George Fox University

Undergraduate Catalog

2011-12

GEORGE FOX
UNIVERSITY

Be Known

George Fox University

2011-12 Undergraduate Catalog

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Use of Catalog

This catalog is provided for guidance in course selection and program planning. While every effort is made to ensure the accuracy of the information in this catalog, in no sense is it to be considered a binding contract, and it may be changed by action of appropriate bodies within the university.

Courses listed in this catalog are subject to change through normal academic process. New courses and changes in existing course work are initiated by the appropriate school, department, or program, and approved by the Office of Academic Affairs and the university faculty. Changes to the curriculum are published in the program outlines and schedule of classes.

University Profile

Accreditation and Memberships

George Fox University is accredited by the Northwest Commission on Colleges and Universities, by the Oregon Teacher Standards and Practices Commission for the preparation of teachers in specific fields, and by the National Association of Schools of Music. It is approved by the U.S. government and the states of Oregon and Idaho for the education of veterans, and by the U.S. attorney general for the admission of international students.

The university is a member of the national Christian College Consortium, the Council of Independent Colleges Northwest Conference, the Council for Christian Colleges and Universities, the Association of American Colleges, the College Scholarship Service, the American Association for Higher Education, the Friends Association for Higher Education, the National Association of Evangelicals, the National Collegiate Athletic Association, the Northwest Conference, the National Association of Independent Colleges and Universities, the Council of Independent Colleges, the Evangelical Teacher Training Association, the Northwest Association of Private College and University Libraries, the Oregon Independent Colleges Association, the Oregon Independent College Foundation, the National Council of Schools and Programs of Professional Psychology, and the Council of Graduate Departments of Psychology.

The undergraduate athletic training education program is accredited by the Commission on Accreditation of Athletic Training Education.

The undergraduate engineering program is accredited by the Engineering Accreditation Committee of the Accreditation Board for Engineering and Technology.

The undergraduate music program is accredited by the National Association of Schools of Music.

The undergraduate nursing program is accredited by the Commission on Collegiate Nursing Education.

The undergraduate social work program is accredited by the Council on Social Work Education.

The School of Education is accredited by the National Council for Accreditation of Teacher Education (NCATE).

The School of Education is also approved by the Oregon Teacher Standards and Practices Commission (TSPC) for the preparation of early childhood and elementary teachers at the undergraduate and graduate levels and for the preparation of middle and high school level teachers in specific fields at the graduate level. TSPC has also approved the School of Education for the preparation of principals, superintendents, and other administrators as well as school counselors and school psychologists.

The school counseling and school psychology degrees and certificates fulfill all the educational requirements for licensure by the Teacher Standards and Practices Commission (TSPC).

George Fox Evangelical Seminary is accredited by the Association of Theological Schools in the United States

and Canada.

The Graduate School of Clinical Psychology is accredited by the American Psychological Association. Doctor of Psychology (PsyD) degrees fulfill all the educational requirements for licensure by the Oregon Board of Psychology Examiners and for listing in the National Council of Health Service Providers in Psychology.

Counseling and marriage and family therapy degrees fulfill all the educational requirements for licensure by the Oregon Board of Licensed Professional Counselors and Therapists.

The play therapy certificate fulfills all the educational requirements to become a Registered Play Therapist (RPT) through the Association for Play Therapy (APT).

The other 12 members of the Christian College Consortium are Asbury College, Wilmore, Ky.; Bethel College, St. Paul, Minn.; Gordon College, Wenham, Mass.; Greenville College, Greenville, Ill.; Houghton College, Houghton, N.Y.; Malone College, Canton, Ohio; Messiah College, Grantham, Pa.; Seattle Pacific University, Seattle, Wash.; Taylor University, Upland, Ind.; Trinity College, Deerfield, Ill.; Westmont College, Santa Barbara, Calif.; and Wheaton College, Wheaton, Ill.

The Council for Christian Colleges and Universities, based in Washington, D.C., was founded in 1976. Each of the more than 100 U.S. member institutions is committed to academic excellence and to the integration of faith, learning, and living. The coalition, comprising four-year liberal arts colleges and universities with regional accreditation, provides a medium for strengthening and unifying this important sector of private higher education.

Statement of Faith

The Trinity
We believe in one eternal God, the source and goal of life, who exists as three persons in the Trinity: the Father, the Son, and the Holy Spirit. In love and joy, God creates and sustains the universe, including humanity, male and female, who are made in God's image.

God the Father
We believe in God the Father Almighty, whose love is the foundation of salvation and righteous judgment, and who calls us into covenant relationship with God and with one another.

God the Son
We believe in Jesus Christ, the Word, who is fully God and fully human. He came to show us God and perfect humanity, and, through his life, death, and resurrection, to reconcile us to God. He is now actively present with us as Savior, Teacher, Lord, Healer, and Friend.

God the Holy Spirit
We believe in the Holy Spirit, who breathed God's message into the prophets and apostles, opens our eyes to God's Truth in Jesus Christ, empowers us for holy living, and carries on in us the work of salvation.

Salvation
We believe that salvation comes through Jesus Christ alone, to whom we must respond with repentance,

faith, and obedience. Through Christ we come into a right relationship with God, our sins are forgiven, and we receive eternal life.

