unit leader, in the role of mediator, will meet with the student and the faculty member in an attempt to settle the dispute.
In the event that the concern is in a class with the academic unit leader as instructor, a senior faculty member, selected by the Provost (or designee), with experience as an academic unit leader from a related discipline may fulfill this role.
A summary of the outcome of this meeting will be provided in writing to the student and faculty member with a copy to the Vice Provost for Academic Administration.
- Stage 3: Appeal to the Dean
- If stage two does not resolve the dispute, the student has ten (10) business days to inform the Vice Provost for Academic Administration and submit the appeal to the dean responsible for the academic unit in which the course is offered (if this dean is not a different individual than the academic unit leader, stage 3 is omitted). All documentation will be forwarded by the academic unit leader to the dean. The dean will discuss the dispute with the student, the academic unit leader, and the faculty member and make a recommendation as to a resolution which will be communicated to both the student and faculty member in writing.
- Stage 4: Appeal to the Vice Provost
- If either the student or faculty member does not accept the recommendation from the previous stages, the student or faculty member may appeal by informing the Vice Provost for Academic Administration within ten (10) business days. The dean will forward the matter to the Vice Provost for Academic Administration who will thoroughly review the matter. The Vice Provost may involve the Academic Policies Committee or other individuals with specialized expertise to review and make recommendations to the Vice Provost. The Vice Provost will make the decision and the decision will be provided to the student, the faculty member, and the dean in writing. The decision of the Vice Provost is final.
In the rare event that the decision is to recommend a grade change and the faculty member rejects the recommendation, the Provost will have the grade changed to reflect the recommendation.


## 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 gradepoint 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 veteran's 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:

| Classification | Units Taken |
| :--- | :--- |
| 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 gradepoint 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 Life and Formation, 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 session grade-point average of 3.500 or higher in at least 12 units of work during the previous semester. The Dean's List is provided to students via email in the following semester.

## 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 is inaccurate, misleading, or otherwise in violation of the student's privacy under FERPA.

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), photo, 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:
- develop, validate, or administer predictive tests;
- administer student aid programs; or
- 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 nonforcible 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 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 Registrar.

## Leave of Absence

For more information regarding Leave of Absence, please refer to the Traditional Undergraduate Student Handbook (https://pointloma-public.courseleaf.com/handbooks/tug-handbook/).

## Study Abroad Policy

To maintain a high academic standard, study abroad 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. Study abroad 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 study abroad 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:

- Study Abroad Office (SAO)-designated international affiliates
- Non-SAO programs
- Semester-at-Sea programs

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

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

Students should confirm their program with the PLNU Study Abroad Office.

## Teach-Out Policy

For more information regarding Teach-Out Policy, please refer to PLNU's Teach-Out Policy and Procedures (https://drive.google.com/file/ d/1kLvKbxAgb8m2m90ZR3cXafVfnzabBAf4/view/?usp=sharing).

## 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.

## Foundational Explorations (General Education)

Foundational Explorations (FE) is PLNU's designation for General Education (GE) requirements.

## 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 ${ }^{1}$ \#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.
${ }^{1}$ 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 ongoing 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 ideas, skills, and experiences. 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.

## Required First-Year Courses

| Code | Title | Units |
| :--- | :--- | ---: |
| PSY 1001 | Psychology of Personal Development - First Year <br> Experience (FE) | 3 |
| Choose one (1) course from the following: | $2-4$ |  |
| WRI 1010 | College Composition: Writing and Research - First <br>  <br> WRI 1016 | College Composition: Research - First Year <br>  <br>  <br>  <br> Experience (FE) |

${ }^{1}$ 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

## 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).

| Code | Title | Units |
| :---: | :---: | :---: |
| A. Biblical Foundations |  |  |
| BIB 1001 | Old Testament History and Religion (FE) | 2 |
| BIB 1002 | New Testament History and Religion (FE) | 3 |
| B. The Christian Tradition |  |  |
| Choose one (1) | urse from the following: | 3 |
| CHU 3040 | Women in the Christian Tradition (FE) |  |
| CHU 3095 | The Christian Tradition (FE) |  |
| THE 3005 | Christian Faith and the Natural Sciences (FE) |  |
| THE 3060 | Christian Life as Vocation (FE) |  |
| THE 3070 | Global Christianity (FE) |  |
| Total Units |  | 8 |

## 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.
Code Title Units
A. Personal Development

Choose one (1) course from the following:
PSY 1001 Psychology of Personal Development - First Year Experience (FE) (Freshmen) ${ }^{1}$
PSY 1003 General Psychology (FE) (All Others)
B. Critical Thinking and Communication


## Total Units

17-20
${ }^{1}$ 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.
${ }^{2}$ All students must fulfill the 4-unit composition requirement by the end of their second semester.
${ }^{3}$ 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.
${ }^{4}$ WRI 1016 is for students who have transferred the first half of the FE 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 FE writing requirement.

## 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.

## Code Title Units

## A. The Natural World

Choose two (2) courses; one from each group, and at least one with a 8 lab:

Biological Science
Choose one (1) course/sequence from the following:
BIO 1001 Human Biology and Bioethics (FE)
and BIO 1001L and Human Biology and Bioethics Laboratory (FE)
BIO 1002 Environment and People (FE)
BIO 1003 Introduction to Biology (FE)
and BIO 1003L and Introduction to Biology Laboratory (FE)
BIO $1004 \quad$ Biotechnology and Society (FE)

| BIO 1005 and BIO 1005L | Ecology and Conservation (FE) and Ecology and Conservation Laboratory (FE) |
| :---: | :---: |
| BIO 1006 | Global Health and Pathogens (FE) |
| BIO 1030 and BIO 1030L | Human Anatomy and Physiology I (FE) and Human Anatomy and Physiology I Laboratory (FE) |
| $\begin{aligned} & \text { BIO } 2010 \\ & \text { and BIO 2010L } \end{aligned}$ | Cell Biology and Biochemistry (FE) and Cell Biology and Biochemistry Laboratory (FE) |
| BIO 2011 and BIO 2011L | Ecological and Evolutionary Systems (FE) and Ecological and Evolutionary Systems Laboratory (FE) |
| Physical Scienc |  |

Choose one (1) course/sequence from the following:
CHE 1001 Chemistry and Society (FE)
CHE 1002 Chemistry in our Everyday Lives (FE)
and CHE 1002L
CHE 1003 Introduction to General, Organic, and Biological and Chemistry (FE)
CHE 1003L and Introduction to General, Organic, and Biological Chemistry Lab (FE)
CHE 1052 General Chemistry I (FE)
and and General Chemistry I Lab (FE)
CHE 1052L
PHY 1034 The Physics of Sound and Music (FE)
and $\quad$ and The Physics of Sound and Music Lab (FE)
PHY 1034L
PHY 1044 General Physics I (FE)
and and General Physics I Lab (FE)
PHY 1044L
PHY 2044
and
University Physics I (FE)
and University Physics I Lab (FE)
PHY 2044L
PSC 1004 The Cosmos (FE)
PSC 1014 Physical Science for Teachers (FE)
B. Physical Fitness and Nutrition

Choose one (1) course from the following: 2

| KIN 1000 | Fitness Through Movement (FE) |
| :--- | :--- |
| KIN 2000 | Optimal Health (FE) |
| KIN 2030 | Lifestyle as Medicine (FE) |
| SWF 3015 | Health and Well-Being (FE) |

Choose one (1) course from the following: 1-2
Any one (1) unit activity course ${ }^{1}$
KIN 2020 Team Sports Fundamentals and Strategies (FE)
KIN 2025 Individual and Dual Sports Fundamentals and Strategies (FE)
C. Problem Solving

Choose one (1) course/sequence from the following: 3-4

| MTH 1044 | Calculus with Applications (FE) |  |
| :--- | :--- | :--- |
| MTH 1064 <br> and | Calculus I (FE) |  |
| MTH 1064L | and Calculus I Lab (FE) |  |
| MTH 1073 | Business Calculus (FE) |  |
| MTH 3003 | Problem Solving (FE) |  |
| Total Units |  | $\mathbf{1 4 - 1 6}$ |

${ }^{1}$ Course numbered KIN 1010-KIN 1084. Note: KIN 1070-KIN 1084 are for varsity athletes only.

## 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.

| Code | Title | Units |
| :---: | :---: | :---: |
| A. The Fine Arts |  |  |
| Choose two (2) courses in distinct areas from the following: |  | 4-5 |
| ART 1000 | Introduction to Art (FE) |  |
| ART 1002 | Fundamentals of Art (FE) |  |
| ART 2000 | History of Art I (FE) |  |
| ART 2001 | History of Art II (FE) |  |
| MUH 1000 | Introduction to Music (FE) |  |
| MUH 1001 | Introduction to Listening (FE) |  |
| TRE 1001 | Introduction to Theatre (FE) |  |
| B. Literature ${ }^{1}$ |  |  |
| Lower-Division |  |  |
| LIT 2000 | Literature and Culture (FE) | 2 |
| Upper-Division |  |  |
| Choose one (1) | urse from the following: | 3 |


| LIT 3050 | Diverse Voices of World Literature (FE) |
| :--- | :--- |
| LIT 3051 | Diverse Voices of Cinema (FE) |
| LIT 3052 | Diverse Voices of American Literature (FE) |
| LIT 3053 | Diverse Voices of Women Writers (FE) |

All materials for the following Foundational Explorations (FE)
Literature Upper-Division Requirement options are written in
foreign language:
FRE 3020 Survey of French Literature
FRE 3025 Francophone Literature
SPA 3020 Mexican American Literature and Culture
SPA $3080 \quad$ Genre/Period Studies in Hispanic Literature or Film
SPA 4000 Peninsular Literature Before 1800
SPA 4002 Peninsular Literature Since 1800
SPA 4037 Latin American Literature Before 1910
SPA 4039 Latin American Literature Since 1910
C. Foreign Language ${ }^{2}$

Choose one (1) sequence from the following: ${ }^{3,4}$
CHN 1001 Elementary Chinese (Mandarin) I (FE)
and CHN 1002 and Elementary Chinese (Mandarin) II (FE)
GER 1001 Elementary German I (FE)
and GER 1002 and Elementary German II (FE)
GRK 2007 Biblical Greek I (FE)
and GRK 2008 and Biblical Greek II (FE)
HEB 2005 Biblical Hebrew I (FE)
and HEB 2006 and Biblical Hebrew II (FE)
FRE 1001 Elementary French I (FE)
and FRE 1002 and Elementary French II (FE)
LAN 1001 Elementary Foreign Language I (FE)
and LAN 1002 and Elementary Foreign Language II (FE)
SPA 1001 Elementary Spanish I (FE)
and SPA 1002 and Elementary Spanish II (FE)
D. Philosophy

| PHL 2001 | Introduction to Philosophy (FE) |
| :---: | :--- |
| or PHL 2011 | Ethics (FE) |

Total Units
20-21
${ }^{1}$ B.S.N. candidates choose between two Literature options or one Literature and one Philosophy.
${ }^{2}$ A foreign language is not required for B.S.N. candidates.
${ }^{3}$ 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.
${ }^{4}$ 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.

## Special Program Information Honors Scholars Program

## Mark Mann, Director

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 extensive research project during the senior year. Successful scholars will receive special recognition at commencement ceremonies and on the university transcript of record.

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. Exceptions may be made for students who plan to graduate in the fall.

- 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)
- Note: Education Specialist Credential - Mild to Moderate and Extensive Support Needs can be pursued post-graduation.


## 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 (https://catalog.pointloma.edu/preview_entity.php? catoid=58\&ent_oid=2211)).
- 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 (https://catalog.pointloma.edu/ preview_entity.php?catoid=58\&ent_oid=2211)).
- 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 (https://catalog.pointloma.edu/preview_entity.php? catoid=58\&ent_oid=2211)).
- Those interested in software engineering may choose to major in Software Engineering (see Department of Mathematical, Information, and Computer Sciences (https://catalog.pointloma.edu/ preview_entity.php?catoid=58\&ent_oid=2209)).
- 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 (https://catalog.pointloma.edu/preview_entity.php? catoid=58\&ent_oid=2211)).

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 prehealth 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 dentistry, medicine, optometry, pharmacy, or veterinary medicine 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 preprofessional 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.

## Study Abroad Programs

In an ever-changing and interdependent world, Point Loma Nazarene University values and encourages study abroad/away programs. We provide a robust range of programs which give students the opportunity to live, learn, and engage in service in another culture. This experience helps students to expand their appreciation and understanding of other cultures.

In strong support of Point Loma Nazarene University's mission and core values, the Study Abroad Office (SAO) actively encourages all students to participate in learning opportunities overseas for an academic year, semester or summer term, or with a faculty-led program. The SAO works with the PLNU community to develop a global perspective in its study abroad curriculum and promotes strong academic integration in all the programs.

The SAO offers a selected range of programs through affiliated universities and program providers. Students wishing to study abroad must apply and be accepted with the SAO. 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, 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 SAO website, via e-mail at studyabroad@pointloma.edu, by telephone at 619-849-2387, or by visiting the SAO.

To maintain a high academic standard and promote student success, our programs require a minimum cumulative GPA of 2.750 . Some program partners require a higher minimum GPA. 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:

- PLNU-SAO-designated international affiliates
- Non-PLNU-SAO programs
- Semester-at-Sea programs

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

- PLNU-SAO-designated domestic affiliates
- PLNU-SAO-designated partner university programs
- PLNU faculty-led programs

Students should confirm their program with the Study Abroad Office.

## 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, Writing, and 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 Linkedln. (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.)

## Special Studies

Courses offered to enhance students' learning including improving study strategies, information literacy skills, and advocacy skills.

- IDS 2090
- Managing Your Time and Your Life
- Learning and Study Strategies
- Making Sense of (Too Much) Information
- Self-Advocacy in Higher Education


## Degree Program Information 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 Music (B.Mus.), the Bachelor of Science (B.S.), the Bachelor of Science in Business Administration (B.S.B.A.), and the Bachelor of Science in Nursing (B.S.N.). 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 Foundational Explorations 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 designatedcontent 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 Foundational Explorations 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 Foundational Explorations 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.

## 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;
- 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.


# Graduation Requirements General Requirements 

Undergraduate students all share certain general requirements for earning and receiving the baccalaureate degree (B.A., B.Mus., B.S., B.S. Bus. Admin, B.S.E., and B.S.N.). 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 called a Final Graduation Check 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 Foundational Explorations 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 (a Final Graduation Check) 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 "Final 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. Foundational Explorations. Students must meet the stated requirements in Foundational Explorations, 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 upperdivision 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 respectively. 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/have posted 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 (24) of these units must be taken at the 3000level or above. A minimum of 24 units must be earned in the new major, with no duplication of units from the previous major. Twenty-four (24) units must be taken in residence at PLNU. All Foundational Explorations (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 OGSdesignated partner programs are included in PLNU GPA calculation (students should confirm affiliate and partner school designations with the Study Abroad Office).

The university announces ceremonial (unofficial) honors during the commencement ceremony using these calculations based on the GPAs and a minimum of 36 residential units earned by the conclusion of the preceding semester. Official honors are calculated and 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 (p. 241)" 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 (p. 225)" for program and course requirements.

## 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 Offerings and Class Schedules

All course offerings are posted in Workday (https:// www.myworkday.com/pointloma/d/home.htmld/). The university reserves the right to cancel any class with insufficient enrollment and make necessary changes in its schedule and programs.

## 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 |
| :--- | :--- | :--- |
| $0001-0999$ | Remedial | Pre-university |
| $1000-1999$ | Freshman | Lower-division |
| $2000-2999$ | Sophomore | Lower-division |
| $3000-3999$ | Junior | Upper-division |
| $4000-4999$ | Senior | Upper-division |
| $5000-5999$ | Undergraduate and | Undergraduate and |
|  | Post-baccalaureate ${ }^{1}$ | Post-baccalaureate |

${ }^{1}$ Courses applicable to an undergraduate degree, master's degree program, credential, or certificate.

## Special Designations

Courses marked FE meet requirements in Foundational Explorations. Those marked WS are offered in the Women's Studies minor.

## 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.

## Alternate-Year Offerings

Many of the courses listed in this Catalog, particularly those at the upperdivision 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.

## Prerequisite/Corequisite

Some courses listed in this Catalog stipulate either a prerequisite or a co-requisite. 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 corequisite refers to a condition or a requirement that must be met prior to or concurrent with enrollment in a course.

## 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.

## ACC - Accounting

ACC 2000 Principles of Accounting for Non-Business Majors (3 Units) 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 Units)

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(s): BUS 1000
Recommended: Recommended for sophomores.
ACC 2002 Principles of Managerial Accounting (3 Units)
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(s): MTH 1053 or MTH 1073, or consent of instructor for non-majors.
Recommended: Recommended for sophomores.
ACC 3050 Ethics in Accounting (3 Units)
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 Units)

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 Units)
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 Units)

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 decisionmaking. 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 Units)

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 Units)
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 Units)
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 Units)
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.
Also offered as FIN 4025.
Prerequisite(s): FIN 3035 and Senior standing only.
ACC 4060 Auditing (3 Units)
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; Senior standing only. Pre or Corequisite(s): ACC 4021 or consent of instructor.

## ACC 4089 Internship in Accounting (1-3 Units)

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.
May be repeated for a maximum of six (6) units. Credit/No Credit.
Prerequisite(s): BUS 3013, Junior or Senior Standing, and consent of instructor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.

ACC 4090 Special Topics in Accounting (3 Units)
Study in a special topic to be determined by the school.
May be repeated for a maximum of six (6) units.
Prerequisite(s): Consent of instructor.
Open to juniors and seniors only.
ACC 4091 Independent Studies in Accounting (1-3 Units)
An intensive study of a selected topic under the direction of an instructor. May be repeated for a maximum of six (6) units.
Prerequisite(s): Consent of 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.

## BIB - Bible

BIB 1001 Old Testament History and Religion (FE) (2 Units) 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 (FE) (3 Units)
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 Units)
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 Units)
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 Units)
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 Units) 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 Units)
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 Units)
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 Units)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 Units)
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 Units)

An investigation of a topic in biblical studies not otherwise covered in the curriculum.
May be repeated up to a total of nine (9) units.
Prerequisite(s): Consent of the Dean of the School of Theology and Christian Ministry
BIB 4095 Seminar in Biblical Literature (3 Units)
Advanced study in a topic in Bible.
May be repeated up to a total of six (6) units.
Prerequisite(s): BIB 1001 or BIB 1002 and consent of instructor.