The Bible
We believe that God inspired the Bible and has given it to us as the uniquely authoritative, written guide for Christian living and thinking. As illumined by the Holy Spirit, the Scriptures are true and reliable. They point us to God, guide our lives, and nurture us toward spiritual maturity.

The Christian Life
We believe that God has called us to be and to make disciples of Jesus Christ and to be God's agents of love and reconciliation in the world. In keeping with the teaching of Jesus, we work to oppose violence and war, and we seek peace and justice in human relationships and social structures.

The Church
We believe in the church as the people of God, composed of all who believe in Jesus Christ, who support and equip each other through worship, teaching, and accountability, who model God's loving community, and who proclaim the gospel to the world.

Christian Worship
We believe Christ is present as we gather in his name, seeking to worship in spirit and in truth. All believers are joined in the one body of Christ, are baptized by the Spirit, and live in Christ's abiding presence. Christian baptism and communion are spiritual realities, and, as Christians from many faith traditions, we celebrate these in different ways.

The Future
We believe in the personal return of Jesus Christ, in the resurrection of the dead, in God's judgment of all persons with perfect justice and mercy, and in eternal reward and punishment. Ultimately, Christ's kingdom will be victorious over all evil, and the faithful will reign with him in eternal life.

Our Heritage

More than a century ago, early Oregon Quaker pioneers helped settle the rich and fruitful Chehalem Valley of Oregon. One of their first priorities, along with the founding of their church, was the education of their children. In 1885, the Christian instruction of their offspring was assured with the establishment of Friends Pacific Academy. At the same time, founding pioneers were looking ahead with a dream of a college to provide more advanced education. That time came Sept. 9, 1891, with the opening of the doors of Pacific College. Fifteen students were counted on opening day.

In the 116 years since George Fox University's founding, major changes have included the name of the university itself. Retitled in 1949 because of the many "Pacific" colleges, the school was named in honor of the founder of the Friends Church. The name changed again in July 1996 when George Fox College became George Fox University, incorporating Western Evangelical Seminary.

From only a handful of courses in the 1890s, the university now offers 38 undergraduate majors, and graduate programs in psychology, counseling, education, business, ministry, and religion. Over the years, more than 16,000 students have called this institution their alma mater.

George Fox has grown rapidly in the last two decades - both in reputation and facilities. *U.S. News & World Report* for 19 years has named George Fox "One of America's Best Colleges." In 2005, George Fox ranked in the top tier in the category of Best Universities - Master's, West Region. National recognition also has come from the John Templeton Foundation, which selected George Fox as one of 100 in its Honor Roll of Character-Building Colleges.

Following a series of campus master plans, George Fox has expanded in recent years to now include 70 buildings on approximately 108 acres. The most recent expansion is the 2006 purchase of an adjacent eight acres formerly occupied by Providence Newberg Hospital. The growth to the east incorporates tree-filled Hess Creek Canyon within the main campus. The canyon formerly served as the campus' eastern boundary. A 24-acre tract north of the campus also is to be developed into a new athletic field complex. More than 3,000 students come to George Fox from across the nation to participate in the experience of sharing faith and learning with dedicated faculty and administrators.

Even as it expands its mission by offering graduate programs and serving adult learners, George Fox remains committed to providing more than 1,500 traditional undergraduate students with a residential campus atmosphere in Newberg. There, learning continues outside the classroom - as well as inside - through a variety of experiences including music, athletics, clubs and organizations, special events, and Christian ministries.

The Christian atmosphere is a campus priority. With other Christians, the university holds to the historic truths and teachings of Christianity, as outlined in the statement of faith. From its founding, the university has been guided by Northwest Yearly Meeting of Friends Church. It historically has emphasized the necessity of a genuinely experiential Christian faith, personal integrity and purity, the spiritual nature of the ordinances, the importance of peacemaking and responsible social action, the involvement of women in ministry and leadership, the valuing of simplicity, and the right and duty of each person to hear and follow God's call.

George Fox University has more Friends students on campus than any other college in the United States. They represent approximately 5 percent of the student body. Altogether, more than 50 denominations are represented on campus. Denominations with a significant enrollment include the Evangelical Church of North America, Free Methodist, Nazarene, Presbyterian, Disciples of Christ, Mennonite, United Methodist, Assemblies of God, Christian and Missionary Alliance, Catholic, Lutheran, American Baptist, Conservative Baptist, Church of God, and Foursquare. There are also numerous students who attend independent churches.

Locations

George Fox University serves students at a number of locations in the Pacific Northwest, including its Portland Center, Salem Center, Boise (Idaho) Center, and teaching sites in other Oregon communities. Its residential undergraduate campus is in Newberg, Ore., in the lower Willamette Valley, on an 108-acre tree-shaded campus in a residential neighborhood. This area offers a variety to meet most interests. Newberg is a friendly community close (23 miles) to a major metropolitan environment of 1.9 million people. It is located in the beauty of the Pacific Northwest, with nearby mountain ranges for skiing and easy access to rugged coastal beaches just an hour away.

Oregon - 97,060 square miles of variety - stretches from the Pacific Coast, over the Coast Range, through

the fertile Willamette Valley, past the snowcapped Cascades, and into the high desert country of central and eastern Oregon. More than half of the student body call Oregon home. Others come to school in Oregon and decide to make it their new home - despite the fabled rain. Yes, there is rain, and sometimes it falls hard in the valley between the mountain ranges where George Fox University is located. But it is the rain that makes Oregon green and gives it natural beauty. Umbrellas and raincoats do come in handy during the winter months, but when the sun comes out, Oregon is spectacular - and it's worth the wait. Just ask the visitors who make tourism one of the state's largest industries, along with high technology, forest products, and agriculture.

Just a half-hour drive from the campus, metropolitan Portland is George Fox's big-city neighbor. In 2000, Portland topped *Money* magazine's list of "Best Places to Live in the U.S." Oregon's largest city, Portland, offers its Old Town district, the Tom McCall Waterfront Park, numerous art galleries and museums, a number of theatre groups and jazz clubs, and a world-class symphony, ballet, and opera. Other attractions include the Oregon Zoo, the Japanese Garden, the International Rose Test Gardens, and the Oregon Museum of Science and Industry. Every June the city holds its Rose Festival, with three parades, a coronation, and 25 days of festival events.

For those who love the outdoors, Portland has 9,400 acres of parks, including Mill Ends Park, the smallest in the world, and Forest Park, named "Best Urban Park in the U.S." And George Fox students can join in the enthusiasm of cheering for the Portland Trail Blazers NBA team, the Portland Winter Hawks WHL ice hockey squad, and the Portland Beavers Triple-A minor league baseball team.

Despite the numerous Portland advantages, many students prefer the small-town flavor of Newberg. Located on the Willamette River, Newberg has a population of 20,000, with many residents living in Newberg and commuting to Portland for their jobs. Historic downtown Newberg consists of a variety of stores, shops, and services. Friendly merchants who appreciate the university's students are just a few blocks south of the campus, with most businesses within walking distance. It's a personable town, rich in tradition-former President Herbert Hoover once lived here.

The Newberg-Portland area has a mean daily high temperature in July of 83 degrees and a mean daily low in January of 32 degrees. Precipitation averages 37 inches a year, most of which is rain. While Newberg does get snow, it is seldom more than a few inches a year and rarely lasts more than a couple of days.

Mission, Vision and Values

Mission Statement
George Fox University, a Christ-centered community, prepares students spiritually, academically, and professionally to think with clarity, act with integrity, and serve with passion.

Vision
Our vision is to become one of the most innovative and engaging universities in the western United StatesÂ known for academic excellence and for connecting the message of Jesus Christ to the global challenges and opportunities of the future.

Our Values

Living like Christ as Agents of Love and Reconciliation
We are a Christ-centered university rooted in the Friends tradition. We take seriously the challenge of Jesus Christ to be God's agents of love and reconciliation in the world.

Creating a Transformational Learning Community
We maintain the highest standards for serving our community's academic and spiritual needs. We will continue to attract and nurture an authentic wisdom community of faculty and staff dedicated to providing a dynamic, diverse, and holistic spiritual and educational experience.

Pursuing Scholarly Inquiry
As a university, we seek to advance knowledge by engaging in and supporting scholarship. Working from Christian premises, we attempt to better understand God and God's creation. Doing so helps us to teach and serve others more effectively.

Engaging Globally and Connecting Culturally
We value worldwide experiential learning aimed at understanding and improving the human condition. We desire to connect genuinely with people from diverse cultures both locally and globally through relationships and reciprocal teaching and learning.

Reflecting the Diversity of God's People
All people are created in God's image. Therefore, George Fox University represents the ethnic, socio-economic, cultural, and gender diversity of the broader Kingdom of God. We provide opportunities for students to dialogue about issues of diversity and to live and study in diverse communities.

Preparing Innovators and Risk Takers in Pursuit of God's Kingdom
Our community inspires and equips students and employees to take responsible risks in pursuit of God's kingdom and to discover creative ways to fulfill Christ's purposes in our university life and the world around us.

Serving and Leading in Communities of Trust
We strive to be a community of trust, camaraderie, and respect where we practice collaborative leadership. We value the contributions of students, faculty, staff, administrators, and trustees and find unity through

serving one another.

Promoting Peace, Justice, and Care of the Earth
Jesus Christ calls us to be peacemakers, to serve the poor, and to engage our world responsibly. We are a community that actively creates peace, promotes justice, and cares for the earth.

Student Outcomes

In any enterprise involving students of varied preparedness, motivation, and discipline, there will be differences in outcomes. Education is realistic and idealistic. It reaches beyond the average, the assured, and the guaranteed. University objectives - indeed the entire catalog - may be seen as sincere intention to provide an educational program of high quality. Accountability to students is fulfilled by providing qualified teachers, a community with Christian values, and the historical continuity of a Quaker university. The opportunity for personal growth and development is here, yet student initiative and responsibility are vital. The catalog is not an unconditional contract.

Values Statement

The George Fox University community values...