## BIO - Biology

BIO 1001 Human Biology and Bioethics (FE) (3 Units)
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 (FE) (1 Unit) An inquiry-based laboratory that is a co-requisite for BIO 1001.
Letter grade.
Corequisite(s): BIO 1001

## BIO 1002 Environment and People (FE) (FE) (4 Units)

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 (FE) (3 Units)
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 (FE) (1 Unit)
An inquiry-based laboratory that is a co-requisite for BIO 1003.
Letter grade.
Corequisite(s): BIO 1003
BIO 1004 Biotechnology and Society (FE) (4 Units)
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, knockouts, 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 (FE) (3 Units)

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 (FE) (1 Unit)
An inquiry-based laboratory that is a co-requisite for BIO 1005.
Letter grade.
Corequisite(s): BIO 1005

BIO 1006 Global Health and Pathogens (FE) (4 Units)
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 (FE) (3 Units)
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(s): CHE 1003 or CHE 1052
Corequisite(s): BIO 1030L
BIO 1030L Human Anatomy and Physiology I Laboratory (FE) (1 Unit)
An anatomy and physiology laboratory that is a co-requisite for BIO 1030. Letter grade.
Corequisite(s): BIO 1030
BIO 1040 Human Anatomy and Physiology II (3 Units)
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 Unit)
An anatomy and physiology laboratory that is a co-requisite for BIO 1040. Letter grade.
Corequisite(s): BIO 1040

## BIO 2010 Cell Biology and Biochemistry (FE) (3 Units)

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 (FE) (1 Unit)
An inquiry-based laboratory that is a co-requisite for BIO 2010.
Letter grade.
Corequisite(s): BIO 2010
BIO 2011 Ecological and Evolutionary Systems (FE) (3 Units)
An introduction to the principles of ecology, evolutionary biology and sustainability.
Corequisite(s): BIO 2011L
BIO 2011 L Ecological and Evolutionary Systems Laboratory (FE) (1 Unit)
An inquiry-based laboratory that is a co-requisite for BIO 2011.
Letter grade.
Corequisite(s): BIO 2011

## BIO 2012 Organismal Biology (3 Units)

Principles of animal and plant structure, function, and diversity.
Prerequisite(s): BIO 2011
Corequisite(s): BIO 2012L

## BIO 2012L Organismal Biology Laboratory (1 Unit)

An inquiry-based laboratory that is a co-requisite for BIO 2012.
Letter grade.
Corequisite(s): BIO 2012
BIO 2020 Microbiology of Infectious Diseases (3 Units)
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 or CHE 1052; BIO 1040 (may be taken concurrently).
Corequisite(s): BIO 2020L
BIO 2020L Microbiology of Infectious Diseases Laboratory (1 Unit)
A laboratory that is a co-requisite for BIO 2020.
Letter grade.
Corequisite(s): BIO 2020
BIO 3012 Applied Plant Biology (2 Units)
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.
Prerequisite(s): BIO 2012
Recommended: MTH 2003 or MTH 3063

## BIO 3015 Microbiology (3 Units)

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 Unit)

An inquiry-based laboratory that is a co-requisite for BIO 3015.
Letter grade.
Corequisite(s): BIO 3015
BIO 3023 Introduction to Oceanography (3 Units)
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 Unit)
A field work-based laboratory that is a co-requisite for BIO 3023.
Letter grade.
Corequisite(s): BIO 3023
BIO 3033 Marine Biology (3 Units)
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 Unit)

A field work-based laboratory that is a co-requisite for BIO 3033.
Letter grade.
Corequisite(s): BIO 3033

BIO 3040 Field Biology: Neotropical Ecology (2 Units)
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 Units)
The study of the inheritance, organization, expression and variability of genes.
Prerequisite(s): BIO 2010 with a grade of " $C$ " or better or consent of instructor.
Corequisite(s): BIO 3045L
BIO 3045L Genetics Laboratory (1 Unit)
An inquiry-based laboratory that is a co-requisite for BIO 3045.
Letter grade.
Corequisite(s): BIO 3045

## BIO 3050 Advanced Cell Biology (3 Units)

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 Unit)
A laboratory that is a co-requisite for BIO 3050.
Letter grade.
Corequisite(s): BIO 3050
BIO 3052 Research Methodology (3 Units)
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 Units)

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 biologgers, 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 Unit)

A field work-based laboratory that is a co-requisite for BIO 3063.
Letter grade.
Corequisite(s): BIO 3063

## BIO 3080 Molecular Biology (3 Units)

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): BIO 3045 and CHE 1052
Corequisite(s): BIO 3080L

## BIO 3080L Molecular Biology Laboratory (1 Unit)

An inquiry-based laboratory that is a co-requisite for BIO 3080.
Letter grade.
Corequisite(s): BIO 3080

## BIO 3090 Immunology (3 Units)

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 repertories, 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 Unit)

An inquiry-based laboratory that is a co-requisite for BIO 3090. Letter grade.
Corequisite(s): BIO 3090
BIO 4000 Developmental Biology (3 Units)
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 Unit)
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 grade.
Corequisite(s): BIO 4000

## BIO 4010 Vertebrate Biology (3 Units)

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 Unit)

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 grade.
Corequisite(s): BIO 4010
BIO 4023 Advanced Human Physiology (3 Units)
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 consent of instructor (Cell and Molecular Biology or Organismal minors).
Recommended: MTH 2003 or MTH 3063
BIO 4023L Advanced Human Physiology Laboratory (1 Unit)
An inquiry-based laboratory that is a co-requisite for BIO 4023.
Letter grade.
Corequisite(s): BIO 4023

## BIO 4030 Animal Behavior (3 Units)

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 Unit)

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 grade.
Corequisite(s): BIO 4030

## BIO 4050 Advanced Biochemistry (3 Units)

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.
Also offered as CHE 4050.
Prerequisite(s): BIO 2010 and CHE 2094
Corequisite(s): BIO 4050L

## BIO 4050L Advanced Biochemistry Laboratory (1 Unit)

An inquiry-based laboratory that is a co-requisite for BIO 4050.
Letter grade.
Also offered as CHE 4050L.
Corequisite(s): BIO 4050
BIO 4063 Methods of Teaching Secondary Science (3 Units)
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 stateadopted 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 EDU 6024 (graduate level). PLNU students who complete BIO 4063 are exempt from taking EDU 4034 or EDU 6024 for their preliminary single subject credential.
Prerequisite(s): BIO 2010 or FE-BIO and at least Sophomore standing.

## BIO 4070 Neuroscience (3 Units)

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, pathophysiology, 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 Units)

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 Unit)
A field work-based laboratory that is a co-requisite for BIO 4073.
Letter grade.
Corequisite(s): BIO 4073

## BIO 4083 Introduction to Geographic Information Systems (GIS) (3 Units)

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 Units)

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. May be repeated for a maximum of three (3) units. Credit/No Credit.
Prerequisite(s): Junior or Senior standing; consent of department chair and faculty advisor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.
BIO 4095 Special Topics - Naturalist Interpretation (3 Units) Instruction includes topics specific to how to conduct research for information of a particular location and unique characteristics of that environment and ecosystem.

## BIO 4097 Biology Seminar (1 Unit)

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, Biology-Chemistry, or Environmental Science major.

## BIO 4099 Research in Biology (1-3 Units)

Independent investigation, under the supervision of a member of the biology faculty.
May be repeated for a total of six (6) units, but no more than three (3) units may count toward upper-division requirements for graduation.
Prerequisite(s): Junior or Senior standing and consent of instructor.

## BUS - Business Administration

BUS 1000 Introduction to Business and Systems (3 Units)
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.
Prerequisite(s): Restricted to Freshmen and Sophomores or consent of instructor.
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 upperdivision ACC/BUS/ECO/FIN/MGT/MKT in lieu of the BUS 1000 course requirement, excluding courses numbered 4089 and 4091.

## BUS 2001 Legal Environment of Business (3 Units)

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 Business Communications (3 Units)
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 Units)
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 Units)

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 Units)
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 Units)

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.
May be repeated for a maximum of six (6) units. Credit/No Credit.
Prerequisite(s): BUS 3013, Junior or Senior standing, and consent of instructor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.
BUS 4090 Special Topics in Business Administration (3 Units)
Study in a special topic to be determined by the school.
May be repeated for a maximum of six (6) units.
Prerequisite(s): Junior or Senior standing and consent of instructor.

BUS 4091 Independent Studies in Business Administration (1-3 Units) 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 (6) units.
Prerequisite(s): Consent of instructor.

## CHE - Chemistry

CHE 1001 Chemistry and Society (FE) (4 Units)
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 Foundational Explorations requirement; does not count toward any Chemistry Department majors.
Prerequisite(s): MTH 0099 or equivalent.
CHE 1002 Chemistry in our Everyday Lives (FE) (3 Units)
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(s): MTH 0099 or equivalent.
Corequisite(s): CHE 1002L
CHE 1002L Chemistry in our Everyday Lives Lab (FE) (1 Unit)
A lab course designed for a hands-on exploration of basic principles of chemistry as they apply to our everyday lives.

## Pre or Corequisite(s): CHE 1002

## CHE 1003 Introduction to General, Organic, and Biological Chemistry

 (FE) (4 Units)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 Foundational Explorations 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 (FE) (1 Unit)
An inquiry-based laboratory that is a co-requisite for CHE1003.
Pre or Corequisite(s): CHE 1003
CHE 1052 General Chemistry I (FE) (4 Units)
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 (FE) (1 Unit)
An inquiry-based laboratory that is a co-requisite for CHE 1052.
Letter grade.
Corequisite(s): CHE 1052

CHE 1053 General Chemistry II (3 Units)
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 Unit)
An inquiry-based laboratory that is a co-requisite for CHE 1053.
Letter grade.
Corequisite(s): CHE 1053
CHE 2001 Serving Through Healing: An Introduction to Health Professions (1 Unit)
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.
Credit/No Credit.

## CHE 2013 Analytical Chemistry (3 Units)

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 Units)
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 Unit)
An inquiry-based laboratory that is a co-requisite for CHE 2094.
Letter grade.
Corequisite(s): CHE 2094
CHE 2096 Organic Chemistry II (3 Units)
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 Unit)
An inquiry-based laboratory that is a co-requisite for CHE 2096.
Letter grade.
Corequisite(s): CHE 2096
CHE 3025 Physical Chemistry I (3 Units)
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, MTH 1044 or MTH 1064, and PHY 1054 or PHY 2054
Corequisite(s): CHE 3025L
CHE 3025L Physical Chemistry I Lab (1 Unit)
An inquiry-based laboratory that is a co-requisite for CHE 3025.
Letter grade.
Corequisite(s): CHE 3025

## CHE 3026 Physical Chemistry II (3 Units)

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, MTH 1044 or MTH 1064, and PHY 1054 or PHY 2054
CHE 3027 Physical Chemistry II Laboratory (1 Unit)
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 Units)
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.
Prerequisite(s): CHE 2096 and consent of instructor.

## CHE 3070 Instrumental Analysis (2 Units)

Analytical analysis using instruments such as gas chromatography, high performance liquid chromatography, ultraviolet-visible, FT-infrared and nuclear magnetic resonance spectroscopy, and mass spectrometry. One four-hour laboratory each week.
Prerequisite(s): CHE 2013 and consent of instructor.
CHE 4050 Advanced Biochemistry (3 Units)
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.
Also offered as BIO 4050.
Prerequisite(s): BIO 2010 and CHE 2094
Corequisite(s): CHE 4050L
CHE 4050L Advanced Biochemistry Lab (1 Unit)
An inquiry-based laboratory that is a co-requisite for CHE 4050.
Letter grade.
Corequisite(s): CHE 4050
CHE 4053 Advanced Organic Chemistry (2 Units)
Advanced study of organic reaction mechanisms including: the Hammett equation, isotope and substituent effects and orbital symmetry. Modern synthetic reactions are presented.
Prerequisite(s): CHE 2096 and consent of instructor.
CHE 4054 Advanced Organic Chemistry Laboratory (1 Unit)
Designed to accompany CHE 4053. Emphasis on modern synthetic methods and purification of complex reaction mixtures.
One four-hour laboratory each week.
Corequisite(s): CHE 4053

## CHE 4066 Bioinorganic Chemistry (2 Units)

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.
Prerequisite(s): CHE 2096 or consent of instructor.

CHE 4067 Advanced Inorganic Chemistry Laboratory (1 Unit)
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(s): CHE 4068
CHE 4068 Advanced Inorganic Chemistry (3 Units)
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 4070 Environmental Chemistry (3 Units)

This course covers the chemistry of Earth's environment, including the natural chemical processes as well as anthropogenic contributions. The environment in this context is divided into the atmosphere, the hydrosphere, the lithosphere, and anthrosphere. Particular emphasis is given to human influences in each of these "spheres," including the causes, effects, detection, prevention, and mitigation of pollution. Environmental pollution is a global problem, with many technological and cultural causes, and as such requires an understanding of numerous disciplines in order to solve. This course thus involves the integration of concepts from chemistry, biology, geology, ecology, atmospheric sciences, hydrology, toxicology, political science, and others.
Prerequisite(s): CHE 2013, CHE 2094, and CHE 2094L
CHE 4070L Environmental Chemistry Laboratory (1 Unit)
Designed to accompany CHE 4070. The lab component will focus primarily on detection of pollutants in air and water by using modern chemical instrumentation. The skills learned will be applied to a class research project.
One four-hour laboratory each week.
Pre or Corequisite(s): CHE 4070
CHE 4075 Special Topics in Chemistry (2 Units)
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.
Prerequisite(s): CHE 2096 or consent of instructor.
CHE 4090 Internship in Chemistry (1-3 Units)
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.
May be repeated up to a maximum of three (3) units. Credit/No Credit.
Prerequisite(s): Junior or Senior standing; consent of department chair and faculty advisor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.
CHE 4095 Chemistry Seminar (1 Unit)
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 Units)
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 (4) units.
Corequisite(s): Consent of instructor.
Open to Juniors and Seniors.

## CHD - Child and Adolescent Development

## CHD 1020 Child and Adolescent Development (4 Units)

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 Units)
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 Units)
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 infanttoddler 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 Units)
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 Units) 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 Units)
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 Units)
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 Units) 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 4060 Administration and Supervision in Early Childhood

## Education (4 Units)

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 Units)
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 (2-4 Units)

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.
For two (2) units of credit, 80 hours of work experience is required; for four (4) units, 160 hours of work experience is required. May be repeated up to a total of four (4) units. Credit/No Credit.
Prerequisite(s): Senior standing in the Department of Sociology, Social Work, and Family Sciences; CHD 1020 and consent of department chair. "C" Designation is for California Internships. "E" Designation is for Out of State Internships.

CHD 4090 Special Studies in Child Development (1-4 Units)
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 (4) units.
Prerequisite(s): Senior standing in the Department of Sociology, Social
Work, and Family Sciences and consent of department chair.
CHD 4097 Senior Seminar (2 Units)
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.

## CHN - Chinese

CHN 1001 Elementary Chinese (Mandarin) I (FE) (4 Units)
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 (FE) (4 Units)
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.

## CMI - Christian Ministry

CMI 1055 Christian Formation and Ministry (3 Units)
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 Units)
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 Units)
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 Units) Students will explore approaches to the discipleship ministries for youth in the local church and parachurch organizations.
CMI 3045 Enacting Worship (3 Units)
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 Units)
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 Units)
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 Units)
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 Units) 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 Units)
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 congregationallybased, direct-action approaches to local ministry.
Prerequisite(s): CMI 1055
CMI 4025 Youth and Family Ministry (3 Units)
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 Units)
Supervised on-site ministry to help students integrate theory and classroom experience with the practice of ministry.
May be repeated up to a total of six (6) units. Credit/No Credit.
Prerequisite(s): BIB 1001 or BIB 1002 and CMI 1055 and consent of instructor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.

## CMI 4090 Special Studies in Christian Ministry (1-3 Units)

An investigation of a topic in Christian ministries not otherwise covered in the curriculum.
May be repeated up to a total of nine (9) units.
Prerequisite(s): Consent of the dean of the School of Theology and Christian Ministry

## CHU - Church History

CHU 3040 Women in the Christian Tradition (FE) (3 Units)
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 (FE) (3 Units)
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

## COM - Communications

## COM 1000 Principles of Human Communication (FE) (3 Units)

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 Units)
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 Units)

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 Units)
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 Units)
Requirements vary according to the activity developed in consultation with the instructor.
May be repeated up to a total of eight (8) units. Credit/No Credit.

## COM 2020 Small Group Communication (3 Units)

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 (FE) (3 Units)
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 Units)
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 Units)

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 Units)
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 Units)

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 Units)
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 Units)

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 Units)

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 Units)
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): COM 2043 and JRN 2050
Pre or Corequisite(s): JRN 3012
Corequisite(s): COM 3013 and JRN 3012 are corequisites and must be taken in the same semester.

## COM 3015 Oral Interpretation (3 Units)

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 Units)

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 Units)

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 Units)

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 Units)
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 Units) 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 3071 Professional Acting for the Camera (offered for the Film Studies concentration @ the Los Angeles Film Studies Center LAFSC) (3 Units)
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 3090 Introduction to Public Relations (3 Units)

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 Units)

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 4000 Sundance Film Festival (1 Unit)

Students critically analyze the aesthetics and themes presented in Sundance Film Festival films while attending the festival in Park City, Utah. Participants pay a course fee on top of block tuition, attend film screenings and forums, and complete course assignments including a final project.
COM 4005 Public Relations Cases and Campaigns (3 Units)
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 Units)

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 Units)
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 Units)
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 up to a total of eight (8) units. 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 Units)
Participation in an internship supervised by departmental faculty.
May be repeated up to a total of six (6) units. Credit/No Credit.
Prerequisite(s): Junior or Senior standing.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.
COM 4022 Portfolio Construction (1 Unit)
Completion of a portfolio and supporting documentation for assessment and preparation for employment.
Credit/No Credit.
Prerequisite(s): Consent of instructor.
COM 4025 Advanced Television Workshop (1-3 Units)
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 for upper-division students working as staff for the Point TV leaders. May be repeated up to a total of six (6) units.
Prerequisite(s): COM 2043
COM 4035 Advanced Audio Production (1 Unit)
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 (4) units.
Prerequisite(s): COM 2075

## COM 4042 Field Television Production (3 Units)

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 Units)
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 Units)
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 Unit) 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 Units)

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 Units) 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 4070 Hollywood Production Workshop (offered for the Film Studies concentration @ the Los Angeles Film Studies Center - LAFSC) (4 Units) 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 Units)
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 Units) 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 Units) 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 Units) 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 Units) 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.

## COM 4085 Communication, Values, and Society (2 Units)

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 Units)
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 (6) units.
Prerequisite(s): Consent of instructor.
COM 4092 Independent Study (1-3 Units)
Independent investigation, under the direct supervision of a faculty member, of a specific issue relevant to the study of communication.

## CSC - Computer Science

CSC 1011 Computer Programming for the Absolute Beginner (1 Unit) 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
Students who have credit for CSC 1043 may not take this course.
CSC 1043 Introduction to Computer Programming (2 Units)
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 multidimensional 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.
Also offered as EGR 1043.
Prerequisite(s): MTH 1013 or equivalent.
Corequisite(s): CSC 1043L
CSC 1043L Introduction to Computer Programming Lab (1 Unit)
A lab course designed for a hands-on exploration of Introductory
Computer Programming. Meets two hours per week.
Not repeatable. Letter grade.
Also offered as EGR 1043L.
Prerequisite(s): MTH 1013 or equivalent.
Corequisite(s): CSC 1043

CSC 1054 Objects and Elementary Data Structures (3 Units)
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. Also offered as EGR 1054.
Prerequisite(s): CSC 1043 or EGR 1043 with a grade of C- or higher. Corequisite(s): CSC 1054L
CSC 1054L Objects and Elementary Data Structures Lab (1 Unit)
A lab course designed for a hands-on exploration of Objects and Elementary Data Structures. Meets two hours per week.
Not repeatable. Letter grade.
Also offered as EGR 1054L.
Prerequisite(s): CSC 1043 or EGR 1043 with a grade of C- or higher. Corequisite(s): CSC 1054
CSC 2052 Data Structures in C++ (1 Unit)
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.
Prerequisite(s): CSC 1054 or EGR 1054 with a grade of C- or higher.
Corequisite(s): CSC 2052L
CSC 2052 is the first quad of CSC 2054.
CSC 2052L Data Structures in C++ Lab (1 Unit)
A lab course designed for a hands-on exploration of Data Structures in C+
+. Meets two hours per week.
Not repeatable. Letter grade.
Prerequisite(s): CSC 1054 or EGR 1054 with a grade of C- or higher. Corequisite(s): CSC 2052
CSC 2054 Data Structures and Algorithms (3 Units)
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 or EGR 1054 with a grade of C- or higher. Corequisite(s): CSC 2054L

## CSC 2054L Data Structures and Algorithms Lab (1 Unit)

A lab course designed for a hands-on exploration of Data Structures and Algorithms. Meets two hours per week.
Not repeatable. Letter grade.
Prerequisite(s): CSC 1054 or EGR 1054 with a grade of C- or higher. Corequisite(s): CSC 2054

## CSC 3002 UNIX and Python Scripting for Computational Science (2 Units)

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 or EGR 1043 with a grade of C- or higher.

CSC 3011 Machine Learning and Multivariate Modeling in R (1 Unit) 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 or EGR 1043 with a grade of C- or higher.
CSC 3012 Operating Systems for Software Engineering Certificate (2 Units)
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.

## Prerequisite(s): CSC 2052 or CSC 2054

## CSC 3014 Operating Systems (4 Units)

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.
Also offered as EGR 3014.
Prerequisite(s): CSC 2052 or CSC 2054
CSC 3021 Computational Tools (1 Unit)
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.
Prerequisite(s): CSC 3002 or consent of instructor.
CSC 3021 is the first quad of CSC 3022.
CSC 3022 Data Management for Computational Science (2 Units) 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 Units)
This course offers an in-depth treatment of the software development process. Software analysis and design study emphasizes an objectoriented 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 Unit) 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.
Also offered as EGR 3023.
Prerequisite(s): CSC 1043 or EGR 1043 with a grade of C- or higher.
CSC 3054 Design and Analysis of Algorithms (4 Units)
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 Units)

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 3102 Security+ Exam Preparation (1-2 Units)
This is an independent study course designed for students who wish to prepare for the CompTIA's Security+ certification exam. The course is intended for students who have already completed at least one course in computer security.
Prerequisite(s): Consent of instructor.
CSC 3112 Network+ Exam Preparation (1-2 Units)
This is an independent study course designed for students who wish to prepare for the CompTIA's Network+ certification exam. The course is intended for students who have already completed at least one course in computer networking.
Prerequisite(s): Consent of instructor.
CSC 4012 Topics in Computer Science (2 Units)
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 (6) units.
Prerequisite(s): CSC 2054, MTH 1031 and MTH 1044 or MTH 1064 and consent of instructor.
CSC 4054 Computer Architecture and Assembly Language (4 Units) 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.
Also offered as EGR 4054.
Prerequisite(s): CSC 1054 or EGR 1054 with a grade of C- or higher and Junior or Senior standing.

CSC 4081 Senior Seminar in Computer Science (1 Unit)
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.

## 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 Units)
Study of a selected problem or topic under the direction of an instructor. The instructor and student propose the course of study.
May be repeated for a total of six (6) units.
Prerequisite(s): Consent of instructor and approval by the department chair is required.
CSC 4093 Software Project (3 Units)
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 Units)
Independent research conducted under the guidance of a faculty mentor.
The instructor and student propose the research topic.
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 Unit)
The continuation of independent research conducted under the guidance of a faculty mentor. The instructor and student propose the research topic.
Credit/No Credit.
Prerequisite(s): Approval of the department chair, CSC 4102, and consent of instructor.

## CSC 4133 Service Learning in Computer Science (3 Units)

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.

## ECO - Economics

## ECO 1000 Survey of Economics (FE) (3 Units)

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 (FE) (3 Units)
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 (FE) (3 Units)

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 Units)
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 3080 Money and Banking (3 Units)
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 4040 The Economics of Race, Class, and Gender (WS) (3 Units) 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 4070 Contemporary Development Planning (3 Units)

This course explores the role of development planning in a Global South context. Topics include consideration of historic approaches to development planning, the United Nations' Sustainable Development Goals, current market-driven, innovative approaches to alleviate poverty, and ways businesses and nonprofits can support the involvement and voices of people at the localized, grass-roots level for planning purposes. The effectiveness of different strategies and approaches to development planning policies and programs are also explored.
Prerequisite(s): ECO 1001 and ECO 1002
ECO 4090 Special Studies in Economics (3 Units)
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 (6) units.
Prerequisite(s): Consent of instructor.

ECO 4091 Independent Studies in Economics (3 Units)
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 (6) units.
Prerequisite(s): Consent of instructor.

## EDU - Education

## EDU 40CP1 Elementary Clinical Practice Seminar I (1 Unit)

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.
Also offered as EDU 6CP1.
Corequisite(s): EDU 4040
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.
EDU 40CP2 Elementary Clinical Practice Seminar II (1 Unit)
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.
Also offered as EDU 6CP2.
Corequisite(s): EDU 4060
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.

## EDU 40CP3 Secondary Clinical Practice Seminar I (1 Unit)

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.
Also offered as EDU 6CP2.
Corequisite(s): EDU 4050
It is through this course that each candidate completes the CaITPA task "Assessing Learning" as a performance-based measure of the knowledge and skills taught in this course.

## EDU 40CP4 Secondary Clinical Practice Seminar II (1 Unit)

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.
Credit/No Credit.
Also offered as EDU 6CP2.

## Corequisite(s): EDU 4055

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.
EDU 3002 Foundations of Education and Learning Theory (3 Units)
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 (20) fieldwork hours are required.
Also offered as EDU 6000.
Candidates are responsible for transportation to and from the school site. Task-stream registration is required.

## EDU 3006 Principles of Language Acquisition (3 Units)

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.
Also offered as EDU 6001.
Prerequisite(s): EDU 3002 and EDU 4004
Candidates are responsible for transportation to and from the school site. Task-stream registration is required.

## EDU 3024 Differentiated Mathematics Instruction for All Learners (3 Units)

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.
Also offered as EDU 6012.
Prerequisite(s): EDU 3002, EDU 3006, EDU 4004, and MTH 2023
Candidates are responsible for transportation to and from the school site. Task-stream registration required.

## EDU 4004 Foundations of Special Education (3 Units)

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 (20) fieldwork hours are required when taken on the undergraduate campus.
Also offered as EDU 6002.
Prerequisite(s): EDU 3002
Task-stream registration required.
EDU 4009 Classroom Assessment and Research Practices (3 Units)
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 4010 Methods of Teaching Reading and Writing (3 Units)
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 Units)
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 grade.
Prerequisite(s): EDU 3002 and EDU 4004 or consent of instructor; Senior standing.
EDU 4020 Literacy Instruction for Secondary Teachers (3 Units) 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 Units)
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.
Also offered as EDU 6021.
It is through this course that each candidate completes the CaITPA task "Designing Instruction" as a performance-based measure of the knowledge and skills taught in this course.

## EDU 4022 Interdisciplinary Approaches to Teaching in the Content Areas (3 Units)

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 4032 Methods of Teaching Secondary Language Arts (3 Units) This methodology course is designed to prepare prospective secondarylevel (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 sixtrait 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 Units) 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 graduatelevel elective for the MAT degree.)
Also offered as EDU 6023.

## EDU 4034 Methods of Teaching Secondary Science (3 Units)

This methodology course is designed to prepare prospective secondarylevel (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 Units) This methodology course is designed to prepare prospective secondarylevel (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 stateadopted 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 Units)
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 Units)

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 Units)

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 Units) 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 4040 Elementary Clinical Practice I (4 Units)

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. The Clinical Practice experience contributes to the candidates' preparation to complete the Teaching Performance Assessment (TPA) required for credential completion. Credit/No Credit.

## Also offered as EDU 6030.

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

## EDU 4050 Secondary Clinical Practice I (4 Units)

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. The Clinical Practice experience contributes to the candidates' preparation to complete the Teaching Performance Assessment (TPA) required for credential completion. Credit/No Credit.
Also offered as EDU 6040.
Corequisite(s): EDU 40CP3

## EDU 4053 Organization and Management for Success in the Moderate/ Severe Classroom (3 Units)

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 Units)

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 4055 Secondary Clinical Practice II (4 Units)

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. The Clinical Practice experience contributes to candidates' preparation to complete the Teaching Performance Assessment (TPA) required for credential completion. Credit/No Credit.
Also offered as EDU 6044.
Corequisite(s): EDU 40CP4

## EDU 4060 Elementary Clinical Practice II (4 Units)

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. The Clinical Practice experience contributes to candidates' preparation to complete the Teaching Performance Assessment (TPA) required for credential completion. Credit/No Credit.
Also offered as EDU 6034.
Prerequisite(s): Successful completion of Clinical Practice I and completion of all Teacher Education admission requirements.
Corequisite(s): EDU 40CP2

## EDU 4070M Special Education Mild/Moderate Clinical Practice I (4 Units)

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 (4 Units)

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 Units)

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 (4

 Units)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 4090 Special Studies in Education (1-3 Units)

Intensive study in a special topic in education under the direction of faculty member.
May be repeated up to a total of six (6) units.

EDU 4092 Assessment and Services for Students with Disabilities (3 Units)
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 EDU 6050.

## EDU 4093 Curricular and Instructional Adaptations for Students with Mild/Moderate Disabilities (3 Units)

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 EDU 6051.

## EDU 4094 Collaboration and Consultation for IEP Implementation, Evaluation, and Program Involvement (3 Units)

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 EDU 6052.
EDU 4096 Principles of Language Acquisition for Students with Moderate/Severe Disabilities (3 Units)
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.
EDU 4099 Research in Education (1-3 Units)
Open to candidates of proven ability.
May be repeated up to a total of six (6) units.
Prerequisite(s): Consent of the dean of the School of Education and instructor.

## EGR - Engineering

EGR 1012 Introduction to Engineering I (1 Unit)

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): EGR 1012L and MTH 1033 (or equivalent).
EGR 1012L Introduction to Engineering I Lab (1 Unit)
Laboratory to compliment EGR 1012. Meets two hours per week. Corequisite(s): EGR 1012

## EGR 1023 Introduction to Engineering II (2 Units)

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 Unit)

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 Units)

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 multidimensional 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.
Also offered as CSC 1043.
Prerequisite(s): MTH 1013 or equivalent.
Corequisite(s): EGR 1043L
EGR 1043L Introduction to Computer Programming Lab (1 Unit) A lab course designed for a hands-on exploration of Introductory Computer Programming. Meets two hours per week.
Also offered as CSC 1043L.
Prerequisite(s): MTH 1013 or equivalent.
Corequisite(s): EGR 1043

## EGR 1054 Objects and Elementary Data Structures (3 Units)

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. Also offered as CSC 1054.
Prerequisite(s): EGR 1043 with a grade of C - or higher.
Corequisite(s): EGR 1054L
EGR 1054L Objects and Elementary Data Structures Lab (1 Unit)
A lab course designed for a hands-on exploration of Objects and
Elementary Data Structures. Meets two hours per week.
Also offered as CSC 1054L.
Prerequisite(s): EGR 1043 with a grade of C - or higher.
Corequisite(s): EGR 1054

EGR 2014 Engineering Mechanics: Statics (3 Units)
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 Unit)
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 Circuit Analysis (3 Units)
Theory and analysis of electrical circuits. Topics include basic circuit elements, laws of circuit analysis, Kirchoff's laws, loop and nodal analysis, differential equations for modeling electronic circuits, $A C$ 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 Circuit Analysis Lab (1 Unit)
A lab course designed for a hands-on exploration of 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 Units)
A survey of nuclear physics including nuclear models, law of radioactive decay, radiation detection, and applications of nuclear science in engineering and medicine.
Also offered as PHY 3013.
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

## EGR 3013L Nuclear Physics Lab (1 Unit)

A lab course designed for a hands-on exploration of Nuclear Physics. Meets two hours per week.
Also offered as PHY 3013L.
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

## EGR 3014 Operating Systems (4 Units)

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.
Also offered as CSC 3014.
Prerequisite(s): CSC 2052 with a grade of C- or higher or CSC 2054 with a grade of C - or higher.

EGR 3023 Software Engineering (3 Units)
This course offers an in-depth treatment of the software development process. Software analysis and design study emphasizes an objectoriented approach that is introduced and contrasted with traditional design methodologies. CASE tools are used during the design process.
Also offered as CSC 3023.
Corequisite(s): CSC 2054
EGR 3034 Mechanics of Materials (3 Units)
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): EGR 2014 and PHY 2044 with a grade of C- or higher. Corequisite(s): EGR 3034L

## EGR 3034L Mechanics of Materials Lab (1 Unit)

A lab course designed for a hands-on exploration of Mechanics of Materials. Meets two hours per week.
Prerequisite(s): EGR 2014 and PHY 2044 with a grade of C- or higher. Corequisite(s): EGR 3034
EGR 3043 Analytical Mechanics: Dynamics (3 Units)
Newtonian mechanics, dynamics of particles and rigid bodies, oscillatory motion, central forces, inertial tensors, Lagrangian and Hamiltonian formulations.
Also offered as PHY 3043.
Prerequisite(s): MTH 2074 with a grade of C- or higher and PHY 2054 with
a grade of C - or higher.
Recommended: MTH 3033
EGR 3053 Analog Electronics (2 Units)
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 Unit)
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 Units)
Classical electromagnetism including topics in electrostatics, magnetostatics, fields in matter, electromagnetic induction, and Maxwell's equations.
Also offered as PHY 3063.
Prerequisite(s): MTH 2074 with a grade of C- or higher and PHY 2054 with a grade of C - or higher.

## Recommended: MTH 3033

EGR 3073 Networking and Security (3 Units)
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.
Also offered as ISS 3073.
Prerequisite(s): CSC 1054 with a grade of C- or higher or EGR 1054 with a grade of C - or higher and Junior standing.

EGR 3083 Electricity, Magnetism, and Waves II (3 Units)
Electrodynamics with an emphasis on application of Maxwell's equations particularly to electromagnetic radiation.
Also offered as PHY 3083.
Prerequisite(s): EGR 3063
EGR 3093 Digital Electronics (2 Units)
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 Unit)
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 Units)
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.
Also offered as ISS 4003.
Prerequisite(s): CSC 3014 or EGR 3014; EGR 3073 or ISS 3073
EGR 4013 Thermodynamics (3 Units)
Fundamental concepts of thermodynamics and statistical mechanics; applications to both classical and quantum systems.
Also offered as PHY 4013.
Prerequisite(s): PHY 2054
Recommended: MTH 3033

## EGR 4042 Embedded Systems and Robotics (1 Unit)

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): CSC 2054 or EGR 2024 with a grade of C- or higher. Corequisite(s): EGR 4042L
EGR 4042L Embedded Systems and Robotics Lab (1 Unit)
A lab course designed for a hands-on exploration of Embedded Systems and Robotics. Meets two hours per week.
Prerequisite(s): CSC 2054 or EGR 2024 with a grade of C- or higher. Corequisite(s): EGR 4042
EGR 4054 Computer Architecture and Assembly Language (4 Units) 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 Units)
An introduction to the study of solids, including crystal structure, reciprocal lattices, crystal binding, phonons, and electron band theory. Also offered as PHY 4063.
Prerequisite(s): PHY 2054 with a grade of C- or higher.
EGR 4072 Senior Project I (2 Units)
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 Units)
This course provides students (teams with) the opportunity to hone and finish building the project design initiated in EGR 4072. The students will prepare a scientific paper about their research/project and give an oral presentation of their findings. This course will normally be completed in a student's senior year.
Prerequisite(s): EGR 4072 or consent of instructor.

## EGR 4090 Special Topics in Engineering (1-4 Units)

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 (6) units.
Prerequisite(s): Consent of instructor.

## EGR 4092 Internship in Engineering (2 Units)

A supervised experience in which the student works with industry professionals to gain experience in engineering.
May be repeated up to a total of four (4) units. Credit/No Credit.
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 Units)
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 Units)
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.

## EVS - Environmental Science

EVS 3096 Advanced Biology (3 Units)
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 Units)

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 Units)
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 Units)

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).

## ESI - Environmental Studies

ESI 2050 Introduction to Environmental Studies (3 Units)
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 Units)
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 Units)
A supervised experience in which the student works off campus in an established program, public service, or business that connects to environmental concerns.
May be repeated up to a total of four (4) units.
Concurrent: ESI 2050 or consent of instructor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.

## FIN - Finance

FIN 3035 Business Finance (3 Units)
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 Units)

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 Units)
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 Units)
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.
Also offered as ACC 4025.
Prerequisite(s): FIN 3035 and Senior standing only.
FIN 4035 International Finance (3 Units)
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 Units)
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 (6) units.
Prerequisite(s): Consent of instructor
FIN 4091 Independent Studies In Finance (1-3 Units)
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 (6) units.
Prerequisite(s): Consent of instructor

## LAN - Foreign Language

## LAN 1001 Elementary Foreign Language I (FE) (4 Units)

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.

## LAN 1002 Elementary Foreign Language II (FE) (4 Units)

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 - French

FRE 1001 Elementary French I (FE) (4 Units)
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 (FE) (4 Units)
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 Units)
Intensive practical use of the language designed to bring the student to a high level of proficiency in communicative skills through firsthand 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 Units)
Intensive practical use of the language designed to bring the student to a high level of proficiency in communicative skills through firsthand 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 Units)
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 Units)
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 Units)
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 Units)
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
FRE 4020 Studies in French Literature (3 Units)
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 Units)
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 (6) units.
Prerequisite(s): Consent of instructor and department chair.

FRE 4095 Literary Theory Capstone (3 Units)
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.

## FST - Freshman Studies

FST 1000 Freshman Studies Seminar I (1 Unit)
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 Units)
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.

## GER - German

## GER 1001 Elementary German I (FE) (4 Units)

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 (FE) (4 Units)
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 Units)

Intensive practical use of the language designed to bring the student to a high level of proficiency in communicative skills through firsthand 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 Units)
Intensive practical use of the language designed to bring the student to a high level of proficiency in communicative skills through firsthand 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 Units)
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 (6) units.
Prerequisite(s): Consent of instructor and department chair.

## GRK - Greek

## GRK 2007 Biblical Greek I (FE) (4 Units)

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 (FE) (4 Units)
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 - Hebrew

HEB 2005 Biblical Hebrew I (FE) (4 Units)
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 (FE) (4 Units)

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

## HIS - History

HIS 1010 World Civilizations I (FE) (3 Units)
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 (FE) (3 Units)
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 Units)
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 Units)

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 Units)
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 Units)
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 Units)
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 Units)

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 SpanishAmerican wars as the nation hurtled toward world power status after World War I.

## HIS 3035 History of Surfing and Surf Culture (2 Units)

This course introduces students to the history of surfing and surf culture from early modern times to the present. It explores the origin and evolution of wave riding as it developed in the Pacific Rim, eventually expanding to become a global athletic and ethical tradition. Key participants in surfing culture, as well as political, economic, environmental, and spiritual aspects of surfing will be analyzed.

## HIS 3040 Russia to 1900 (4 Units)

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 Units) 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 Units)
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 Units)

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 Units)

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 Wilderness in the American Mind (3 Units)

Wilderness in the American Mind studies influential ways people in American history have thought about creation. Traditions within Christianity, romanticism, pragmatism, and scientism are woven throughout. We read the great writers on the subject from the seventeenth through the twenty-first centuries. We learn the history of the most influential conservation organizations. We also study public policy as it develops: the creation of parks, the defining of terms such as "nature," "ecology," and "wilderness," and the issues caused by tourism, pollution, and population growth. As a history class, we emphasize people, situations, and events in the hope of gaining wisdom that will apply today in our world.

## HIS 3065 Modern Japan and Korea (4 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 3085 World War II Through Film (2 Units)
We will seek to better understand the main causes and events of the Second World War, while also exploring the relationship between war, history, and cinema. Film is both a primary source and secondary source, and provides us with ample opportunity to discuss the relationship between the two and the role of perspective in shaping sources. Along with discussing the role of cinema during and after the war, we'll also be learning about the major theatres of the war, the Holocaust, the treatment of POWs and civilians, the internment of Japanese Americans, and life on the home front.

## HIS 3090 Off-Campus Cooperative Programs (3-15 Units)

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 Units)
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 Units)

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 Units)

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 Units)

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 Units) 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 Units)
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 Units)

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.
Repeatable for up to four (4) units.
Prerequisite(s): Consent of instructor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.

## HIS 4070 Senior Seminar in History (4 Units)

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 Units)

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 Units)
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 Units)

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 Units)

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 Units)

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 Units)

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, Eusibius, and Tacitus.

## HIS 4090 Special Studies in History (1-4 Units)

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 (8) units.
Prerequisite(s): Consent of instructor.

## HON - Honors Program

HON 1000 Introduction to Christian Scholarship (FE) (1 Unit)
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 1001 Rhetoric: Critical Communication (FE) (4 Units)

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 (FE) (3 Units)
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 (FE) (4 Units)
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 (FE) (3 Units)
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 (FE) (2 Units)
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 twotestament canon.
Taken in conjunction with HON 2002 in sequential Quad terms.
HON 2002 New Testament History and Religion (FE) (3 Units)
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 (FE) (4 Units)
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 (FE) (4 Units)

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 (FE) (3 Units)

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 (FE) (4 Units)
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 (FE) (1 Unit)

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.

HON 3099 Foundations of Independent Research (1-2 Units)
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.
May be repeated up to a total of four (4) units. 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 Units)

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.

## 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 Unit)

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.
Credit/No Credit.
Prerequisite(s): HON 4098

## ISS - Information Systems

## ISS 3042 Project Management and Quality Assurance (2 Units)

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 Units)
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 Units)
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 Units)
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 Units)

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 Units)
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 Units)
A supervised experience in which the student works with industry professionals to gain experience with managing information systems. May be repeated for a total of four (4) units. Credit/No Credit.
Prerequisite(s): Student must have taken at least two upper-division computer science or information systems courses for their major and consent of instructor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.

## ISS 4081 Senior Seminar in Information Systems (1 Unit)

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.
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 Units) Independent research conducted under the guidance of a faculty mentor. The instructor and student propose the research topic. 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 Unit) The continuation of independent research conducted under the guidance of a faculty mentor. The instructor and student propose the research topic.
Credit/No Credit.
Prerequisite(s): ISS 4102, approval of the department chair, and consent of instructor.

ISS 4133 Service Learning in Computer Information Systems (3 Units) 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.

## IDS - Interdisciplinary Studies

## IDS 2090 Special Studies in Interdisciplinary Studies (1-3 Units)

A study in a special topic to be determined by the academic dean or designee. May not be applied to major, minor, or FE requirements. May be repeated for a maximum of six (6) units as long as the content is different.
Prerequisite(s): Consent of instructor.

## JRN - Journalism

## JRN 2015 Newspaper Workshop (1 Unit)

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. COM 2075, JRN 2015, JRN 2017, JRN 2018, and WRI 2016 may be repeated up to a combined total of eight (8) units.
Prerequisite(s): Fulfillment of the College Composition requirement.
JRN 2017 Yearbook Workshop (1 Unit)
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. COM 2075, JRN 2015,
JRN 2017, JRN 2018, and WRI 2016 may be repeated up to a combined total of eight (8) units.
Prerequisite(s): Fulfillment of the College Composition requirement.

## JRN 2018 Multimedia Workshop (1 Unit)

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.
COM 2075, JRN 2015, JRN 2017, JRN 2018, and WRI 2016 may be repeated up to a combined total of eight (8) units.
Prerequisite(s): Fulfillment of the College Composition requirement.