- Following Christ, the Center of Truth
- Honoring the worth, dignity, and potential of the individual
- Developing the whole person - spirit, mind, and body
- Living and learning in a Christ-centered community
- Pursuing integrity over image
- Achieving academic excellence in the liberal arts
- Preparing every person to serve Christ in the world
- Preserving our Friends (Quaker) heritage

Academic Support Programs

George Fox University offers the following programs that support the mission of the traditional undergraduate program at the university:
On-Campus Academic Programs
Off-Campus Programs
Consortium Visitor Program
Semesters Off Campus
Juniors Abroad
English Language Institute (ELI)

On-Campus Academic Programs

Academic Success Program

A limited number of carefully selected students who do not meet regular admission standards are welcomed to the George Fox University Academic Success Program (ASP) each fall. Admitted provisionally to the university, ASP students attend an afternoon orientation before other students arrive. Under the individualized guidance of the ASP director and faculty advisors, they register for fall courses. Tutorial assistance and other aids are available, as needed. Total hours are limited to 14 for fall semester.

Academic Symposia

Each year, George Fox University hosts numerous academic symposia as well as faculty lectures, some of which offer academic or chapel credit to students. On the Newberg campus, the biennial Herbert Hoover Symposium features leading authorities on the life and career of Herbert Hoover. Hoover spent part of his youth in Newberg, attending Friends Pacific Academy, the predecessor school to George Fox University. There is an annual Woolman Forum and Spring Theological Conference. Christian Life Week, Missions Week, Cultural Celebration Week, and Quaker Heritage Week all provide an opportunity to hear guest speakers lecture on related topics. At the Portland Center, the George Fox Evangelical Seminary offers a lecture series on various dates throughout the academic year.

First Year Seminar Program

Repeated studies of the experience of college freshmen have found that the degree to which students identify with and become involved in the college environment during the first few weeks of attendance affects their success and satisfaction with their entire college experience. As a result, George Fox University demonstrates its commitment to freshmen by providing a First Year Seminar to assist students as they integrate into the academic and social life of the university community.

All first-time freshman students who matriculate fall or spring semester participate in the First Year Seminar. Students select a topical seminar designed by advisors to interest and involve students as they begin their college experience. Students meet in small groups with an assigned advisor for a required First Year Seminar

during the first five weeks of the fall or spring semester, for which they earn one credit hour. The advisor also meets with students individually for academic advising. A returning student peer advisor is assigned to a group and maintains one-on-one contact with each freshman to assist with the transition to college life. This program provides new college students with the opportunity to interact - beyond the residence hall and traditional classroom setting - with one another, with a faculty member, and with a returning student during the first semester of enrollment.

Richter Scholar Program

This program provides financial assistance to both graduate and undergraduate students to facilitate advanced research in their fields. The program is funded by annual grants from the Paul K Richter and Evalyn E.C. Richter Memorial Funds. Although the funding is available for research work at any time during the year, the typical undergraduate award provides a stipend for full-time research work in the summer, along with supplies and travel. For more information, see the guidelines on the George Fox website.

Off-Campus Programs

Tilikum Retreat Center

Christian camping is emphasized through the facilities of university-owned Tilikum, a center for retreats and outdoor ministries for the greater Portland area. Tilikum features year-round programs and facilities with a wide appeal to all ages and denominations. More than 2,500 children and youth enjoy the summer camping program. University students have opportunities for study, recreation, personal renewal, and employment.

Tilikum provides the following kinds of retreat and camp experiences: (1) relational - family groups, men, women, couples, youth, and single parents - with a goal of strengthening the entire family unit; (2) support to local churches - to make available a retreat setting that encourages opportunity for renewal, planning, and spiritual growth; (3) senior adult Elderhostels; and (4) a challenge ropes course for teamwork, personal challenge and growth, and fun through experiential learning.

Field Education

This program, commonly referred to as "field experience," "internship," or "cultural experience," usually takes place off campus, yet is an integral part of the student's academic experience. Its purpose is to promote personal and career development by integrating classroom study with planned and supervised practical experience in vocational, educational, or cultural activities outside the classroom.

Enrollment in field education is an elective option in certain majors and a requirement in others. Refer to each program to determine how it applies. The program is open to George Fox University students only.

Two types of off-campus experiences are available: career and cultural. The career-oriented field experience focuses on two levels, which are "exploratory" (275) and "preparatory" (475). These two levels provide opportunity for initial exposure to a career-interest area and for realistic preparation toward a chosen field. The culture-oriented field experience (375) is designed to encourage a short-term residence in a different cultural setting, e.g., foreign country, inner city, rural community.

Academic credit may be earned through participation in an approved field education program. A full-time student may generate up to 12 hours during one semester. Part-time involvement can generate credit at the same rate as other methods of learning. Thirty to 45 clock hours per semester are required for one hour of credit. A maximum of 20 hours may be accumulated in field education between numbers 275, 375, and 475. Twelve hours are allowed between the career-oriented options, 275 and 475. Normally, the three alternatives are broken down as follows:

___ 275	1 to 3 hours
___ 375	2 to 12 hours
___ 475	2 to 12 hours

Applications for field experience should be requested through the registrar. Applications must be completed, approved by the department chairperson, and submitted to the registrar for enrollment. The vital link to a successful field experience is the faculty sponsor (supervisor) with whom the learning plan is developed and carried out. The program also necessitates a field supervisor at the location of service or employment with whom the faculty sponsor and student interrelate.

Evaluation of the field experience is based upon successful completion of the stated individualized objectives in the learning plan. Field experience is graded pass/no pass.