## JRN 2050 Introduction to Journalism (3 Units)

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 Units)
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 Units)
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): COM 2043 and JRN 2050
Corequisite(s): COM 3013 or JRN 3014

## JRN 3013 Television News Production (3 Units)

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.
Also offered as COM 3013.
Corequisite(s): JRN 3012 and COM 3013 or JRN3013 are co-requisites and must be taken in the same semester.
JRN 3014 Computer-Assisted Reporting (3 Units)
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 Units)

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 Units)
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 Units)

Focuses on current aspects of journalism with a different concentration each time it is offered.
May be repeated up to six (6) units as long as the content is different. Prerequisite(s): JRN 2050
JRN 3055 Public Relations Writing (3 Units)
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 Units)

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. Also offered as COM 4013.
Prerequisite(s): COM 3013 or JRN 3014 and JRN 3012

JRN 4014 Long-Form Broadcast News (3 Units)
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.
Also offered as COM 4014.
Prerequisite(s): COM 3013 or JRN 3014 and JRN 3012
JRN 4025 Advanced Television Workshop (1 Unit)
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 (6) units.
Also offered as COM 4025.
Prerequisite(s): COM 2043
JRN 4030 Multimedia Journalism (3 Units)
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 Units)
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 Units)
A supervised experience in which the student works off campus in an established media business or public service media company.
May be repeated for a total of four (4) units.
Prerequisite(s): JRN 2050, JRN 3040, and JRN 3050, or consent of instructor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.

## JRN 4095 Senior Seminar in Multimedia Journalism (3 Units)

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.

## KIN - Kinesiology

KIN 1000 Fitness Through Movement (FE) (2 Units)
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.

## KIN 1001 Orientation to Kinesiology (1 Unit)

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 Units)
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 Units)
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(s): KIN 1002
KIN 1010 Martial Arts and Self Defense (FE) (1 Unit)
An introductory course for the general student covering mixed martial arts (karate/tae kwon do, jujitsu/aikido) and self defense.

## KIN 1011 Beginning Soccer (FE) (1 Unit)

This course will cover the basic beginning concepts of soccer. It will also enhance the importance of healthy stewardship of personal health.

## KIN 1012 Yoga Sculpt (FE) (1 Unit)

Development of personal fitness through a variety of activities including yoga, pilates, core stability ball, light weights, resistance bands, and mat work.

## KIN 1013 Yoga (FE) (1 Unit)

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.

## KIN 1014 Cheerleading (FE) (1 Unit)

May be repeated up to a total of four (4) units.
Prerequisite(s): Consent of instructor.

## KIN 1015 Adapted Physical Activity (FE) (1 Unit)

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 two (2) units.
Prerequisite(s): Physician's referral and approval of the department chair.

## KIN 1016 High Intensity Functional Training (FE) (1 Unit)

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.

## KIN 1017 Contemporary Dance (FE) (1 Unit)

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.
KIN 1018 Southern California Hiking (FE) (1 Unit)
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.

KIN 1019 Core and Cardio Training (FE) (1 Unit)
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.

KIN 1020 Beginning Tennis (FE) (1 Unit)
Fundamental techniques, rules, court play, and etiquette.
KIN 1021 Advanced Tennis (FE) (1 Unit)
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.
KIN 1022 Pickleball (FE) (1 Unit)
This is a beginning pickleball course in which students will develop the basic skills to play the game of pickleball. These will include: safety, etiquette, rules, scoring, forehand and backhand groundstrokes, volleys, serves, lobs, overheads, dink shots, proper footwork, basic strategies and court positioning for singles and doubles play. Basic fitness and training principles will be discussed as applicable to the sport of pickleball.
KIN 1030 Beginning Volleyball (FE) (1 Unit)
An introduction to the fundamental skills for effective play and an understanding of the rules of the game.
KIN 1035 Badminton (FE) (1 Unit)
An introduction to the basic techniques, strategies, and rules for singles and doubles play.
KIN 1040 Beginning Swimming (FE) (1 Unit)
Fundamental swim strokes, skills, and safety techniques geared toward developing fitness.

## Fee: Special fee.

## KIN 1041 Advanced Swimming (FE) (1 Unit)

Training techniques in competitive swimming. Starts, turns, conditioning, stroke mechanics.
Prerequisite(s): KIN 1040 or consent of instructor.
Fee: Special fee.
KIN 1044 Beginning Surfing (FE) (1 Unit)
Instruction and participation in the basic skills of surfing and rough water safety.
KIN 1048 Boot Camp Fitness (Aerobics) (FE) (1 Unit)
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.

## KIN 1055 Weight Training (FE) (1 Unit)

Development of skills and knowledge pertaining to building strength, endurance, and flexibility through the use of weights.

## KIN 1060 Golf (FE) (1 Unit)

An introduction to basic skill techniques, rules, safety, and etiquette leading to a practical golf course experience.
Fee: Special fee.

## KIN 1068 Outdoor Adventures (FE) (1 Unit)

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.
Fee: Special fee for transportation and food.

KIN 1070 Varsity Basketball: Men (FE) (1 Unit)
May be repeated up to four (4) units.
KIN 1071 Varsity Basketball: Women (FE) (1 Unit)
May be repeated up to four (4) units.
KIN 1072 Varsity Tennis: Men (FE) (1 Unit)
May be repeated up to four (4) units.
KIN 1073 Varsity Tennis: Women (FE) (1 Unit)
May be repeated up to four (4) units.
KIN 1075 Varsity Track and Field: Women (FE) (1 Unit)
May be repeated up to four (4) units.
KIN 1076 Varsity Golf (FE) (1 Unit)
May be repeated up to four (4) units.
KIN 1077 Varsity Baseball (FE) (1 Unit)
May be repeated up to four (4) units.
KIN 1078 Varsity Softball (FE) (1 Unit)
May be repeated up to four (4) units.
KIN 1080 Varsity Soccer: Men (FE) (1 Unit)
May be repeated up to four (4) units.
KIN 1081 Varsity Volleyball (FE) (1 Unit)
May be repeated up to four (4) units.
KIN 1083 Varsity Cross Country: Women (FE) (1 Unit)
May be repeated up to four (4) units.
KIN 1084 Varsity Soccer: Women (FE) (1 Unit)
May be repeated up to four (4) units.
KIN 2000 Optimal Health (FE) (2 Units)
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.

KIN 2001 Fundamentals of Fitness Assessment and Development (2 Units)
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.
KIN 2020 Team Sports Fundamentals and Strategies (FE) (2 Units) 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.

## KIN 2025 Individual and Dual Sports Fundamentals and Strategies

 (FE) (2 Units)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.

## KIN 2030 Lifestyle as Medicine (FE) (2 Units)

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 evidencebased approaches to prevent and manage chronic diseases in their families, communities, and their own lives.

## KIN 2050 Medical Terminology (2 Units)

This course focuses on the principles of medical word building using root words, prefixes, and suffixes to help students develop medical vocabulary used in health care settings. The course includes common terms, definitions, and pronunciations for each body system, including pathology, pharmacology, radiography, laboratory tests, and surgical procedures.

## KIN 2080 Care and Prevention of Athletic Injuries (2 Units)

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.
Fee: Special fee.
KIN 2080L Care and Prevention of Athletic Injuries Lab (1 Unit)
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.
Corequisite(s): KIN 2080
Fee: Special fee.
KIN 3001 Fitness Assessment and Exercise Prescription (3 Units) 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.
Prerequisite(s): Junior or Senior standing.
Corequisite(s): KIN 3001L
Fee: Special fee.
KIN 3001L Fitness Assessment and Exercise Prescription Lab (1 Unit) Practical laboratory experiences in fitness assessment and exercise prescription.
Corequisite(s): KIN 3001
Fee: Special fee.

## KIN 3008 Methods of Teaching Physical Education (3 Units)

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): KIN 1000 or KIN 2000 or SWF 3015

## KIN 3012 Motor Learning and Motor Development (3 Units)

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 Units)

In-depth study of the structure and function of neuro-musculo-skeletal components of the human body in motion.
Laboratory experiences included.
Prerequisite(s): BIO 1030 or consent of instructor.
KIN 3027 Applied Biomechanics (2 Units)
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.
Corequisite(s): KIN 3025

## KIN 3027L Biomechanics Laboratory (1 Unit)

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(s): KIN 3027

KIN 3030 Nutrition for Exercise and Sport Performance (3 Units)
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): KIN 2000, KIN 2030, or consent of instructor.

## KIN 3040 Physiology of Exercise (3 Units)

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.
Prerequisite(s): BIO 1040 or consent of instructor.
Fee: Special fee.
KIN 3040L Physiology of Exercise Lab (1 Unit)
Practical experiences in assessing human physiological responses to exercise and training.
Corequisite(s): KIN 3040
KIN 3050 Foundations and Techniques of Coaching (3 Units)
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): KIN 2020 or consent of instructor.
KIN 3070 Praxis of Strength Training and Conditioning (3 Units)
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

KIN 3075 Movement Interventions and Corrective Exercise (2 Units) 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 and BIO 1040
Corequisite(s): KIN 3027

## KIN 3085 Pathology of Injury and Illness (3 Units)

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

## KIN 3087 Assessment of Lower Extremity Pathology (3 Units)

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.

KIN 3088 Assessment of Head, Spinal, and Upper Extremity Pathology (3 Units)
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.

## KIN 4010 Therapeutic Exercise (3 Units)

Theory and practice of active therapeutic techniques including manual, William's, and McKensie therapies, proprioceptive neuromuscular facilitation and progressive resistance.

## KIN 4020 Pharmacology (1 Unit)

Study of drug classifications and medico-legal aspects of therapeutic and pharmacological treatments.

## KIN 4030 Clinical Exercise Physiology (3 Units)

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.
Prerequisite(s): KIN 3040
Fee: Special fee.
KIN 4040 Measurement, Statistics, and Evaluation of Human Performance (3 Units)
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 administration and interpretation are the central content areas of the course with application to sport science, sports medicine, and sport performance.

KIN 4075 Gross Anatomy: Neuromusculoskeletal Dissection of the Spine and Extremities (3 Units)
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): BIO 1030 and BIO 1040
KIN 4080 Leadership in the Fitness Professions (3 Units)
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.
KIN 4084 Practicum in Kinesiology (1-3 Units)
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 (6) units.
Prerequisite(s): Consent of instructor.
KIN 4088 Internship in Kinesiology (1-3 Units)
An off-campus experience under supervision of a faculty member in which the student gains experience in the field of kinesiology.
May be repeated for up to a total of six (6) units.
Prerequisite(s): Consent of instructor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.
KIN 4090 Special Studies in Kinesiology (1-3 Units)
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 for up to a total of six (6) units.
Prerequisite(s): Consent of instructor and department chair.
KIN 4091 Research in Kinesiology (1-3 Units)
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 (6) units.
Prerequisite(s): Consent of department chair.
KIN 4095 Kinesiology Capstone (1 Unit)
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 Units)

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.
Online.
Also offered as KIN 6010.

## KIN 5075 Gross Anatomy: Neuromusculoskeletal Dissection of the Spine and Extremities (3 Units)

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.
Also offered as KIN 4075 and KIN 6075.
Prerequisite(s): Consent of instructor.

## LIN - Linguistics

LIN 3012 Introduction to Linguistics (3 Units)
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 Units)
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 Units)
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 (6) units.
Prerequisite(s): Consent of instructor and department chair.

## LIT - Literature

## LIT 2000 Literature and Culture (FE) (2 Units)

A study of representative works of literature and cultural contexts.
LIT 2052 World Literatures: Ancient and Medieval Literatures (3 Units) 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 Units)

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 Units)

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 Units)
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 Units)
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 Units)

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 Units)
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 Diverse Voices of World Literature (FE) (3 Units)
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 Diverse Voices of Cinema (FE) (3 Units)

An advanced study of representative works of 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 of American Literature (FE) (3 Units)
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 Diverse Voices of Women Writers (FE) (3 Units)
An advanced study of selected works written by women; themes and genres studied may vary. The course focuses on intersecting questions of gender, class, race, ability, and identity.
Prerequisite(s): Fulfillment of the College Composition requirement, LIT 2000, and Junior or Senior standing.

LIT 4000 American Literature to 1900 (3 Units)
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 Units)

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 Units)
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 Units)
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 Units)
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 Units)
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 Units)

An advanced study of selected post-colonial literature and post-colonial theory from the turn of the 19th century through 21 st 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 Units)

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 Units)
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 Foundational Explorations literature requirement and LIT 3000.

## LIT 4090 Special Studies in Literature (1-3 Units)

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 (6) units.
Prerequisite(s): Consent of instructor and department chair.
LIT 4095 Literary Theory and Scholarship (3 Units)
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 Units)
Independent research under the guidance of a faculty member.
Prerequisite(s): Senior standing; consent of instructor and department chair.
LIT 5000 American Literature to 1900 (3 Units)
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.
Also offered as LIT 4000.
Prerequisite(s): Consent of instructor.
LIT 5020 American Literature Since 1900 (3 Units)
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.
Also offered as LIT 4020.
Prerequisite(s): Consent of instructor.
LIT 5044 Medieval Literature (3 Units)
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.
Also offered as LIT 4044.
Prerequisite(s): Consent of instructor.
LIT 5045 17th Century English Literature (3 Units)
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.
Also offered as LIT 4045.
Prerequisite(s): Consent of instructor.

## LIT 5046 Romantic Literature (3 Units)

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.
Also offered as LIT 4046.
Prerequisite(s): Consent of instructor.

LIT 5047 Victorian Literature (3 Units)
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. Also offered as LIT 4047.
Prerequisite(s): Consent of instructor.
LIT 5048 Postcolonial Classics and Theory (3 Units)
An advanced study of selected post-colonial literature and post-colonial theory from the turn of the 19th century through 21 st century. Class inquiry focuses on the effects of empire, colonization, neocolonialism, and globalization presented in these texts.
Also offered as LIT 4048.
Prerequisite(s): Consent of instructor.

## LIT 5050 The Novel (3 Units)

An advanced study of representative examples of the novel. Selected novels may include both novels written in English and novels translated into English.
Also offered as LIT 4050.
Prerequisite(s): Consent of instructor.

## LIT 5061 Shakespeare ( 3 Units)

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.
Also offered as LIT 4061.
Prerequisite(s): Consent of instructor.
LIT 5090 Seminar in Literature (3 Units)
An advanced literature course: period and topic of study selected by the faculty member.
May be repeated for credit three times with different course content each time and content that is different than undergrad literature credits taken for undergraduate degree at PLNU.
Also offered as LIT 6090.

## MGT - Management

## MGT 2012 Principles of Management (3 Units)

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, decisionmaking, human resources and leadership.

## Prerequisite(s): BUS 1000

## MGT 3020 Organizational Behavior (3 Units)

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 Units)

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 a total of six (6) units.
Enrollment by application. Sophomore, Junior, or Senior standing only.
MGT 3061 Sourcing Management (3 Units)
This course provides an understanding of the critical role that procurement and planning play in an organization's supply chain.
Students will explore the role of purchasing, order management, metrics, performance, contracts, the intelligent supply chain, and ethical/
sustainable sourcing. The overall impact of human capital and strategy in a supply chain will also be addressed.
Prerequisite(s): MGT 2012
MGT 3062 Logistics Management (3 Units)
This course provides an understanding of the fundamentals of logistics in a supply chain. Students will learn about the full logistics life cycle including how transportation and warehousing contribute to organizational success. Students will also explore the role of distribution, quality control, material flow, IT systems, packaging and sustainability within a supply chain strategy.
Prerequisite(s): MGT 3061 or consent of instructor.
MGT 3074 Human Resource Management (3 Units)
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 Units)
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 Units)

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 Units)

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.

MGT 4070 Nonprofit Organization Management (3 Units)
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 and Senior standing only.

## MGT 4084 Operations Management (3 Units)

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 and Senior standing only.
Pre or Corequisite(s): MGT 3020 and MGT 3074

## MGT 4088 Strategic Management (3 Units)

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(s): FIN 3035, MGT 4088L, and Senior standing.
MGT 4088L Strategic Management Lab (0 Units)
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(s): MGT 4088
MGT 4090 Special Topics in Management (3 Units)
Study in a special topic to be determined by the school. Open to juniors and seniors only.
May be repeated for up to a total of six (6) units.
Prerequisite(s): Consent of instructor.
MGT 4091 Independent Studies in Management (1-3 Units)
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 up to a total of six (6) units.
Prerequisite(s): Consent of instructor.

## MKT - Marketing

## MKT 3032 Principles of Marketing (3 Units)

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.

Pre or Corequisite(s): MGT 3020

MKT 3033 Consumer and Organizational Buying Behavior (3 Units) 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 Communication (3 Units) 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 Units)
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 Units)
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 Units)
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 Units)
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 Units)
Study in a special topic to be determined by the school. Open to juniors and seniors only.
May be repeated for up to a total of six (6) units.
Prerequisite(s): Consent of instructor.

## MKT 4091 Independent Studies in Marketing (1-3 Units)

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 up to a total of six (6) units.
Prerequisite(s): Consent of instructor.

## MTH - Mathematics

## MTH 0099 Elementary Algebra (3 Units)

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.
This course does not count toward the minimum 128 units required for graduation.

## MTH 1013 College Algebra (3 Units)

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 Unit)
An introduction to mathematical modeling using mathematical concepts from Calculus I.

## 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 Unit)

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 Units)

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 (FE) (4 Units)
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 Units)
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 (FE) (3 Units)
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 (FE) (1 Unit)

An introduction to mathematical modeling using mathematical concepts from Calculus I.
Corequisite(s): MTH 1064

## MTH 1073 Business Calculus (FE) (3 Units)

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 Units)
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 Unit)

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 Units)

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 Units)
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 Units) 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 Units)

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 Units)
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 Units)
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 (FE) (3 Units)
A Foundational Explorations 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 Units)
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.
Prerequisite(s): MTH 1074 with a grade of C- or higher.

## MTH 3033 Differential Equations (3 Units)

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 Units)
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 Units)

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 Units)

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 Units)
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 nonmathematical disciplines. Written report and oral presentation are required.
Prerequisite(s): MTH 2074 and MTH 3083
MTH 3083 Mathematical Probability and Statistics (3 Units)
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 Units)
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 Units)
Complex numbers, analytic functions, integration, series, contour integration, residues and conformal maps.
Corequisite(s): MTH 2074
MTH 4024 Real Analysis (4 Units)
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 Units)
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 Units)
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 Units)
Independent research conducted under the guidance of a faculty mentor. The instructor and student propose the research topic.
Credit/No Credit.
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 Unit)
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 meeting are held during the semester and a series of lectures by the professor and others are presented on location.
Prerequisite(s): Consent of instructor.

MTH 4072 Internship in Data Science (2 Units)
A supervised experience in which the student works with industry professionals to gain experience in data science.
May be repeated up to a total of four (4) units. Credit/No Credit.
Prerequisite(s): MTH 2092, MTH 3083, and consent of instructor. "C" Designation is for California Internships. "E" Designation is for Out of State Internships.
MTH 4081 Senior Seminar in Computer Science (1 Unit)
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.
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 Units)
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 up to a total of six (6) units.
Prerequisite(s): Consent of instructor.
MTH 4092 Special Topics in Mathematics (2 Units)
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 up to a total of six (6) units.
Prerequisite(s): Consent of instructor.
MTH 4102 Independent Research in Mathematics I (2 Units)
Independent research conducted under the guidance of a faculty mentor.
The instructor and student propose the research topic.
Credit/No Credit.
Prerequisite(s): Approval of the department chair, consent of instructor, and Junior standing.
MTH 4121 Independent Research in Mathematics II (1 Unit)
The continuation of independent research conducted under the guidance of a faculty mentor. The instructor and student propose the research topic.
Credit/No Credit.
Prerequisite(s): MTH 4102, approval of the department chair, and consent of instructor.

## MTH 4133 Service Learning in Mathematics (3 Units)

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.

## CMU - Music - Church Music

## CMU 3014 Music and Worship (3 Units)

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 Units) 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 Units)
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 Units)
Supervised internship in a church situation.
Prerequisite(s): Consent of instructor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.

CMU 4090 Special Studies in Church Music (1-2 Units)
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 Units)
Provides for special courses offered as an adjunct to the curricula.
Seminar title, content, and units to be announced in class schedule.

## MCM - Music - Commercial Music

MCM 1000 Introduction to Commercial Composition (1 Unit)
An introduction to modern composition processes through lead sheet writing including harmonic progression, melodic development, form, style, and notation.

## MCM 3024 Songwriting (2 Units)

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 Units)

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 four (4) units.
Prerequisite(s): MUT 1020
MCM 3035 Arranging I (2 Units)
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 3036 The Business of Music (2 Units)
This course is a study of the major functional areas of the music business. Attention is given to copyright, publishing, revenue streams, contracts, marketing, promotion, professional partnerships, and current best practices.

## MCM 4035 Arranging II (2 Units)

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 Unit)
A public performance, approximately forty-five minutes in length, given in the student's major performing area.
Prerequisite(s): Senior standing.

## MUA - Music Applied

MUA 1001 Recital Attendance - 4 semesters (0 Units)
All Music majors are required to attend 12 department-sponsored or approved concerts/recitals each semester.
Credit/No Credit.

## MUA 1031 Class Voice (1 Unit)

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.
May be repeated.
MUA 1041 Class Piano I (1 Unit)
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 Unit)

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 Unit)

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 two (2) units.
Prerequisite(s): MUA 1042 or consent of instructor.

## MUA 1055 Private Voice (1-2 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)
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 Units)
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 Units)

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 Units)

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 Units)

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 Units)

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 Units)
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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)
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 Units)
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 Units)
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 Units)

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 2002 Guitar Proficiency Exam (0 Units)

Music Education majors are required to pass a proficiency examination in guitar 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 Units)

Introduction to basic conducting techniques, such as score reading, metric patterns, cues and cutoffs.

## MUA 2052 Diction for Singers (3 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)
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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)
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 Units)
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 Units)

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 3014 Advanced Conducting (3 Units)

Providing an extension to techniques and principles learned in MUA 2012, students will focus on score study and the development of expressive conducting techniques. Skills in error detection interpretation, conducting nuance, and general rehearsal techniques will be explored.
Prerequisite(s): MUA 2012 and MUT 2020

## MUA 3031 Acting For Singers (1 Unit)

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 two (2) units.

## MUA 3032 Musical Theater Production (1-2 Units)

Performance experience in musical theatre, open to all students by audition.

## MUA 3055 Private Voice (1-2 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)
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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)
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 Units)
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 Units)
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 Units)

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 3077 Solo Recital for Music Education (0 Units)

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 Units)
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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)

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 Units)
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 Units)
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 Units)
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 Units)

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 Units)

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 Units)

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 Units)

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 Units)
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 Units)
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 Units)
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 Units)

A public solo recital, approximately one hour in length, given in the student's major performing area.
Prerequisite(s): MUA 3076

## MUC - Music Composition

## MUC 2052 Private Composition (1-2 Units)

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 four (4) units.
" C " Designation is for Commercial Music.
MUC 3052 Private Composition (1-2 Units)
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 four (4) units.
Prerequisite(s): MUC 2052
"C" Designation is for Commercial Music.
MUC 4052 Private Composition (1-2 Units)
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 four (4) units.
Prerequisite(s): MUC 3052
"C" Designation is for Commercial Music.
MUC 4077 Senior Recital in Composition (0 Units)
A public recital of original compositions, forty-five minutes in length. Prerequisite(s): MUC 4052
MUC 4095 Seminar in Composition (1-2 Units)
Provides for special courses offered as an adjunct to the curricula.

## MUE - Music Education

MUE 2000 Introduction to Music Teaching and Learning (2 Units) This course provides an orientation to the fundamental principles, theories, and practices of music teaching and learning. This course will survey the history of school music education in America and highlight broader contexts beyond TK-12 education. Course activities include observations and hands-on experiences with formal school music programs, informal music making, and community music contexts.

## MUE 2001 Woodwind Methods (1 Unit)

A laboratory class in playing the woodwind instruments with emphasis on teaching and basic repair techniques.
MUE 2002 Brass Methods (1 Unit)
A laboratory class in playing brass instruments with emphasis on teaching and basic repair techniques.

## MUE 2003 Percussion Methods (1 Unit)

A laboratory class in playing the percussion instruments with emphasis on teaching and basic repair techniques.
MUE 2004 String Methods (1 Unit)
A laboratory class in playing the string instruments (violin, viola, cello, bass) with emphasis on teaching and basic repair techniques.

MUE 3004 Choral Music Methods (3 Units)
Designed to help prepare students to become effective choral music educators. Students focus on vocal production and technique, repertoire selection, effective rehearsal strategies, and program development.

MUE 3010 Vocal Pedagogy (2 Units)
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 Teaching (2 Units)

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 3012 Teaching Instrumental Lessons (3 Units)
A survey of the methods and materials used in teaching private instrumental lessons with special emphasis upon teaching elementary students and the adult beginner. Includes observation of private studio teaching.
MUE 3041 Music Skills for the Elementary Classroom Teacher (3 Units) 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 Music Methods (3 Units)

Methods of teaching public school music in the elementary grades.
Prerequisite(s): MUT 1021
MUE 4051 Internship in Music (1-2 Units)
Supervised internship in the student's major concentration.
May be repeated up to a total of four (4) units.
Prerequisite(s): Consent of instructor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.

MUE 4054 Instrumental Music Methods (3 Units)
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 4060 Music Education Practicum (1 Unit)

This course offers a capstone experience for music education majors by providing hands-on opportunities for students to apply concepts and strategies learned through their MUE coursework. Students are placed with a mentor teacher at a local TK-12 school site.
MUE 4090 Special Studies in Music Education (1-2 Units) 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 Units)
Provides for special courses offered as an adjunct to the curricula. Seminar title, content, and units to be announced in class schedule. May be repeated for up to a total of eight (8) units; once per semester.

## MUH - Music History

## MUH 1000 Introduction to Music (FE) (2 Units)

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 (FE) (2 Units)
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 Units)
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 Units)
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 3034 World Music (2 Units)
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 Units)

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 3040 History of Western Music I (3 Units)

Study of Western art music, from Medieval to the Baroque, approximately 500-1750 A.D., with an emphasis on literature, development, and an introduction to musicological principles.
MUH 3041 History of Western Music II (3 Units)
Study of Western art music, focusing on the principal trends from the Classical to the Modern periods, approximately 1750 A.D. to the present day, with an emphasis on literature, analysis, and music research.
MUH 4031 Faith, Life, and Music (2 Units)
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 Units)
Provides for special courses offered as an adjunct to the curricula. Seminar title, content, and units to be announced in the class schedule.

## MUP - Music Performance

MUP 3032 Chamber Orchestra (1 Unit)
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 Unit)
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 (0.5 Units)

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 (0.5-1 Units)
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 schedules.
May be repeated each semester.

## MUP 3037 Concert Choir (1 Unit)

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 Unit)
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 (0.5 Units)
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 Ensemble (0.5 Units)

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 ( 0.5 Units)
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 (0.5 Units)
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 (0.5 Units)
A small vocal ensemble (membership by audition) focusing on jazz literature.
May be repeated each semester.

## MTC - Music Technology

MTC 1000 Introduction to Music Technology (1 Unit)
This course is an introduction to the fundamental technologies involved in professional music production, performance, and analysis. Primary areas of focus include the terminology of technology, signal flow, history of audio technology, the digital audio workstation, and digital music notation.

## MTC 3027 Digital Audio I (2 Units)

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 Units)

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 4095 Production and Recording Techniques (3 Units)
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.

## MUT - Music Theory

MUT 1000 Basic Music Theory (2 Units)

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 Units)
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 Units)
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 Units)

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 3002 Analysis of Form and Texture in Music (3 Units)
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 Units)

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 Units)
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 Units)
Intensive study of a selected problem, under the direction of a department faculty advisor.
Prerequisite(s): Consent of department chair.

## NSG - Nursing

NSG 1050 Caring Faithfully: An Introduction to Nursing (2 Units) 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.
Prerequisite(s): Minimum grade of "C" in BIO 1030 and CHE 1003 and CHE 1003L.
Corequisite(s): BIO 1040, NSG 2050 (for transfer students)
Minimum grade of " $B$ " required.

NSG 2046 Transition to Nursing (2 Units)
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
NSG 2050 Nursing of Individuals: Adult Health I (3 Units)
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. Corequisite(s): BIO 2020
Concurrent: NSG 2051; NSG 1050 (for transfer students)
NSG 2051 Nursing of Individuals: Clinical Practicum I (3 Units) 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.
Credit/No Credit.
Concurrent: NSG 2050
NSG 2055 Changing Minds, Changing Lives (1 Unit)
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 Units)
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): BIO 2020, NSG 2050, and NSG 2051
Corequisite(s): CHD 1050 (or NSG 4042) and NUT 2025
Concurrent: NSG 2061 and NSG 2070
NSG 2061 Nursing of Individuals: Clinical Practicum II (3 Units)
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.
Credit/No Credit.
Concurrent: NSG 2060
NSG 2070 Pharmacology in Nursing (2 Units)
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 Unit)
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 Unit)
Application of physical, psychological, cultural, and spiritual assessments of the individual and the family.
A clinical course which includes laboratory activities and independent practice. Credit/No Credit.
Prerequisite(s): Advanced placement and consent of instructor.
Concurrent: NSG 3000
NSG 3010 Nursing of Families: Child/Adolescent Focus (2 Units)
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 (2.5 Units)
Consists of opportunities for application of nursing theory and child development as it relates to the child, adolescent clients and their
families.
Credit/No Credit.
Concurrent: NSG 3010
NSG 3030 Nursing of Families: The Childbearing Process (2 Units)
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: Childbearing Process Clinical Practicum (2.5 Units)
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.
Credit/No Credit.
Concurrent: NSG 3030
NSG 3040 Nursing of Families: Adult Health III (2 Units)
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 Units)
Nursing process is applied to adults experiencing multi-system failure.
Emphasis is placed on assessment of individual and family needs in critical illness.
Credit/No Credit.
Concurrent: NSG 3040
NSG 3045 Transition to Professional Nursing (3 Units)
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 3055 Mindful Self-Compassion (1 Unit)
The Mindful Self-Compassion (MSC) course focuses on building the resources of mindfulness and self-compassion to promote psychological well-being and build resilience capacity in healthcare providers. Providing care to individuals living with physical, emotional, psychological, spiritual illnesses can be challenging physically, emotionally, and psychologically for the care provider. MSC offers care providers a holistic mechanism to maintain their own health and wellness.

## NSG 3095 Clinical Nursing Internship (1-3 Units)

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 > 3.00) may apply for summer session only.
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.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.

## NSG 3099 Nursing Research (2 Units)

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): MTH 2003, WRI 1010 (or WRI 1015 /WRI 1016), and Junior standing in Nursing program.
Concurrent: NSG 3040 and NSG 3041
NSG 4041 Topics in Nursing (1-3 Units)
Offers concentrations of study in selected areas of nursing practice. Topics include a theory component and may include a clinical component.
May be repeated up to a total of nine (9) units.
Prerequisite(s): Consent of instructor.
NSG 4042 Health Promotion in Adult Development (2 Units)
Explores development of the individual from early adulthood to death. Biophysical and psychosocial issues are explored as they apply to early adulthood, middlescence 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 Units) 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 Units)
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 Units)
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 (2 Units)
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.
Credit/No Credit.
Concurrent: NSG 4050, NSG 4060, and NSG 4061
NSG 4060 Nursing of Communities: Community Health Focus (3 Units) 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 4050, NSG 4051, and NSG 4061
NSG 4061 Nursing of Communities: Community Health Focus Clinical Practicum (1 Unit)
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.
Credit/No Credit.
Concurrent: NSG 4060
NSG 4070 Leading Faithfully: A Synthesis and Transition to Professional Nursing Practice (3 Units)
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: Transitions to Practice (1 Unit)
The exploration and analysis of milestones, concepts, and issues associated with transitioning from the role of student nurse to professional nurse.
Prerequisite(s): Senior standing in Nursing program.
Corequisite(s): NSG 4070 and NSG 4081
NSG 4081 Nursing Capstone Practicum (3 Units)
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 4070 and NSG 4080
NSG 4090 Special Studies in Nursing (1-2 Units)
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 up to a total of six (6) units.
Prerequisite(s): NSG 2060, NSG 2061, and NSG 2070; GPA of 3.000 in Nursing program, and consent of instructor.
NSG 4091 Directed Clinical Studies in Nursing (1-3 Units)
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 up to a total of six (6) units. 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 Units)

See NSG 3095 for description.
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.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.

## NUT - Nutrition

NUT 1001 Introduction to Nutrition (2 Units)
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 Units)

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 Units)

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 Units)

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 Units)
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 Units)

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(s): BIO 1040 and NUT 3065

## NUT 3030 Community Nutrition (3 Units)

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 Unit)
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
Corequisite(s): NUT 3030 (required)
Concurrent: Must enroll concurrently in NUT 3030.
NUT 3035 Nutrition Research Through the Life Cycle (3 Units)
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 Units)
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 Units)
Theories integrated from physiology, biochemistry and nutrition. An indepth study of nutrients and their role in human metabolism. Current research on human metabolic processes is analyzed.
Laboratory applications.
Prerequisite(s): BIO 1030, CHE 2094, and NUT 2025

## NUT 4014 Practices in Nutrition Education and Dietary Counseling (2 Units)

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 Units)

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): BIO 1040 and NUT 3065
Corequisite(s): NUT 4017 (required)

## NUT 4017 Medical Nutrition Therapy Practicum (1 Unit)

Case studies, medical chart notation practice, opportunity to interact with dietetic professionals working in clinical fields.
Prerequisite(s): BIO 1040 and NUT 3065
Corequisite(s): NUT 4015 (required)
Concurrent: Must enroll concurrently in NUT 4015.
NUT 4025 Child and Adolescent Nutrition and Health (3 Units)
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): FCS 3005 or NUT 2025

## NUT 4035 Food Service Management (2 Units)

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 Units)

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 Units)

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): CHE 2094 and NUT 1010

## NUT 4080 Internship in Nutrition (2-4 Units)

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.
For two (2) units of credit, 80 hours of work experience is required; for four (4) units, 160 hours of work experience is required. May be repeated up to a total of four (4) units. Credit/No Credit.
Prerequisite(s): Senior standing in the Department of Sociology, Social Work, and Family Sciences and consent of department chair.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.

## NUT 4090 Special Studies in Nutrition (1-4 Units)

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 (4) units.
Prerequisite(s): Senior standing in the Department of Sociology, Social Work, and Family Sciences and consent of department chair.
NUT 4097 Senior Seminar (2 Units)
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.

## OCP - Off-Campus Programs

OCP 0000 Off-Campus Program (12-17 Units)
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.

## PHL - Philosophy

PHL 2001 Introduction to Philosophy (FE) (3 Units)
A historical survey of selected philosophical ideas, systems, and methods, especially as these have developed in Western civilization.
PHL 2011 Ethics (FE) (3 Units)
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 Units)

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. Agustine, 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 Units)
A study of the logical appraisal of arguments with attention given to formal and informal fallacies.
PHL 3001 Plato and Aristotle (3 Units)
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 Units)
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 Units)
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.
Also offered as SOC 3021.
Prerequisite(s): PHL 2001 or PHL 2011
PHL 3031 Existential Philosophy and Literature (3 Units)
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 Units)
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 Units)
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 Units)

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 Units)
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 Units)
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 Units)
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 Units)
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 Units)
An investigation of a topic in philosophy not otherwise covered in the curriculum.
May be repeated up to a total of nine (9) units.
Prerequisite(s): Consent of the dean of the School of Theology and Christian Ministry.

## PSC - Physical Science

PSC 1004 The Cosmos (FE) (4 Units)
An introduction to our place in the universe emphasizing religious, cultural and historic perspectives including modern developments in physics and astronomy.
Meets a Foundational Explorations requirement; does not count toward any Chemistry or Physics majors.
Prerequisite(s): MTH 0099 or equivalent.
PSC 1014 Physical Science for Teachers (FE) (4 Units)
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 Foundational Explorations requirement; does not count toward the Chemistry or Physics major.
Pre or Corequisite(s): MTH 1013 or equivalent.
PSC 1023 Earth and Space Science for Teachers (3 Units)
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

## PHY - Physics

PHY 1034 The Physics of Sound and Music (FE) (3 Units)
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(s): MTH 0099 or equivalent.
Corequisite(s): PHY 1034L
PHY 1034L The Physics of Sound and Music Lab (FE) (1 Unit)
A lab course designed for a hands-on exploration of The Physics of Sound and Music. Meets two hours per week.
Corequisite(s): PHY 1034

PHY 1044 General Physics I (FE) (3 Units)
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
Corequisite(s): PHY 1044L
PHY 1044L General Physics I Lab (FE) (1 Unit)
A lab course designed for a hands-on exploration of General Physics I.
Meets two hours per week.
Prerequisite(s): MTH 1033
Corequisite(s): PHY 1044
PHY 1054 General Physics II (FE) (3 Units)
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 (FE) (1 Unit)
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 (FE) (3 Units)
An analytic, calculus-based study of classical physics appropriate for science and engineering majors. Includes mechanics, waves, and thermodynamics.
Corequisite(s): MTH 1044 or MTH 1064 or consent of instructor and PHY 2044L.

## PHY 2044L University Physics I Lab (FE) (1 Unit)

A lab course designed for a hands-on exploration of University Physics I. Meets two hours per week.
Corequisite(s): MTH 1044 or MTH 1064 or consent of instructor and PHY 2044L.
PHY 2054 University Physics II (3 Units)
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): MTH 1074 or consent of instructor and PHY 2054L.
PHY 2054L University Physics II Lab (1 Unit)
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): MTH 1074 or consent of instructor and PHY 2054.
PHY 3004 Modern Physics (3 Units)
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 Unit)

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 Units)
A survey of nuclear physics including nuclear models, laws of radioactive decay, radiation detection, and applications of nuclear science in engineering and medicine.
Also offered as EGR 3013.
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 Unit)
A lab course designed for a hands-on exploration of Nuclear Physics. Meets two hours per week.
Also offered as EGR 3013L.
Prerequisite(s): PHY 1054 with a grade of C- or higher or PHY 2054 with a grade of C - or higher.
Corequisite(s): PHY 3013
PHY 3043 Analytical Mechanics: Dynamics (3 Units)
Newtonian mechanics, dynamics of particles and rigid bodies, oscillatory motion, central forces, inertial tensors, Lagrangian and Hamiltonian formulations.
Also offered as EGR 3043.
Prerequisite(s): MTH 2074 and PHY 2054 with a grade of C- or higher.
Recommended: MTH 3033
PHY 3063 Electricity, Magnetism, and Waves I (3 Units)
Classical electromagnetism including topics in electrostatics,
magnetostatics, fields in matter, electromagnetic induction, and

## Maxwell's equations.

Also offered as EGR 3063.
Prerequisite(s): MTH 2074 and PHY 2054 with a grade of C- or higher.
Recommended: MTH 3033
PHY 3083 Electricity, Magnetism, and Waves II (3 Units)
Electrodynamics with an emphasis on application of Maxwell's equations particularly to electromagnetic radiation.
Also offered as EGR 3083.
Prerequisite(s): EGR 3063 or PHY 3063
PHY 4013 Thermodynamics (3 Units)
Fundamental concepts of thermodynamics and statistical mechanics; applications to both classical and quantum systems.
Also offered as EGR 4013.
Prerequisite(s): PHY 2054
Corequisite(s): MTH 3033

## PHY 4053 Quantum Mechanics (3 Units)

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 Units)
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 I (2 Units)
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.
PHY 4082 Senior Project II (2 Units)
This course provides students (teams) with the opportunity to hone and finish building the project design initiated in PHY 4072. The students will prepare a scientific paper about their research/project and give an oral presentation of their findings. This course will normally be completed in a student's senior year.
Prerequisite(s): PHY 4072 or consent of instructor.
PHY 4090 Special Topics in Physics (1-3 Units)
The topics in physics chosen depend on regular or visiting faculty expertise as well as student demand.
May be repeated up to a total of six (6) units as long as content is different.
Prerequisite(s): Consent of instructor.
PHY 4092 Internship in Physics (2 Units)
A supervised experience in which the student works with industry professionals to gain experience in physics or engineering.
May be repeated up to a total of four (4) units. Credit/No Credit.
Prerequisite(s): Student must have taken at least two upper-division engineering or physics classes and consent of instructor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.
PHY 4099 Independent Studies in Physics (1-4 Units)
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.

## POL - Political Science

POL 1001 Understanding the Political World (FE) (3 Units)
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 U.S. Democracy (FE) (4 Units)
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 (FE) (WS) (4 Units) 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 Units)

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 Units)
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 Units)
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 Units)

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 Units)
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 Units)

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 Units)
Foundations of democratic theory and the development of political thought in the American experience, from its Enlightenment roots to postmodern challenges.
POL 3030 The Development of Feminist Thought (WS) (4 Units) 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 Units)
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 Units)

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 Units)

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 Units)
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 indepth country analysis of eight specific countries.

POL 3080 Congress and the Presidency (4 Units)
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 Units)
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 Units)

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 Units)

An examination of women's role in political life. The content includes analysis of gender as a legitimate category of political inquiry, genderbased social movements, women's political participation, and the impact of political systems and public policy on women.

## POL 4020 United States Foreign Policy (4 Units)

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 Units)

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 (3 Units)

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.
Also offered as ECO 4010.
Prerequisite(s): ECO 1001 and ECO 1002 or consent of instructor.

## POL 4038 International Law (4 Units)

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 Units)
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 Units)

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 Units)
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 Units)
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 Units)
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 (1-4 Units)

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.
May be repeated up to a total of four (4) units.
Prerequisite(s): Consent of instructor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.

## POL 4073 Senior Seminar in Political Science and International Studies (3 Units)

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(s): POL 2070 or equivalent and Senior standing.
POL 4090 Special Studies in Political Science (1-4 Units)
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 (8) units.
Prerequisite(s): Consent of instructor.

## PSY - Psychology

PSY 1001 Psychology of Personal Development - First Year Experience (FE) (3 Units)
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 grade.