OICA Cross-Registration

A full-time student may take one course a semester for no additional tuition (if total credits do not exceed 18 semester hours) at one of the neighboring institutions in the Oregon Independent Colleges Association (OICA). Only courses not available on the home campus may be selected. Cross-registration is initiated by application through the George Fox University registrar.

ROTC Program

Through a cooperative agreement with the University of Portland, George Fox University students may participate in the Air Force Reserve Officers Training Corps (AFROTC) Program offered on the University of Portland campus. For more information, see the University of Portland catalog or contact the professor of aerospace studies, University of Portland, Portland, OR 97203, 503-283-7216

Consortium Visitor Program

The Christian College Consortium Exchange sponsors a student visitors program intended as an enrichment to those disciplines where personnel and courses may be somewhat limited. Normally this one-semester experience should be part of the junior year or the first semester of the senior year. Application forms and a descriptive brochure are available from the registrar.

The other 12 members of the Christian College Consortium are Asbury College, Wilmore, KY; Bethel College, St. Paul, MN; Gordon College, Wenham, MA; Greenville College, Greenville, IL; Houghton College, Houghton, NY; Malone College, Canton, OH; Messiah College, Grantham, PA; Seattle Pacific University, Seattle, WA; Taylor University, Upland, IN; Trinity College, Deerfield, IL; Westmont College, Santa Barbara, CA; and Wheaton College, Wheaton, IL.

Although spending a semester at another Christian institution can be very beneficial, there are budgetary limits on the number of students that can be approved for off-campus, semester-long programs. Students should not assume they will automatically be approved for the Consortium Visitor Program and may want to consider applying for one of the other programs as well.

The program permits a student in good standing to enroll for one semester at one of the other consortium colleges. Qualifying students must have at least a 3.0 grade point average, have completed prior to application one or more semesters free of academic or citizenship probation, and have been approved by the selection committee.
Selection to the above programs will be based on the academic purposes involved, grade point average, citizenship, classification, and the extent to which the student has or has not had diverse educational experiences.

Semesters Off Campus

Introduction
Students enrolled at George Fox University may enrich their learning experience and in some cases fulfill important requirements for their major or minor by participating in one of the approved programs listed below. For those approved to participate, the cost is similar to staying on campus. Complete information about the programs and the application processes is available in the Center for Global Studies and on the George Fox University website.

Eligibility

- Student must have sophomore standing, including 31 semester hours completed, at the time of application for a semester off campus. Exceptions may be made if necessary for completion of a student's major requirements.
- Student must be enrolled at GFU for a full academic year prior to participation in a semester off campus. Exceptions may be made if necessary for completion of a student's major requirements.
- Student must be in good standing with Student Life.
- Student must be current with student financial accounts.
- Student must have a minimum cumulative GPA of 3.00 to apply for a semester off campus. Exceptions will be granted to students in good academic standing if a semester off campus is required for completion of the student's major or minor requirements. Students applying to the Scholars' Semester in Oxford

must have a minimum cumulative GPA of 3.5.

- GPA will be one of the factors considered by the committee that selects GFU students to participate in the Semesters Off Campus programs.
- Application Process
- Meet with your academic advisor to determine the impact on completing the major and other graduation requirements.
- Obtain the application form from the Center for Global Studies or the GFU website.
- Submit the form and its required attachments (faculty recommendation, transcript request, essay on your interest in the program) as well as the required signatures from various offices on campus to the registrar's office. The materials are due at the end of the first week of classes in the spring semester.

Selection Process
After the deadline, the Off Campus Selection Committee meets to review the applications and accepts or rejects them, based on the requirements listed above. The director of global studies then notifies the applicants of their acceptance or rejection.

Approved Programs
The following programs have been approved by the GFU faculty for their academic quality, their Christian focus, and their affordability. Detailed literature about the programs can be obtained at the Center for Global Studies.

- AMBEX Christian Exchange Program (Germany) - Situated in Regensburg, Germany, in the Bavarian region, the program emphasizes Reformation history, theology, and the German language. It is called the AMBEX program, short for American/Bavarian Exchange.
- American Studies Program -In conjunction with the Council of Christian Colleges and Universities (CCCU), George Fox students can spend a semester in Washington D.C., a city filled with internship opportunities at national and international organizations. For over 30 years, ASP students have been securing high-intensity, high-impact placements with Congressional offices and committees, federal agencies, international businesses, law firms, think tanks, and global relief-and-development organizations. Students choose one of two project tracks during the semester, Public Policy or Global Development Enterprise. The Public Policy track investigates a pressing public policy issues being debated on Capitol Hill. Focus is placed on the political difficulties policymakers face when economic, humanitarian, and national security priorities come into conflict with one another. Students directly engage policy advocates and
- political actors on all sides of the issue during their field work. ASP's newest track, Global Development Enterprise, helps students make the move from merely *dreaming* about eradicating extreme poverty to actually *doing* something. GDE places students at the center of the partnership between non-profit organizations, government aid agencies, and commercial enterprises. In either track, students join a leadership community bound by a shared commitment to learn how to translate campus convictions into real-world application. Through ASP, students catch a vision for what it takes to lead institutions against the injustices facing our nation and our world.
- Australia Studies Centre - In conjunction with the Council for Christian Colleges and Universities, George Fox students can participate in the Australia Studies Centre (ASC). Students study at the Wesley Institute for Ministry and the Arts, located in Sydney, Australia. The program is designed primarily for those interested in the study of theology, music, drama or art.
- Belize Creation Care Study Program - In this pocket of Central America, toucans, howler monkeys,

jaguars and tapirs populate the rainforest neighborhood - along with adventuresome undergraduates studying Christian creation care. Students explore Belize's unparalleled rainforest and reef.