PSY 1003 General Psychology (FE) (3 Units)
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 Units)
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.
May be repeated up to a total of six (6) units. Credit/No Credit.
Prerequisite(s): Consent of instructor and approval of departmental faculty.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.
PSY 3000 Personality and Adult Development (4 Units)
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 Units)
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 Units)
A systematic study of the physical, cognitive, social, and emotional development of the individual from birth through adolescence.

## PSY 3015 Positive Psychology (3 Units)

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 grade.
Pre or Corequisite(s): PSY 1003 or consent of instructor.

## PSY 3020 Social Psychology (3 Units)

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 Units)

Study of etiology, assessment, diagnosis, and treatment of various forms of abnormal behavior from various psychological perspectives.
Prerequisite(s): One of CHD 1050, PSY 1003, PSY 3008, or consent of instructor.

## PSY 3025 Clinical and Community Interventions (4 Units)

This course provides an overview of the fields of clinical and community psychology. It focuses on individual, family and systems, socialcommunity, bio-psycho-social, and health interventions. Career directions within the mental health professions are introduced. Theories and interventions include cognitive-behavioral, humanistic-existential, psycho-dynamic-psychoanalytic, and systems. Focus is on how therapists apply therapeutic knowledge in a variety of settings.

PSY 3030 Moral Psychology and Cultural Values (4 Units)
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 Units)

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 a total of six (6) units.
Prerequisite(s): Consent of instructor.
PSY 3045 Group Dynamics (3 Units)
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 Units)

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 fianc,.
Letter grade.
Prerequisite(s): Consent of instructor.

## PSY 3050 Clinical and Research Assessment (3 Units)

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 Units)
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 Units)
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 Units)
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 Units)
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.
Prerequisite(s): PSY 1003 and PSY 3090 or consent of instructor. This course must be taken in the semester immediately following PSY 3090.
PSY 4000 History and Contemporary Issues in Psychology (2 Units) 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 and PSY 1003
PSY 4009 Psychology of Cognition and Learning (4 Units)
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 Units) 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 Units)
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): BIB 1001 or BIB 1002 and PSY 1001 or PSY 1003. Senior standing or consent of instructor.

## PSY 4040 Psychology of Religion (4 Units)

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.
Recommended: PSY 3030 is strongly recommended.

## PSY 4070 Fieldwork in Psychology (2-4 Units)

Students are placed in local mental health or social service agencies to obtain training in specific psychological skills.
May be repeated up to a total of twelve (12) units. Credit/No Credit.
Prerequisite(s): Consent of instructor and approval of departmental faculty.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.

## PSY 4090 Special Studies in Psychology (1-4 Units)

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 Units)
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 (12) units.
Prerequisite(s): Consent of instructor and approval of departmental faculty.

## SWK - Social Work

## SWK 3003 Introduction to Social Work (3 Units)

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 Units)

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 Units)

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 Units)
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 Units)
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 Units)
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 Units)
Intended for seniors in social work only. The student completes direct practice in an approved field setting, supervised by professional social workers. One (1) unit of credit is given for each 50 hours of approved practice. A minimum total of 200 hours ( 4 units) is required to be completed. Students may take the course for a minimum of two (2) units each semester.
May be repeated up to a total of five (5) units.
Also offered as SWK 4071.
Prerequisite(s): SWK 3070 and SWK 3071 or consent of the Director of Social Work.
SWK 4071 Social Work Practicum (2-5 Units)
Intended for seniors in social work only. The student completes direct practice in an approved field setting, supervised by professional social workers. One (1) unit of credit is given for each 50 hours of approved practice. A minimum total of 200 hours ( 4 units) is required to be completed. Students may take the course for a minimum of two (2) units each semester.
May be repeated up to a total of five (5) units.
Also offered as SWK 4070.
Prerequisite(s): SWK 3070 and SWK 3071 or consent of the Director of Social Work.

## SWK 4072 Seminar in Social Work I (2 Units)

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 Units)
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 Units)
Selected topics of current interest in depth.
May be repeated for up to a total of six (6) units. Students wishing to earn more than six (6) 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 Units)
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 (6) units.
Prerequisite(s): Consent of instructor.

## SOC - Sociology

SOC 1001 Introduction to Sociology (FE) (3 Units)
An introduction to sociology, basic concepts, theories, development as a discipline, and the tools of social investigation.

SOC 2001 Cultural Anthropology (FE) (3 Units)
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 Units)
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 Unit) 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 student s 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 Units)

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 Units)
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 Units)
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.
Concurrent: SOC 1001 or SOC 2001 or consent of instructor.
SOC 3010 Criminology (3 Units)
The study of crime and criminal behavior, the role of law, efforts at prevention and control.
Concurrent: SOC 1001 or SOC 2001 or consent of instructor.
SOC 3014 Juvenile Delinquency (3 Units)
A study of the youthful offender including theories of cause, the role of law and authority, and current trends.
Concurrent: SOC 1001 or SOC 2001 or consent of instructor.
SOC 3016 Sociology of Aging (3 Units)
Analysis of aging within social contexts: the aging process, death, and dying, and the impact of psychological, economic, physiological, and social factors.
Concurrent: SOC 1001 or SOC 2001 or consent of instructor.
SOC 3020 Social Psychology (3 Units)
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 Units)
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.
Also offered as PHL 3021.
Prerequisite(s): PHL 2001 or PHL 2011
SOC 3030 The Development of Feminist Thought (WS) (4 Units)
A survey of the development of various strands of feminist thought, and engagement in current conversations within and about feminism.

SOC 3035 Civil Rights Pilgrimage (3 Units)
This course examines the complex social dynamics and historical legacies of the American Civil Rights Movement (1954-1968). Guest speakers provide interdisciplinary perspectives, while students travel to key sites in the American South.

## SOC 3050 Urban Sociology (3 Units)

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 instructor.

## SOC 3060 Race and Ethnicity (3 Units)

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 Units)

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 Units)
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 Units) 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 instructor.
SOC 4015 Social Theory (3 Units)
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 instructor.

## SOC 4020 Social Change (3 Units)

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 Units)

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 instructor.

## SOC 4035 Environmental Sociology (3 Units)

A study of the relationship between human societies and ecosystems, from how individuals define "nature" and "sustainability" as well as how institutions such as the market and the government work together or against each other that impact communities.

SOC 4044 Globalization and Culture (3 Units)
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 Units)
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): SOC 1001 or SOC 2001 or SWF 1000 or consent of instructor.

## SOC 4070 Medical Sociology (3 Units)

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 Units)
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.
May be repeated for up to a total of six (6) units of credit. Students may receive credit for a maximum of six (6) units for internship whether SOC 4071 or SOC 4072. Credit/No Credit.
Prerequisite(s): Consent of instructor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.
SOC 4072 Internship in Criminal Justice (2-4 Units)
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.
May be repeated for up to a total of six (6) units of credit. Students may receive credit for a maximum of six (6) units for internship whether SOC 4071 or SOC 4072. Credit/No Credit.
Prerequisite(s): Consent of instructor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.
SOC 4075 Sociology of Education (3 Units)
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 Units)
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 Units)
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 Units)

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 (6) units. Students wishing to earn more than six (6) 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 Units)
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 (6) units.
Prerequisite(s): Consent of instructor.

## SWF - Sociology, Social Work, and Family Sciences

SWF 1000 Living Justly in Contemporary Society (FE) (3 Units) This is a Foundational Explorations 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 Units)

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.

## SWF 3015 Health and Well-Being (FE) (2 Units)

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.

## SPA - Spanish

## SPA 1001 Elementary Spanish I (FE) (4 Units)

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 (FE) (4 Units)
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 Units)
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 Units) 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 Units)
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 Units)
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 Units)
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 Units)

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 Units) 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 3000 and SPA 3002 or consent of instructor.
SPA 3080 Genre/Period Studies in Hispanic Literature or Film (3 Units) A study of a literary genre or period of Hispanic literature or film. Conducted in Spanish.
Prerequisite(s): SPA 3000 and SPA 3002 (SPA 3000 may be concurrent).

SPA 3090 Current Spanish Linguistics (3 Units)
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 Units)

Analysis and discussion of representative works from the medieval era to the 18th century. Conducted in Spanish.
Prerequisite(s): SPA 3000 and SPA 3002 or consent of instructor.
SPA 4002 Peninsular Literature Since 1800 (3 Units)
Analysis and discussion of representative works from the 19th century to the present. Conducted in Spanish.
Prerequisite(s): SPA 3000 and SPA 3002 or consent of instructor.
SPA 4037 Latin American Literature Before 1910 (3 Units)
A study of the development of literary genres featuring representative works from Mexican, Central, and South American writers from the preColumbian period to the Mexican revolution. Conducted in Spanish. Prerequisite(s): SPA 3000 and SPA 3002 or consent of instructor.
SPA 4039 Latin American Literature Since 1910 (3 Units)
A study of the Latin American narrative from the Mexican revolution to the present day. Conducted in Spanish.
Prerequisite(s): SPA 3000 and SPA 3002 or consent of instructor.
SPA 4085 Senior Seminar in Spanish (3 Units)
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 3000, SPA 3002, and Senior standing.
SPA 4090 Special Studies in Spanish (1-3 Units)
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 (6) units.
Prerequisite(s): Consent of instructor and department chair.
SPA 4099 Research in Spanish (1-3 Units)
Independent research under the guidance of a faculty member.
Prerequisite(s): Consent of instructor and department chair and Senior standing.
SPA 5000 Peninsular Literature Before 1800 (3 Units)
Analysis and discussion of representative works from the medieval era to the 18th century. Conducted in Spanish.
Also offered as SPA 4000.
Prerequisite(s): Consent of instructor.
SPA 5002 Peninsular Literature Since 1800 (3 Units)
Analysis and discussion of representative works from the 19th century to the present. Conducted in Spanish.
Also offered as SPA 4002.
Prerequisite(s): Consent of instructor.
SPA 5020 Mexican American Literature and Culture (3 Units) 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.
Also offered as SPA 3020.
Prerequisite(s): Consent of instructor.

SPA 5037 Latin American Literature Before 1910 (3 Units)
A study of the development of literary genres featuring representative works from Mexican, Central, and South American writers from the preColumbian period to the Mexican revolution. Conducted in Spanish. Also offered as SPA 4037.
Prerequisite(s): Consent of instructor.
SPA 5039 Latin American Literature Since 1910 (3 Units)
A study of the Latin American narrative from the Mexican revolution to the present day. Conducted in Spanish.
Also offered as SPA 4039.
Prerequisite(s): Consent of instructor.
SPA 5080 Genre/Period Studies in Hispanic Literature or Film (3 Units)
A study of a literary genre or period of Hispanic literature or film.
Conducted in Spanish.
Also offered as SPA 3080.
Prerequisite(s): Consent of instructor.

## TRE - Theatre

## TRE 1001 Introduction to Theatre (FE) (2 Units)

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 Units)
Requirements vary according to the activity developed in consultation with the instructor.
May be repeated up to a total of three (3) units. Credit/No Credit.

## TRE 2050 Voice and Diction (2 Units)

Practical training in developing the speaking voice, articulation, and pronunciation through a variety of applications including stage, film, and broadcasting.

## TRE 2070 Acting (3 Units)

Development of basic acting techniques and vocabulary through exercises, character analysis, monologues, and scene work.

TRE 3050 Musical Theatre (3 Units)
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 Units)

Introduction to the Laban "effort shaping" method. Essential for the study of mime, mask, and advanced stage movement techniques.

TRE 3071 Playwriting (3 Units)
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 Units)

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 Units)
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 up to a total of eight (8) units. Credit/No Credit.
TRE 4021 Internship in Theatre (3 Units)
Participation in an internship supervised by departmental faculty. May be repeated up to a total of six (6) units. Credit/No Credit.
Prerequisite(s): Senior standing or consent of instructor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.
TRE 4052 Improvisation and Devising (3 Units)
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 Units)
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 (6) units.
Prerequisite(s): Consent of instructor.

## THE - Theology

THE 2050 Introduction to Christian Theology (3 Units)
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 (FE) (3 Units)
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 Units)
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 Units)
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 Units)
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 Units)
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 Units)
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 Units)
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 (FE) (3 Units)

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 (FE) (3 Units)
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 Units)
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 Units)
This course will study traditions of Protestant theology in their historical origins, classic expressions, and contemporary manifestations.

## THE 4090 Special Studies in Theology (1-3 Units)

An examination of a topic in theology not otherwise studied in the curriculum.
May be repeated up to a total of nine (9) 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 Units)
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.

## WRI - Writing

WRI 0097 Writing Skills Tutorial (O Units)

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. Fee: Includes a laboratory fee.

WRI 1001 Writing Across the University (3 Units)
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 (FE) (4 Units)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: Essay - First Year Experience (FE) (2 Units)

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.
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.
Must take WRI 1016 to complete the required composition sequence.
WRI 1016 College Composition: Research - First Year Experience (FE) (2 Units)
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 Unit)

Hands-on production of PLNU's literary magazine, from theme to finished product. Open to all students.
COM 2075, JRN 2015, JRN 2017, JRN 2018 and WRI2016 may be repeated up to a combined total of eight (8) units.
Prerequisite(s): Fulfillment of the College Composition requirement.

WRI 2020 Introduction to Creative Writing (3 Units)
A general introduction and overview of creative writing (including practice in poetry, fiction, drama, and creative nonfiction) that serves majors, potential majors, and other interested students. Attention will be given to methodology in teaching creative writing.
Prerequisite(s): Fulfillment of the College Composition requirement. Non-majors are strongly encouraged to complete Writing 2020 before taking WRI 3021, WRI 3022 or WRI 3023.

## WRI 3021 Creative Writing: Poetry (3 Units)

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 consent of instructor.
Prerequisite(s): Fulfillment of the College Composition requirement.
WRI 3022 Creative Writing: Fiction (3 Units)
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 consent of instructor. Prerequisite(s): Fulfillment of the College Composition requirement.

WRI 3023 Creative Writing: Creative Nonfiction (3 Units)
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 consent of instructor.
Prerequisite(s): Fulfillment of the College Composition requirement.
WRI 3065 Professional Writing (3 Units)
Strategies for success in professional writing. Students will produce a portfolio of professional writing geared toward success in starting their career path beyond graduation.
Prerequisite(s): Fulfillment of the College Composition requirement. Junior or Senior standing required.
WRI 3070 Writing Theory and Pedagogy (2 Units)
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 4000 Writing for the Community (3 Units)

A hands-on study of writing in the service of the literary community as well as for other communities in which students find themselves interested.
Prerequisite(s): Fulfillment of the College Composition requirement. Junior or Senior standing required.

WRI 4020 Advanced Writing Workshop (3 Units)
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 consent of instructor.
Prerequisite(s): WRI 3021, WRI 3022, or WRI 3023

## WRI 4070 Internship in Writing (2 Units)

A supervised experience in which the student works off campus in an established media business or public service media company.
May be repeated up to a total of four (4) units.
Prerequisite(s): JRN 2050, JRN 3010, and JRN 3040, or consent of instructor.
"C" Designation is for California Internships. "E" Designation is for Out of State Internships.

## WRI 4090 Special Studies in Writing/Journalism (1-3 Units)

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 (6) units.
Prerequisite(s): Consent of instructor and department chair.
WRI 4099 Research in Writing/Journalism (1-3 Units)
Independent research under the guidance of a faculty member.
Prerequisite(s): Consent of instructor and department chair and Senior standing.
WRI 5020 Writing Across the Genres (3 Units)
An advanced introduction and overview of creative writing (including practice in writing and workshopping poetry, fiction, and nonfiction). Also offered as WRI 6020.
WRI 5021 Poetry Workshop (3 Units)
Advanced instruction and guided workshop in writing poetry. Attention is also given to methodology in teaching poetry writing and to finding publication.
Also offered as WRI 6021.
Prerequisite(s): WRI 5020

## WRI 5022 Fiction Workshop (3 Units)

Advanced instruction and guided workshop in writing fiction. Attention is also given to methodology in teaching fiction writing and to finding publication.
Also offered as WRI 6022.
Prerequisite(s): WRI 5020

## WRI 5023 Nonfiction Workshop (3 Units)

Advanced instruction and guided workshop in nonfiction writing. Attention is also given to methodology in teaching nonfiction writing and to finding publication.
Also offered as WRI 6023.
Prerequisite(s): WRI 5020

## WRI 5024 Scriptwriting Workshop (3 Units)

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.
Also offered as WRI 6024.
Prerequisite(s): WRI 5020

## WRI 5025 Special Topic in Writing (3 Units)

Advanced instruction and guided workshop in a special topic in writing. Topics might include comics, bookmaking, publishing, and experimental forms, among others. Attention is also given to methodology in teaching writing and to finding publication.
Also offered as WRI 6025.
Prerequisite(s): WRI 5020

## 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 nondiscrimination 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, if you choose to submit test scores. Applicants for the February 15 regular admission priority deadline and those deferred from Early Action may receive notification between midMarch 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, if you choose to submit test scores;
- 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. Many of these students are required to complete the Learning Enrichment for Academic Progress (LEAP) program during the initial enrollment year. For those not required to complete the LEAP program, provisional admission requires a maximum fall semester course load of 14 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 course of study. 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 (optional) 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 (p. 317)."

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), International English Language Testing System (IELTS), or the Duolingo English test. Minimum scores to be considered are an 80 iBT on TOEFL, 110 on Duolingo, 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, Duolingo, 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 a member of the National Association of Credential Evaluation Services (NACES) or the Association of International Credential Evaluators, Inc. (AICE). A detailed or course-bycourse 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 withdraw from, or are administratively withdrawn from 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 nonattendance return under the Catalog in effect at the time of readmission.

## Special Features

## 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 transcripted 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 Foundational Explorations. 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 transcripting fee. For complete information, students should contact the Office of Records.

## Transfer Information

PLNU transfers college-level courses from regionally accredited institutions to count toward Foundational Explorations, 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)*
- Transfer maximum of $25 \%$ of degree total units of non-traditional units/credits from other sources (i.e., 32 units) unless otherwise noted.
- 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 FE 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 Requirements Accepted | Minimum/Maximum Credit | Comment |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Advanced Placement Examinations (AP) | * |  | Score of 3, 4, or 5 | $32{ }^{1}$ | See AP Guide. (https:// drive.google.com/file/ d/OB3hMXF5MXi6EN3NNbFIOMkR view/?usp=sharing) |
| College-Level <br> Examination Program <br> (CLEP) Subject <br> Examinations | * |  |  | $32^{1}$ | See CLEP <br> Guide. (https:// drive.google.com/file/ d/0Bxic57U2ySklYk41VHhuYkVvZ2 view/) |
| International Baccalaureate (IB) | * |  | Score of 5 or higher | $32^{1}$ | Minimum score of 5 on higher level only. See IB Guide. (https:// drive.google.com/file/ d/OB6XNQe7sFTukdFFRS2IOdFhOI view/) |
| NLN - National League for Nursing Mobility Profile | * |  |  |  | Granted upon the recommendation of the School of Nursing. |
| Excelsior College <br> Examinations \#554 <br> (Licensed Vocational <br> 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 | * |  |  | $32^{1}$ | Approved on a case-bycase basis. Number of units to be accepted toward the degree will be communicated to the student prior to admission. See Records Office. |
| Military Discharge <br> Document (DD214), <br> active military <br> identification card or ROTC | * |  |  |  | Waives KIN 1000 and physical activity requirement. |
| Units by non-traditional delivery systems | * |  |  | $12^{1}$ | Approved on a case-bycase 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 | * |  | $70^{1}$ | See Records Office for transfer agreements. (IGETC approved courses from California community colleges taken prior to enrollment at PLNU will transfer to fulfill a portion of the FE requirements. For students with full IGETC certification (37 units), their transfer courses will be matched to PLNU FE and the remaining PLNU FE categories will need to be completed prior to graduation.) |
| :---: | :---: | :---: | :---: | :---: |
| 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. |

1 Note: 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.

## Financing a PLNU Education <br> 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.

## Tuition

| Units | Fee |
| :--- | :--- |
| Tuition Block (12-17 semester units) | $\$ 20,200 /$ semester |
| Less than 12 units (per unit) | $\$ 1,685$ |
| Units in excess of 17 units (per unit) | $\$ 1,345$ |
| Nursing Program Fee (SO, JR, SR) | $\$ 3,000 /$ semester (Pre-2019-2020 cohorts: $\$ 2,400 /$ semester) |
| 2023 Summer Session Tuition | Available in early Spring 2023. Please refer to the Summer School <br> website. |

1 https://www.pointloma.edu/offices/records/traditional-undergraduate-records/summer-school

## General Fees

| Fees | Costs |
| :--- | :--- |
| General fee (per semester) | $\$ 350$ |

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 $\$ 29.25$ per unit.)

| Fees | Costs |
| :--- | :--- |

## 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/pointloma (https://gradguard.com/pointloma/). 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 2022-2023 is $\$ 137.50$ per semester for $\$ 12,500$ 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

| Fees | Costs |
| :--- | :--- |
| Application Fee - Undergraduate | $\$ 55$ |
| 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 | $\$ 220 /$ semester |
| Writing Tutorial Lab Fee | $\$ 150$ |

For more information regarding specific course and lab fees, please click here (https://www.pointloma.edu/offices/student-financial-services/ undergraduate-student-financial-services/costs/\#fees).

## Summer Degree Processing Fee

(Refundable Prior to October 1)

| Fees | Costs |
| :--- | :--- |
| Application for Summer Graduation | $\$ 500$ |

## Music Fees

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

| Fees | Costs |
| :--- | :---: |
| Private Lessons: | $\$ 455$ |
| One half-hour lesson per week (one unit) | $\$ 910$ |
| One hour lesson per week (two units) | $\$ 25$ |
| Practice Rooms | $\$ 50$ |
| Students enrolled in private or class lessons (vocal or instrumental) are <br> charged for the use of a practice room in Cooper Music Center. |  |
| Practice Room Per Semester: |  |
| One half-hour a day |  |
| One hour a day |  |

## Residence Fees

Room and Board (per semester)

| Room Costs | Per Semester | Per Year |
| :--- | :--- | :--- |
| Room only (including Colony) | $\$ 3,375$ | $\$ 6,750$ |
| Dorm Fund (Residence Hall Activities and <br> Laundry Machines) | $\$ 37$ | $\$ 74$ |
| Dining Options (Board): |  | $\$ 5,620$ |
| Unlimited Meals $+\$ 50$ Dining Dollars | $\$ 2,810$ |  |


| 15 Meals/Week + \$50 Dining Dollars | $\$ 2,525$ | $\$ 5,050$ |
| :--- | :--- | :--- |
| 180 Meals/Semester + \$200 Dining Dollars + 10 | $\$ 2,525$ | $\$ 5,050$ |
| Guest Meals/Semester |  | $\$ 4,350$ |
| 120 Meals/Semester + \$200 Dining Dollars +10 | $\$ 2,175$ |  |
| Guest Meals/Semester |  |  |
| Add-on Block - 30 Meals/Semester (only for 120 | 30 meals $-\$ 290$ |  |
| or 180 block plans) |  |  |

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)

| 2022-2023 Costs | Per Semester | Per Year |
| :--- | :--- | :--- |
| Tuition (12-17 units) $^{1}$ | $\$ 20,200$ | $\$ 40,400$ |
| General Fee $^{2}$ | $\$ 350$ | $\$ 700$ |
| Room $^{2}$ | $\$ 3,375$ | $\$ 6,750$ |
| Dorm Fund $^{3}$ | $\$ 37$ | $\$ 74$ |
| Board (Dining Plan) |  |  |
| Total | $\$ 2,525$ | $\$ 5,050$ |

1 These figures do not include the cost of books, supplies, special fees, transportation, or personal expenses.
2 Based on a shared room.
3 Pays for Residence Hall Activities and Laundry Machines.
4 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 (p. 321) 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 <br> (total charges minus financial aid excluding Federal Work-Study) by the following dates:

Fall 2022 semester - August 1, 2022
Spring 2023 semester - January 3, 2023

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.

## 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.

| Semester-Length Courses (16 weeks) | Percentage |
| :--- | :--- |
| First Two Weeks of Semester | $100 \%$ |
| Third Week | $75 \%$ |
| Fourth Week | $50 \%$ |
| Fifth through Eighth Week | $25 \%$ |
| Quad-length courses (8 weeks) |  |
| First Week of Semester | $100 \%$ |
| Second Week | $50 \%$ |
| Third and Fourth Week | $25 \%$ |
| Summer sessions (5 weeks) | $100 \%$ |
| First Week of Semester | $50 \%$ |
| Second Week of Semester | $25 \%$ |
| Third Week of Semester |  |

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 (fourth week for a quad course, third week 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 a student is planning on withdrawing or taking a leave of absence (LOA) ${ }^{1}$ from the University during a term, the student must contact the Office of Records (Records) to begin the process. The official date of withdrawal will be the date the student notifies Records of the intent to withdraw. Records will confirm that the student began attendance in each course and will notify Student Financial Services (SFS) of the official date of withdrawal. Using that date, SFS will determine how much financial aid the student has earned and how much will need to be returned. 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 ${ }^{2}$, the amount of aid returned is based on the institutional refund policy stated above. For instance, if a student withdrew during the $25 \%$ refund period, $75 \%$ of aid offered will remain on the student account and $25 \%$ will be returned. If a student did not begin attendance in a course, that course cannot be considered in the calculation of the student's financial aid.

If a student withdraws after a term has ended, all financial aid will be considered earned since the term was completed and no returns will be made. Aid for subsequent term(s) would be canceled.

If a student borrowed a Federal loan, loan exit counseling must be completed in-person or at https://studentaid.gov.
1 LOAs for Financial Aid purposes are considered a withdrawal from PLNU.
2 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

Residence Hall Fees are 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 $\$ 31$ 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

Charges for meals are prorated as of the date the withdrawal form 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 "Friends and Family" permissions authorized in Workday.

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. 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 (https://drive.google.com/file/
d/1FxY3d91YU2MvhWZJ3nDakfmjmeb3CWvw/view/?usp=share_link) requires that a student's account be paid in full to receive final course grades in a given term.

## 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 offered 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 offered 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 offered 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 the financial assistance.

If the student's financial aid 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 financial aid 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 2022-2023 FAFSA)

## Federal Pell Grant

The Pell Grant is offered 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 grant for the 2022-2023 Academic Year (AY) is $\$ 6,895$.

PLNU uses the Scheduled Disbursement Date as the Pell Grant Recalculation Date (PRD). The Scheduled Disbursement Date is usually the Monday of the third week of each semester. 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. The Federal Pell Grant can only be disbursed for courses in which the student began attendance. If it is determined that a student did not attend a course that was used to calculate Federal Pell Grant eligibility, the Federal Pell Grant may be reduced.

## Federal Supplemental Educational Opportunity Grant (SEOG)

The SEOG is "campus-based" federal aid which is offered to Pell Grant recipients who have a qualifying Expected Family Contribution (EFC). Since SEOG funding is extremely limited, not all students who qualify receive this grant. At PLNU the maximum SEOG Grant for the 2022-2023 Academic Year (AY) is $\$ 1,500$; however, final financial aid decisions are subject to the final campus-based fund allocation provided to PLNU. Students who have an EFC of $\$ 0$ will be considered as a priority group for funding.

## Federal Children of Fallen Heroes (CFH) Scholarship

The CFH Scholarship is available 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 as 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 offered 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 Work-Study

The Federal Work-Study (FWS) program is offered 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 offered Federal Work-Study, the student should contact the Student Employment Office to secure employment at (619) 849-2633 or online at www.pointloma.edu/offices/human-resources/student-employment (http://www.pointloma.edu/offices/human-resources/student-employment/). 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 offered 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 halftime, for the first six months after a student leaves school (referred to as the grace period ${ }^{1}$ ), 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 1st of each year. Direct Loan origination fees become effective on October 1st of each year. Understanding the importance of
repaying any federal student loan taken while in school is critical. Repayment happens through the Department of Education's loan servicers. For more information and for sample loan repayment schedules, visit https://studentaid.gov.

## Yearly amounts:

| Units | Fee |
| :--- | :--- | :--- |
| 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, all first-time borrowers must complete online Entrance Counseling and a Master Promissory Note (MPN). These are mandatory federal requirements 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 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 2022-2023 FAFSA. The PLUS Loan annual borrowing limit is equal to the student's cost of education minus any other financial aid that has been offered. 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 st of each year. The Direct Parent PLUS Loan origination fees become effective on October 1 st 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 through our loan servicer ECSI. Students have up to ten years to repay the loan. Students offered a Nursing Loan must complete Entrance Counseling and sign a Promissory Note each year with our loan servicer ECSI 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 2022-2023 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, a student must complete at least 16 units or more per semester. Students must work with their academic advisors to ensure they 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 twosemester extension of their benefits. Grant amounts are determined annually by the passing of a final State of California budget; all Cal Grants listed on a Financial Aid Offer 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 offered an Entitlement or Competitive Cal Grant. Before a Cal Grant award can be added to a student's Financial Aid Offer 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 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 grant, 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. During the second and subsequent years, Cal Grant B includes a tuition and fee-paying component in addition to Access. The 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 2022-2023 FAFSA (https://studentaid.gov) by March 2, 2022, 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 2022-2023 Academic Year. Students may renew a Cal Grant 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 a Grant Record Change through their Webgrants for Students account, or contact CSAC at 1-888-224-7268.

For details about renewal requirements for the 2022-2023 Cal Grant, students may visit the California Student Aid Commission (CSAC) website at 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 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

## California Military Department (CMD) GI Bill Award Program

The CMD GI Bill issues educational payments to qualifying members of the California Army or Air National Guard, California State Guard, and the California Naval Militia. This State Grant can pay towards tuition and fees at private institutions. Find more information at https://calguard.ca.gov/ education/.

## Law Enforcement Personnel Dependent's Grant

The Law Enforcement Personnel Dependents Grant (LEPD) is a need-based educational grant available 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 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. Financial aid 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 scholarships, 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 Scholarships

## Academic Scholarships

For first-time freshmen who begin attending PLNU during the 2022-2023 Academic Year, academic scholarship are offered 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 scholarship 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 listed here (https://www.pointloma.edu/offices/student-financial-services/undergraduate-student-financial-services/types-aid/scholarships/)


## Bresee Scholarship

The Bresee scholarship is offered to first-time freshmen for the 2022-2023 Academic Year for $\$ 10,000$ and is renewable with a cumulative 3.200 GPA (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 scholarship is given for a maximum of eight (8) semesters.

## Provost Scholarship

The Provost's Scholarship is offered to first-time freshmen for the 2022-2023 Academic Year for \$12,000 and is renewable with a cumulative 3.200 GPA (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 scholarship is given for a maximum of eight (8) semesters.

## Trustee Scholarship

The Trustee's Scholarship is offered to first-time freshmen for the 2022-2023 Academic Year for $\$ 16,000$ and is renewable with a cumulative 3.400 GPA (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 scholarship is given for a maximum of eight (8) semesters.

## President Scholarship

The President's Scholarship is offered to first-time freshmen for the 2022-2023 Academic Year for $\$ 20,000$ and is renewable with a cumulative 3.400 GPA (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 scholarship is given for a maximum of eight (8) semesters.

## Competitive Academic Scholarships

## Full Honors Scholarship

One Full Honors Scholarship will be offered by the Admissions office to a first-time freshman for the 2022-2023 Academic Year. This scholarship covers tuition expenses for the year. This scholarship is initially offered for two years and is then renewable annually with a cumulative 3.400 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 scholarship 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 offered a Science Honors Scholarship by faculty from the Science, Math, or Computer Science disciplines. Offering a Science Honors Scholarship is in addition to the offer of any PLNU Academic Scholarship. This scholarship is initially offered for two years and is then renewable annually with a cumulative 3.400 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 scholarship 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 \$5,000

Transfer GPA of between 3.000 and 3.290

## Transfer Merit 2 Scholarship \$7,500

Transfer GPA of between 3.300 and 3.590
Transfer Merit 3 Scholarship \$10,000
Transfer GPA of 3.600 or higher
The Transfer Merit 1 Scholarship is renewable with a cumulative GPA of $>3.000$ (not rounded) calculated at the end of three full PLNU semesters. The Transfer Merit 2 Scholarship is renewable with a cumulative GPA of $>3.200$ (not rounded) calculated at the end of three full PLNU semesters. The Transfer Merit 3 Scholarship is renewable with a cumulative GPA of $>3.400$ (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 available for a maximum of eight (8) semesters.

Transfer students with less than 17 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 scholarship at the time they were admitted to PLNU may be considered for this scholarship after completing at least three consecutive full-time semesters at PLNU, and attaining a cumulative resident GPA of > 3.700 (not rounded and excluding study abroad, summer school, and transfer units). If eligible, this scholarship will be offered for the following academic year. Applications for this scholarship are available from the Student Financial Services office. Due to limited funding, all students who are eligible may not be offered the scholarship. A priority application deadline of March 2nd will be used to determine eligibility in the event of limited funding. Second Chance Merit Scholarship recipients who have been offered institutional need grants will be offered need grant amounts 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 2022-2023 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 - ${ }^{1}$ career senior pastor or in a full-time career member of the pastoral staff during the 2022-2023 Academic Year.
- The student is under the age of 24 during the academic year in which the discount is received.
- 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 2022-2023 Academic Year. (This discount is given for a maximum of 8 semesters.)

1 "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 grants: the Church Scholarship, the Nazarene Grant-in-Aid, and a District Grant. In order to receive these three grants, 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 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 grants can be used to help pay tuition and mandatory fees or on-campus room and board charges. For students living off-campus, the grants 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 package.

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 offered 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 offered the grant. Students will be offered a Federal Direct Subsidized Loan and Federal Work Study before being offered a Point Loma Forward Grant for the 2022-2023 Academic Year. Renewal of institutional need grants for returning students is dependent upon continued eligibility under the criteria for that cohort and the availability of funds.

## Point Loma Legacy Grant

The Point Loma Legacy Grant may be offered to students who have at least one parent who attended or graduated from Point Loma Nazarene College/ University, who were not offered institutional aid in excess of the maximum allowable, and who demonstrated remaining unmet need. The Point Loma Legacy Grant offer is subject to the availability of funds. To be considered, students must have filed a 2022-2023 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 Scholarships <br> 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 (http://www.pointloma.edu/communication/) Assistant at (619) 849-2391.

## Music Scholarships

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

## Theatre Scholarships

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

## Elected or Appointed Office Institutional Aid ASB and Resident Assistantships (RA)

Both Associated Student Body (ASB) Leadership and RA funds are treated as need-based if the student's financial aid includes any form of federal or state need-based aid. This means that ASB or RA funds 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 fund reduced or canceled to avoid over-funding may be for the student to receive the excess amount 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 funds are based on the equivalent of the mid meal plan with the exception of RA's assigned to Flex housing who are offered the equivalent meal plan for Flex residents.

ASB Scholarships are offered each semester with a portion paid as a stipend directly to the student and a portion offered 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 scholarship. 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 Scholarships is the Director of Community Life. The contact person for resident assistantships is the Dean of Students.

## Departmental/School and Endowment Scholarships

Each year, various academic departments and schools offer 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 scholarships.

A listing of endowed scholarships (http://www.pointloma.edu/life/giving/strategic-giving-priorities/endowed-scholarships/endowed-scholarshiplist/) for the 2022-2023 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 scholarships require financial need. It is the student's responsibility to research outside scholarship opportunities. Once offered, 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 scholarships 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 scholarship must still be treated as a resource, which means that other aid in the student's financial aid package 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 offered to them during an academic year.

## ROTC and Veteran Readiness and Employment (VR\&E)

Funding from both Reserve Officers Training Corps (ROTC) and Veteran Readiness and Employment (VR\&E), formerly known as Vocational Rehabilitation (Voc Rehab) helps students to pay tuition and fee charges. 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 offered 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 grants 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. Decisions will be made in writing to the eligible students. Students offered 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 2022-2023 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 offered to students after they submit:

- 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 offered 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 http://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 scholarship. If the student has remaining unmet need as determined by the FAFSA, they may be offered 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 scholarships) 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 Study Abroad Office.

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. Additional 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 offering 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 ( $30 x$ $66.7 \%=20$ ). 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). Students who extend beyond the 192 units may appeal.
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.

## 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. Inquiries and appeals regarding compliance with this federal requirement may be directed to the Vice President of Student Life and Formation, Nicholson Commons, (619) 849-2215. 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. Inquiries and appeals regarding compliance with the Title IX federal requirement may be directed to Title IX Coordinator, Danielle Brown Friberg, Nicholson Commons 326A, (619) 849-2313, titleix@pointloma.edu. Point Loma Nazarene University also provides individuals with disabilities access to the programs, services, and activities of the University. Pursuant to Section 504 of the Rehabilitation Act, Titles I and III of the Americans with Disabilities Act (ADA), as amended by the ADA Amendments Act, and other applicable federal, state, and local laws and regulations, PLNU will not discriminate against qualified individuals with disabilities on the basis of disability in its services, programs, or activities. The Associate Dean of the Educational Access Center, EAC@pointloma.edu, provides advice and support to students with disabilities. Inquiries and appeals regarding compliance with these federal requirements may be directed to the ADA Coordinator, Dr. Holly Irwin, Mieras Hall, (619) 849-2706, ADA@pointloma.edu.

## 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 is inaccurate, misleading, or otherwise in violation of the student's privacy under FERPA.

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), photo, 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:
- develop, validate, or administer predictive tests;
- administer student aid programs; or
- 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 nonforcible 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 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 Registrar.

## 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) (http://www.ecfr.gov/cgi-bin/text-idx/? c=ecfr\&sid=09f5eb8ac02c547fef87c325e8c4f3f3\&rgn=div5\&view=te 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 (https://catalog.pointloma.edu/content.php? catoid=58\&navoid=3188\#:~:text=complaint\%20process\%2C \%20click-,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 (http://www.bppe.ca.gov/enforcement/ complaint/), via email: bppe@dca.ca.gov, or by phone or fax: (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 servicecentered 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 $\mathrm{Act}^{2}$ 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: Traditional Undergraduate Students (https://pointloma-public.courseleaf.com/handbooks/tug-handbook/ personal-conduct/)
Residential Life Policy (https://pointloma-public.courseleaf.com/ handbooks/tug-handbook/community-living-responsibilities-policies/) Why PLNU (https://www.pointloma.edu/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 ${ }^{1}$ 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.

To qualify for this provision, students are required to:

1. Submit a Certificate of Eligibility (CH33) or VRE Authorization (CH31) to PLNU no later than the first day of a course.
2. Provide a written request to use CH33 entitlement, or have a VRE Authorization on file for CH 31 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.
${ }^{1}$ 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.

## 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 (http://www.pointloma.edu/offices/office-institutional-effectiveness-research/disclosures/).