- China Studies Program - In conjunction with the Council for Christian Colleges and Universities, George Fox students can participate in the China Studies Program (CSP). Based on the island of Xiamen, at the Overseas Education College of Xian University, the China Studies Program allows students to experience cross-cultural living on a Chinese university campus. Students will explore the complex past of one of the world's oldest cultures; experience the economic political and social realities of contemporary China; and look ahead, studying China's challenges as a rapidly emerging world power.
- Contemporary Music Center - The Contemporary Music Center is sponsored by the Council of Christian Colleges and Universities and is designed for students who feel called to a career in the music industry as performers, executives, or promoters. The principal goal is to help Christians impact the "secular" music industry, although the program would benefit those who are interested in Christian music as well. The program is located in Nashville, Tennessee. Courses include: Faith, Music, and Culture; Inside the Music Industry; and specialized courses in two tracks for performers and music managers.
- Go ED. Africa Program - The Go ED. Africa Semester Study Abroad Program offers students a unique blend of academic work and hands-on experience. While it is based in Kigali, Rwanda, students also will have the opportunity to study and engage in field experience in Rwanda, Ethiopia or Uganda.
- Go ED. Mekong Program - Situated in the northern Thailand city of Chiang Mai, the Go ED. Mekong Semester Study Abroad Program emphasizes transformational development from a Christian perspective.
- India Studies Program - The India Studies Program is designed for students who are passionate about the issues of poverty and social justice. In conjunction with the Council of Christian Colleges and Universities (CCCU), ISP teaches best practices on helping the disenfranchised and also exposes students to life as a Christian in a multi-religious society and culture. Whether studying social work, theology, missions, art & design, communications, business, cultural studies, or social sciences, students will find a niche in this program. ISP is offered in partnership with Bishop Appasamy College of Arts and Sciences in Coimbatore, Tamil Nadu, one of India's major states. While attending this program, students encounter one of today's most fascinating and diverse cultures through studying while being immersed in a local Indian community, traveling throughout the country, with an additional option of gaining field experience through an internship.
- Latin American Studies Program - In conjunction with the Council of Christian Colleges and Universities, George Fox students can participate in the Latin American Studies Program (LASP). Based in San Jose, Costa Rica, the Latin American Studies Program allows students to experience cross-cultural living, to deepen their understanding of the Lordship of Christ in an international context, and to explore the economic, political, social and cultural realities of North America's relationship with its Latin neighbors.
- L.A. Film Studies Center - Under the direction of the Council for Christian Colleges and Universities, the Los Angeles Film Studies Center makes a "Hollywood Semester" available to upper-division students. Its purpose is to enable college students to serve in various aspects of the film industry with professional skill and Christian integrity. Located in Burbank near major production studios, the semester-long program combines seminar courses with internships in various segments of the film industry, providing the opportunity to explore the industry within a Christian context and from a liberal arts perspective. The Los Angeles Film Center program may be of particular interest to students majoring in cinema and media communication with a concentration in film studies.
- Middle East Studies Program - In conjunction with the Council for Christian Colleges and Universities,

George Fox students can participate in the Middle East Studies Program (MESP), based in Cairo, Egypt. This program helps students understand the history, religions, peoples, and cultures of this fascinating and complex region. Students also gain an appreciation of the Middle Eastern church and an understanding of the economic and political realities which influence the quest for peace in the Middle East. A trip to other parts of the Middle East is included in the study experience.