## Office of Records

The Office of Records (http://www.pointloma.edu/experience/offices/ administrative-offices/office-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

- Board of Trustees (p. 335)
- Foundation Board (p. 335)
- Alumni Board (p. 336)
- Officers and Administrative Staff (p. 337)
- Office of Academic Affairs (p. 338)
- Faculty (p. 338)


## Board of Trustees

The Board of Trustees serves as the governing board of the University. Numbering 24 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 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
Rev. Rick Power
Vice Chair
Kailua, Hawaii
Mr. Ken Baruth

## Secretary

Olathe, Kansas

## Members of the Board

Ms. Kimberley Cullumber-Alexander (1983)
Chandler, Arizona
Dr. René Bravo (1979)
San Luis Obispo, California
Dr. Bob Brower
San Diego, California
Rev. Moisés Champo (1991)
San Fernando, California
Rev. Dan Chung
San Francisco, California
Mr. Larry Fry (1980)
Roswell, New Mexico
Mr. Jose Hernandez
Chandler, Arizona
Rev. Kordell Kekoa (1984)
Honolulu, Hawaii
Dr. Larry Lacher
Capitan, New Mexico
Dr. John Nells
Winslow, Arizona
Mr. Daryl Nicholson (1968)
Porterville, California
Mr. Matt Robertson (1992)
Rocklin, California
Ms. Jonna Schengel (1981)

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)
Laguna Hills, California
Mr. Steve Swartz (1981)
Murrieta, California
Dr. Nell Becker Sweeden
Lenexa, Kansas
Mr. Mendell Thompson (1976)
Glendora, 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

Dr. Bob Brower (1998)
San Diego, California
Dr. Carolyn Downey (1961)
La Jolla, California

Mr. Michael Gebhart (2004)
Rancho Murrieta, California
Mr. Rob Honer (2005)
Encinitas, 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

## Alumni Board <br> 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
Matt Robertson (1992)
Rocklin, California
Vice President of Regional Engagement
Shannon Fox (2007)
Fairfax, Virginia

## Secretary

Erin McCann (2010)
Lakewood, Colorado

## Area Directors

Arizona
Katy Gent (1993)
Gilbert, Arizona

## Colorado

Evan Amo (2011)
Denver, Colorado

## Hawaii

Will Campbell (2009)
Honolulu, Hawaii
Los Angeles
Suzanne Mulcahy (1982)
Monrovia, California

## Northern California

Alex Moore (2009)

Vallejo, California

## 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

## Southern California

Veronica Eckert (2007)
San Diego, California
Directors at-Large
Chad Van Soest (2003)
Littleton, Colorado
ASB President
Ella Malone (2022)
Plano, Texas

## 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
Nursing Alumni
Debbie Holly (1978)
San Diego, California
Research Associates
Rick Bravo (1979)
San Luis Obispo, California
Women's Auxiliary and Friends

Jennie Vance (1988)
Carlsbad, California
Young Alumni Representative
Christine Abrell (2020)
San Diego, California
Danielle Keyes (2021)
La Mesa, California

## Officers and Administrative Staff Office of the President

Bob Brower
President
Sharon Ayala
Associate Vice President for Marketing
Ron Benefiel
Director, Center for Pastoral Leadership
Danielle Brown-Frieberg
Title IX Coordinator and Compliance Officer
Erin Corbin
Administrative Coordinator
Ethan Hamilton
Director of Athletics
Jackye Peacock
Administrative Assistant
Scott Shoemaker
Associate Vice President for Enrollment and Retention
TBD
Chief Diversity Officer

## Academic Affairs

Kerry Fulcher
Provost and Chief Academic Officer
April Cordero
Dean, Educational Effectiveness
Jim Daichendt
Vice Provost of Academic Studies
Dean of the Colleges
Pamela Harris
Associate Dean, Educational Access Center
Holly Irwin
Vice Provost for Academic Administration
Nick Pertler
Assistant Dean, College of Extended Learning
Rebecca Smith
Executive Director, Career Services

## University Services

Jeff Bolster
Vice President for University Services
Erin Corbin
Administrative Coordinator
Corey Fling
Chief Information Officer and Associate Vice President of Information Technology

Jackye Peacock
Administrative Assistant
Kim Riddle
Director of Auxiliary Services and University Event Coordinator
Mark Ryan
Director, Public Safety
Dan Toro
Associate Vice President, Facility Operations and Campus Planning

## 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
Vice President for Finance and CFO

Tim Benefiel
Associate Vice President for Accounting and Finance
Cindy Chappell
Associate Vice President, Student Financial Services and Risk Management

Brent Goodman
Director, Institutional Research

Leanne Jones
Property and Risk Management Specialist
Samara Timms
Associate Vice President for Human Resources

## Student Life and Formation

Mary Paul
Vice President for Student Life and Formation
Brian Becker
Director, International Ministries and Study Abroad
Dan Bos

| Associate Director, Worship Arts |
| :---: |
| Chris Corbin Assistant Director, Study Abroad |
|  |  |
|  |
| Dean of Students |
| Director, Residential Life |
| Dana Hojsack |
| Director, Community Ministries |
| Maya Hood |
| Director, Multicultural and International Student Services |
| Milton Karahadian |
| Director, Nicholson Commons |
| Jen King |
| Executive Director, Wellness Center |
| Scott McGowan |
| Director, Community Life |
| AJ Pitkin |
| Director, New Student Engagement |
| Liliana Reza |
| Associate Director, International Ministries and Chapel Programming |
| Esteban Trujillo |
| University Chaplain |
| George Williamson |
| Director, Worship Arts |
| Melanie Wolf |
| Associate Dean, Student Care and Engagement |
| Centers and Institutes |
| Kim Berry Jones, Director |
| Center for Justice and Reconciliation |
| Ron Benefiel, 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 |
| Susan Rogers, Academic Director |
| Early Childhood Learning Center |
| Mary Margaret Rowe, Director |
| Health Promotion Center (School of Nursing) |
| TBD |
| Wesleyan Center for 21 st Century Studies |

## 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 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
Administrative Assistant: Shelley Fruchey

## Academic Studies

Vice Provost: Jim Daichendt, Ph.D.
Office: Academic Deans Center, Room 01
Telephone: (619) 849-2412
Email: jimdaichendt@pointloma.edu (jimdaichendt@pointloma.edu)
Administrative Assistant: Kami Leone

## Educational Effectiveness

Dean: April Cordero, Ph.D.
Office: Rohr Science Hall, Room 110
Telephone: (619) 849-2328
E-mail: aprilcordero@pointloma.edu
Administrative Assistant: Cheri Feria

## Faculty

President
Bob Brower, Ph.D., 1998-present

## President Emeritus

Jim Bond, D.Min., L.H.D., 1997

## Professors Emeriti

(Inc/uding 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

Lorinda Carter, Ph.D., 2022
Professor Emerita of Mathematics and Computer Science
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 Science
Ruth Grendell, D.N.Sc., 2000
Professor Emerita of Nursing
Nancy Hardison, Ph.D., 1998
Professor Emerita of Business
Eugene Harris, M.A., 2018
Assistant Professor Emeritus of Art
Rebecca Havens, Ph.D., 2022
Professor Emerita of Economics
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
Gerald Lashley, Ed.D., 2000
Professor Emeritus of Mathematics and Computer Science
Pat Leslie, Ph.D., 2021
Professor Emerita of Social Work
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
Enedina Martinez, Ed.D., 2022
Professor Emerita of Education
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
David Michael McKinney, Ph.D., J.D., 2021
Professor Emeritus of Literature and German
Jeanie Milliken, Ph.D., 2003
Professor Emerita of Education
Robert Morwood, Ed.D., 2013
Professor Emeritus of Education
James Newburg, M.S.L.S., 2006
Librarian Emeritus
Keith Pagan, D.Mus.Ed., 1998
Professor Emeritus of Music

Charlene Pate, M.A., 2022
Associate Professor Emerita of Literature
John Pearson, C.P.A., M.A., 2003
Associate Professor Emeritus of Business

Sam Powell, Ph.D., 2021
Professor Emeritus of Philosophy and Religion
Herbert Prince, M. Div., D.D., 2005
Associate Professor Emeritus of Philosophy and Religion
Dee Puntenney, 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
Barbara Taylor, Ph.D., 2021
Professor Emerita of Nursing
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.

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)
Associate 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;
M.S.N., Ph.D., University of San Diego.

Brent Alvar, Ph.D. (2017)
Director, MS in Kinesiology Program
Professor of Kinesiology
B.S., M.S., Ph.D., Arizona State University.

Dianne Anderson, Ph.D. (2005)
Director, Biology Graduate Program

## Professor of Biology

B.S., Northwest Nazarene College;
M.S., San Diego State University;

Ph.D., University of California, San Diego and San Diego State University

Theodore Anderson, Ph.D. (1986)
Professor of Kinesiology
A.B., Point Loma College
M.Ed., College of Idaho;

Ph.D., Texas A \& M University.

Jerry Arvin, M.S. (1994)
Assistant Professor of Physical Education
B.S., Greenville College;
M.S., Butler University.

Kimberly Athans, M.Ed. (2017)
Professor of Teacher Education
B.A., University of San Diego;
M.A., University of Houston;
M.Ed., University of San Diego

Joy Balta, Ph.D. (2022)
Director of Human Anatomy Education
Associate Professor of Human Anatomy
B.S., Lebanese University;
M.Sc., University of Dundee;
M.A., Ph.D., University of College Cork, Ireland

Linda Beail, Ph.D. (1994)
Professor of Political Science
B.A., Wheaton College;

Ph.D., University of Iowa
Laurance Beauvais, Ph.D. (2013)
Professor of Chemistry
B.S., University of Houston; Ph.D., University of California, Berkeley.

Scott Bennett, Ph.D. (2007)
Professor of Spanish
B.A., M.A., San Diego State University;

Ph.D., University of California, Santa Barbara.
Jeffrey Birdsell, Ph.D. (2016)
Professor of Communication
B.A., Point Loma Nazarene University;
M.A., San Diego State University;

Ph.D., The University of Texas at Austin.

Alexandra Bitter, M.S. (2022)
Assistant Professor of Psychology
B.A., Point Loma Nazarene University;
M.S., University of Wyoming

Carrie Black, M.S. (2022)
Associate Professional Practice Professor of Nursing
B.S.N., California State University, Long Beach;
M.S., University of Phoenix

Daniel Bothe, D.B.A.(2009)
Dean, Fermanian School of Business
Associate Professor of Finance
B.S., San Diego State University;
M.B.A., University of Southern California;
D.B.A., Anderson University.

Matthew Boyne, M.A. (2020)

## Associate Professor of Management

B.S., United States Naval Academy;
M.S., Colorado Tech;
M.A., Seton Hall University;

Ed.D., Pepperdine University.

Max Butterfield, Ph.D. (2013)
Professor of Psychology
B.A., Calvin College;
M.S., Eastern Michigan University;
M.S., Ph.D., Texas Christian University.
J. David Carlson, M.F.A. (2017)

Chair, Department of Art and Design
Professor of Art
B.A., Azusa Pacific University
M.A., California State University;
M.F.A., Vermont College of Fine Art.

Ray Carlson, D.HSc. (2021)
Associate Professor and Academic Principal Faculty
B.S., California University of Pennsylvania;
M.PH., University of North Carolina, San Diego;
D.HSc., A.T., Still University College of Graduate Health Studies.

Kellye Carroll, A.B.D. (2019)
Assistant Professor in Child Development
B.F.A., Chapman University;
M.Ed., University of California, San Diego;
A.B.D., Grand Canyon University.

Benjamin Cater, Ph.D. (2017)
Associate Dean, Foundational Explorations

## Associate Professor

B.A., Point Loma Nazarene University;
M.A., The University of Montana;

Ph.D., University of Utah.

Charles Celaya, B.Th. (2018)
Assistant Professor of Commercial Music
B.S., University of Redlands;
B.Th., Calvary Chapel Bible College.

Michelle Chen, Ph.D. (2010)
Professor of Physics
B.S., B.A., M.A., University of Chicago;

Ph.D., University of Pennsylvania.
Walter Cho, Ph.D. (2012)
Professor of Biology
B.A., Harvard University;

Ph.D., Massachusetts Institute of Technology and Woods Hole Oceanographic Institution.

Yoojin Choi, Ph.D. (2022)
Professor of Biology
B.S., UC Irvine

Ph.D., Harvard University

Sara Choung, Ph.D. (2004)
Professor of Chemistry
B.S., Massachusetts Institute of Technology;

Ph.D., University of California, Berkeley.
Mary Jo Clemmons, Ed.D. (2011)

Director, Center for Teaching \& Learning
Professor of Faculty Development
B.M., University of Louisville;
M.A., Queens College;

Ed.D., Columbia University.
William Clemmons, Ph.D. (1996)

## Professor of Music

B.M., University of Louisville;
M.A., Queens College;

Ph.D., City University of New York.
Benjamin Coleman, Ph.D. (2017)
Director, Clinical Training
B.A., Seattle Pacific University;
M.A., MACL, Ph.D., Fuller Theological Seminary.

Colleen Cook, M.S.W. (2022)
Assistant Professor of Social Work
B.S.W., Northwest Nazarene University;
M.S.W., Boise State University.

Lael Corbin, M.F.A. (2005)
Professor of Art
B.A., Point Loma Nazarene University;
M.F.A., San Diego State University.

April Cordero, Ph.D. (2007)
Dean, Educational Effectiveness
Professor of Biology
B.S., M.A., University of California, San Diego;

Ph.D., University of California, San Diego and San Diego State University.
Michael Corke, Ph.D. (2018)
Director, Assessment and Accreditation
Associate Professor of Education
B.A., M.A., San Diego State University;

Ph.D., Claremont University.
Anthony Cortez, M.S. (2021)
Assistant Professor of Engineering
B.S., University of California, San Diego;
M.S., University of California, Riverside.

Nicole Cosby, Ph.D. (2011)
Program Director, MS in Athletic Training
Professor of Athletic Training
B.A., Point Loma Nazarene University;
M.A., San Jose State University;

Ph.D., University of Virginia.
Steven Cosentino, M.B.A. (2004)
Associate Professor of Accounting
B.A., Point Loma College;
M.B.A., San Diego State University.

Catherine Crockett, Ph.D. (2008)
Professor of Mathematics
B.S., M.S., California State Polytechnic University;

Ph.D., University of California, Riverside.
Paula Cronovich, Ph.D. (2012)
Co-Chair, Department of Literature, Journalism, Writing, and Languages Professor of Spanish
B.A., University of Southern California;
M.A., Ph.D., University of California, Los Angeles.

Gregory Crow, Ph.D. (1992)
Professor of Mathematics
B.A., MidAmerica Nazarene College;
M.S., Ph.D., University of Notre Dame.

David Cummings, Ph.D. (2004)
Professor of Biology
B.A., Point Loma Nazarene University;
M.S., Ph.D., University of Idaho.

Jim Daichendt, Ed.D. (2008)
Vice Provost of Academic Studies

## Dean of the Colleges

B.A., Azusa Pacific University;
M.F.A., Boston University;

Ed.M., Harvard University;
Ed.D., Columbia University.
Julia Dare, Ph.D. (2021)
Associate Professor of Management
B.B.A., Southern Methodist University;
M.B.A., University of Pennsylvania;

Ph.D., USC, Marshall School of Business.
Ann Davis, M.Ed. (2004)
Assistant Professor of Kinesiology
B.A., Washington State University;
M.Ed., National University.

Michael Dorrell, Ph.D. (2009)
Professor of Biology
B.A., Simpson College;

Ph.D., The Scripps Research Institute.
Deborah Erickson, Ed.D. (2013)

## Dean, School of Education

B.A.E, M.A., Pacific Lutheran University;
M.A., California State University, San Bernardino;

Ed.D., University of the Pacific.
Alfonso Esquer, M.S.W. (2018)
Program Director, Criminal Justice
B.S., Biola University;
M.S., Webster University;
M.S.W., University of Southern California.

Grace Fantaroni, Ed.D. (2016)
Professor of Special Education
B.S., University of Delaware;
M.A., National University;

Ed.D., Alliant International University.
Rebecca Flietstra, Ph.D. (1997)
Professor of Biology
B.A., Calvin College;

Ph.D., University of Kansas Medical Center.
Kerry Fulcher, Ph.D. (1993)
Provost and Chief Academic Officer
Professor of Biology
A.B., Northwest Nazarene College;

Ph.D., University of Idaho.

Robert Gailey, Ph.D. (2005)
Professor of Business
B.A., Eastern Nazarene College;
M.Div., Nazarene Theological Seminary;

Ph.D., University of San Diego.
Susan Ganz, Ph.D. (1997)
Professor of Athletic Training
B.A., Azusa Pacific University;
M.S., Austin Peay State University;

Ph.D., University of New Mexico.
Heather Garcia, M.S.N. (2021)
Associate Professional Practice Professor of Nursing
B.S., Westmont College;
M.S.N., Point Loma Nazarene University.

James Gates, Ph.D., (2001)
Professor of Sociology
B.A., Eastern Nazarene College;
M.Div., Nazarene Theological Seminary;

Ph.D., University of Florida.
Nathan Gibbs, MFA (2022)
Associate Professor of Electronic Arts \& Journalism
B.S., Abilene Christian University;

MFA, Rensselaer Polytechnic University.
Jacob Goodin, Ph.D. (2018)
Associate Professor of Kinesiology
B.S., Westmont College;
M.A., Ph.D., East Tennessee State University.

Timothy Hall, Ed.D. (2008)
Professor of Foundational Explorations
B.A., M.A., Point Loma Nazarene University;

Ed.D., Alliant International University.
Jill Hamilton-Bunch, Ph.D. (2002)
Associate Dean, Teacher Education and Bakersfield Campus
Professor of Education
B.A., Point Loma Nazarene University;
M.A., Fresno Pacific University;

Ph.D., University of California, Santa Barbara.
Carl Hammond, M.B.A. (2003)
Associate Professor of Accounting
B.S., University of Denver;
M.B.A., San Diego State University.

Carsten Hennings, D.B.A. (2018)
Associate Professor of Management
B.S., M.S., M.B.A., McGill University;
D.B.A., Anderson University.

Richard Hills, M.A. (1985)
Assistant Professor of Kinesiology
A.B., Point Loma College;
M.A., San Diego State University.

Kimberly Hogelucht, Ph.D. (2006)
Professor of Business
B.A., Iowa State University;
M.A., San Diego State University;

Ph.D., University of San Diego.
Elizabeth Holbrook, M.S. (2020)
Assistant Professor of Accounting
B.A., Point Loma Nazarene University;
M.S., Liberty University.

Kelly Hunter, Ph.D. (2022)
Visiting Assistant Professor of Chemistry
B.S., Loyola Marymount University;
M.S., University of California, San Diego;

Ph.D., University of California.
Jason Hurtado-Prater, Ed.D. (2022)
Associate Professor of Leadership
B.A., UCLA;

MBA, St. Joseph's College of Maine;
Ed.D., University of Urbana-Champaign.
Holly Irwin, Ph.D. (1998)
Vice Provost for Academic Administration
Professor of Psychology
B.A., M.A., Ph.D., University of Louisville.

Daniel Jackson, D.W.S. (2002)
Chair, Department of Music
Professor of Music
B.A., M.A., California State University, Fresno;
D.W.S., Institute for Worship Studies.

Ariane Jansma, Ph.D. (2014)
Associate Professor of Chemistry
B.A., B.S., Pepperdine University;
M.S., San Diego State University;

Ph.D., University of California, San Diego.
Daniel Jenkins, Ph.D. (2004)
Director, Masters of Clinical Counseling
Professor of Psychology
B.A., Pacific Christian College;

Ph.D., Brigham Young University.
Jesús Jiménez, Ph.D. (1992)
Professor of Mathematics
B.S., M.S., National Autonomous University of Mexico;

Ph.D., University of Utah.
Christina Kalberg, M.B.A. (2020)
Assistant Professor of Marketing
B.A., Cal State University, Chico;
M.B.A., Point Loma Nazarene University

Lori Kall, Ph.D. (2018)
Assistant Professor of Teacher Education
B.A., Point Loma Nazarene University;
M.Ed., University of Phoenix;

Ph.D., Walden University.
Dana Kasper, Ph.D. (2021)
Visiting Assistant Professor of Clinical Counseling
B.A., Ashland Theological Society;
M.A., Ashland University;

Ph.D., University of the Cumberlands.
Brad Kelle, Ph.D. (2004)

## Professor of Biblical Literature

B.A., Trevecca Nazarene University;
M.T.S., Emory University Candler School of Theology; Ph.D., Emory University.

Rick Kennedy, Ph.D. (1995)

## Professor of History

B.A., M.A., Ph.D., University of California, Santa Barbara.

Jaeyoon Kim, Ph.D. (2005)
Professor of History
B.A., Chonnam National University, Korea;
M.A., San Diego State University;

Ph.D., University of Oregon.
Son Chae Kim, Ph.D. (2019)
Professor of Nursing
B.S.N., University of Washington; M.S.N., Ph.D., University of San Diego.

Kristopher Koudelka, Ph.D. (2014)

## Professor of Biology

B.A., University of Wisconsin - River Falls;

Ph.D., The Scripps Research Institute.
Jennifer Kritsch, Ph.D. (2012)
Associate Professor of Education
B.A., Northwest Nazarene College;
M.A., Point Loma Nazarene University;

Ph.D., Capella University.
Breeann Kyte Kirby, M.F.A. (2018)
Associate Professor of Creative Writing
B.A., Point Loma Nazarene University;
M.A., University of West Florida;
M.S., M.F.A., San Diego State University.

Victor Labenske, D.M.A. (1987)

## Professor of Music

B.A., Point Loma Nazarene College;
M.M., University of Missouri, Kansas City;
D.M.A., University of Southern California.

Karah Lain, M.F.A. (2019)
Associate Professor of Visual Art, Painting \& Drawing
B.S., Olivet Nazarene University;
M.F.A., Oregon College of Art \& Craft.

Rebecca Laird, D. Min. (2011)
Professor of Christian Ministry and Practice
B.A., Point Loma College;
M.A., Pacific School of Religion;
D. Min., Drew University.

Robin Lang, M.L.I.S. (2016)
Instructional Services Librarian
Associate Professor
B.A., Point Loma Nazarene University;
M.L.I.S., San Jose State University.

Roberta Lavery, MOT (2022)
Assistant Professor of Occupational Therapy
B.S., Penn State University;

MOT, Temple University.
G. Michael Leffel, Ph.D. (1992)

Professor of Psychology
B.A. Point Loma Nazarene College;
M.A., California State University, Long Beach;

Ph.D., University of Illinois, Champagne-Urbana.
Michael Leih, Ph.D. (2015)
Professor of Computer Information Technology
B.A., Point Loma Nazarene University;
M.S., California State University, Fullerton;

Ph.D., Claremont Graduate University.
Alain Lescart, Ph.D. (2005)

## Professor of French

M.A., University of Connecticut;
M.S., Eastern Nazarene College;
M.A., Faculté Universitaire de Théologie Protestante de Bruxelles;

Th.M., Académie de Versailles;
Ph.D., University of Connecticut.
Jennifer Lineback, Ph.D. (2012)
Professor of Education
B.A., B.S., M.S., Miami University;

Ph.D., University of California, San Diego and San Diego State University.
Michael Lodahl, Ph.D. (1999)
Professor of Theology and World Religions
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[^0]:    ${ }^{1}$ LIT 2000 Literature and Culture course subtitle must be "Film Adaptation".

[^1]:    1 Science and/or Math electives beyond those required for the degree must be approved by the department chair.

[^2]:    ${ }^{1}$ PSY 3041 is a pre-requisite.

[^3]:    ${ }^{1}$ MTH 1073 fulfills the Foundational Explorations Problem Solving Requirement, but MTH 1053 does not.
    2 Accounting majors may substitute ACC 4089 for BUS 4089 in the core.

[^4]:    8