- New York Center for Art and Media Studies - This program (NYCAMS) is for art majors and others with serious interests in the visual arts. Situated in New York City, the program is sponsored by Bethel University in Minnesota and has been approved by the Visual Arts Department of George Fox for studies toward a major or minor in art. The courses in the program consist of the following: Art, Faith, and Culture; Contemporary Art History; Directed Open Studio; and Internship in the Arts. The internships are arranged with galleries, design firms, and art organizations in New York City. Lectures, poetry readings, thematic group exhibitions, and guest critiques of student work are among the features of the program.
- Scholars' Semester in Oxford - In conjunction with the Council for Christian Colleges and Universities, George Fox students can participate in the Scholars' Semester in Oxford (SSO). Students enrolled in the SSO are granted Visiting Student status and as such are members of Oxford Univeristy. This gives them full access to the Bodleian Library and relevant faculty libraries, university lectures, as well as athletic teams and social organizations. Transcripts will be issued by Wycliffe Hall, one of more than 45 colleges and halls that comprise Oxford University.
- Semester in Costa Rica Program (Universidad Veritas) - George Fox University students may apply to study in Costa Rica for one semester through a cooperative agreement with Universidad Veritas, San José Costa Rica. The Semester in Costa Rica Program is designed primarily for students majoring or minoring in Spanish. Students study in San Jose, Costa Rica at Universidad Veritas de Arte, Diseo y Arquitectura, and live in local homes.
- Semester in Ecuador Program - George Fox students can apply for a semester of Spanish immersion in Quito, the capitol of Ecuador. The Nazarene International Language Institute (NILI) is a study abroad program that offers culture, language, travel, and ministry as they challenge students to live out a Christian lifestyle. Ecuador is packed with new adventures from the Amazon, to the Andes Mountains, to the Galapagos Islands, and culture that is both rural and urban, and very diverse.
- Semester in France Program - George Fox University students may apply to study in France for one semester through a cooperative agreement with Grace College of Winona Lake, Ind. The semester in France program is designed for students minoring in French or Romance languages. Students study in Dijon, France, and live in local family homes while attending French language and civilization classes with students from 60 countries. There is also a similar program offered through Grace College and CCFS located in Paris.
- Semester in Senegal Program - This program emphasizes the strengthening of skills in the French language through immersion in the Francophone culture of Senegal, in West Africa. Senegal was first under the control of the Portuguese and the Dutch and then became a French colony in the 17th century. The program is located at the Suffolk University-Dakar campus and is operated by the Council for International Educational Exchange. Dakar is a city of about 2.5 million and is a city of great beauty and cultural depth.
- Semester in Spain Program - George Fox University students may apply to study in Spain for one semester through a cooperative agreement with Trinity Christian College of Palos Heights, Ill. The Semester in Spain Program is designed primarily for students majoring or minoring in Spanish. Students study in Seville, Spain, and live in local homes while attending classes with students from Trinity and other colleges.

- South African Studies Program - This is a semester-long program based at Cornerstone Institue in Cape Town. Cape Town is a city of three million people of a variety of ethnicities. It was established in 1652 as a harbor for Dutch ships and is often described as one of the most beautiful cities in the world. There are courses which focus on the South African experiences of moving from apartheid to reconciliation and re-building. South Africa continues to experience the rewards and challenges of those dramatic political and social changes.
- South Pacific Creation Care Study Program - Through the Creation Care Study Program, students have the opportunity to delve into the valuable ecosystems and geography of New Zealand. While exploring coral reefs, lava beds, forests and mountain peeks, students will learn about sustainable development, creation care and critical issues of social change. Students will also become integrated with the culture by living on CCSP's campus and also via a dedicated educational immersion experience in a Maori and Polynesian community in New Zealand.
- Uganda Studies Program - In conjunction with the Council for Christian Colleges and Universities, George Fox students can participate in the Uganda Studies Program (USP). Students will study with African students at Uganda Christian University in Kampala.
- Washington Journalism Center - The Washington Journalism Center is sponsored by the Council of Christian Colleges and Universities and is an advanced, experiential semester to cultivate professional news skills. It is designed to help students think through the implications of being a Christian working in the news media in a city that is home to the powerful and powerless, Washington, DC. Courses include: Foundations for Media Involvement; Reporting in Washington; Washington, News, and Public Discourse. Students spend about 25 hours a week getting hands-on experience in writing, while being mentored by a program staff member.

Semesters Off Campus: Course Disciplines

The following course disciplines are used by George Fox University to record coursework completed by students at approved programs:

Course Prefix	Semester Off-Campus Program
AFSP	Go ED. Africa Program
AMBX	AMBEX Christian Exchange Program (Germany)
AMSP	American Studies Program
AUSP	Australia Studies Centre
CCSP	China Studies Program
CMCP	Contemporary Music Center
CSPB	Belize Creation Care Study Program
CSPN	South Pacific Creation Care Study Program
ECSP	Semester in Ecuador Program
GEMP	Go ED. Mekong Program
GRCE	Semester in France Program
LAFS	L.A. Film Studies Center
LASP	Latin American Studies Program
MESP	Middle East Studies Program
NYAM	New York Center for Art and Media Studies
OXFD	Scholars' Semester in Oxford
SASP	South African Studies Program
SSSP	Semester in Senegal Program
TRTY	Semester in Spain Program
UGSP	Uganda Studies Program
VUSJ	Semester in Costa Rica Program (Universidad Veritas)
WAJC	Washington Journalism Center

Juniors Abroad

In order to enrich the intercultural and international awareness of our campus community, George Fox University offers a transportation-subsidized overseas course of approximately three weeks to any junior student who has fulfilled the following requirements. These tours occur during the annual May Term. Detailed information about eligibility and specific study tours is available from the director of Juniors Abroad.

Objectives

The student who successfully participates in Juniors Abroad will:

1. Experience cross-cultural learning opportunities in cultures distinctly different from their own;
2. Interact with the host culture through informal and formal contacts;
3. Experience what it means to be a cultural "minority";
4. Understand how to participate responsibly in a diverse global community;
5. Learn, through the study of disciplines such as the fine arts, language, science, architecture, or history, how various social institutions affect the host culture.

Policies

1. Students must have maintained three consecutive years of full-time enrollment. Transfer students may receive partial support for transportation expenses; requests for such support should be made to the director of Juniors Abroad.
2. Students must register for either GEED 355 Cross-Cultural Experience-US or GEED 365 Cross Cultural Experience-International.
3. Tuition costs of this course can be included as part of block tuition for the spring semester preceding the May Study-tour. Students will be billed for whatever credits exceed the 18 credit-hour block tuition limit.
4. Students will pay room and board and other fees, in advance, for each study-tour for which they enrolled. All transportation and accommodations are arranged by the university. For the typical Juniors Abroad study-tour, the university will pay the full transportation cost for eligible students. On occasion, a tour with unusually high costs may involve a transportation surcharge.
5. Students must have a minimum cumulative grade point average of 2.0 at the end of the fall semester preceding the May study-tour.
6. Lifestyle violations, as reported by the Office of Student Life, may affect a student's eligibility to participate (see Standards of Conduct).
7. Students must obtain approval from the Health and Counseling Center before final approval will be given for a specific study-tour.
8. The University reserves the right to disallow a student from participation if it is deemed to be in the best interest of the student or the study-tour group.
9. Students must intend to return and graduate from George Fox University.
10. Student accounts must be current as of Feb. 15 the year of the tour.
11. The university reserves the right to withdraw from this program and commitment prior to fall registration in any year. Students already registered under the program are guaranteed the study-tour.
12. In the event of an international monetary, military, or other crisis, the university reserves the right to cancel or postpone a study-tour or to make substitute arrangements.
13. The university does not obligate itself to alternative remuneration to students who cannot go, who decide not to go, or who are ineligible to go on a Juniors Abroad study-tour.

Students (or alumni or friends of the university) who are ineligible for free transportation may apply to join a study-tour and pay their own transportation and tuition, on a space-available basis. Eligibility will be determined on a case-by-case basis.

English Language Institute (ELI)

The purpose of the English Language Institute (ELI) is to develop the language and academic skills of students whose native language is not English and to raise their level of cultural and spiritual awareness in order to prepare them for academic and social success at George Fox University.

The Intensive English Program, taught in the ELI at George Fox University, prepares international students to meet the challenges of academic study in English.

International students who score less than 500 on the paper-based Test of English as a Foreign Language (TOEFL), less than 173 on the computer-based TOEFL, less than 61 on the Internet-based TOEFL, or less than four on the Test of Written English will study intensive English approximately 14 hours per week while they also are enrolled in one or two regular university courses. ELI students may take up to 19 hours a semester, with a maximum of 4credits of non-ELI course work.

To prepare international students to enter into academic life at George Fox University as full and successful participants, ELI courses develop the students' general English proficiency, academic skills, and cultural, spiritual, and social awareness. Lower-level courses stress basic language skills, whereas higher-level courses concentrate increasingly on academic skills.

The core courses at each level develop speaking, listening, reading, and writing skills, as well as vocabulary and grammar. Cultural orientation, interaction with native speakers in the university community, and attendance at campus functions and academic lectures are incorporated into ELI learning activities.

At the highest level, students enroll for credit in one regular academic course together with ELI courses that are designed to help develop the language and academic skills necessary for success. In order to successfully complete the ELI and be admitted to George Fox University as a traditional undergraduate, students must fulfill the following: write at level 4 or higher on the ELI writing test; successfully complete the advanced level of the ELI with a grade of at least C in every class; earn a grade of at least C (no less than 70 percent) in the designated regular academic course; receive the recommendation of ELI faculty based on English language skills and academic performance. After completing the ELI, international students enroll for at least 12 credits in non-ELI courses at George Fox and pay regular tuition. During their first semester they are also required to take ESLA 295 Writing Tutorial (1) to support their transition.

Students receive academic credit for their ELI course work as follows: up to 16 credits for 100-level courses and up to 15 credits for 200-level courses. ELI credit counts as elective credit toward a bachelor's degree.

Academic Programs

- Undergrad Academic Departments
- Course Descriptions
- Academic Support Programs
- Degrees and Minors
- Degrees Offered
- Major and Minor Requirements
- Graduation Requirements
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Undergrad Academic Departments

Undergrad Academic Departments

- Biology
- Business and Economics
- Chemistry
- Communication Arts/Modern Languages/English Language Institute
- Computer Science
- Education
- Engineering
- English
- Family and Consumer Sciences
- Health and Human Performance
- History
- International Studies
- Math
- Nursing
- Performing Arts (Music, Theatre)
- Political Science
- Psychology
- Religious Studies
- Sociology/Social Work
- Visual Arts

Biology Department

The following majors and minors are offered by the Biology Department at George Fox University.

Majors

- BS in Allied Health *(offered in conjunction with the* Health and Human Performance Department*)*
- BA in Biology
- BS in Biology

Minors

- Biology minor

Bachelors (BS) in Allied Health

Allied health offers a 52-semester-hour interdisciplinary course of study, designed to prepare students for work in the field of physical therapy. The major includes strong emphasis on the biology and health and human performance fields. Students are required to obtain a minimum grade of C- in all courses taken for the major.

Each of the elective courses listed below are entrance requirements for some physical therapy programs. The 15-hour requirement allows the student to tailor his or her course package to fit a specific physical therapy graduate program(s).

Special General Education Requirements

Students are recommended to select the general education options listed below. These courses are required by most physical therapy graduate programs:

COMM 100 Introduction to Communication	3
PSYC 150 General Psychology	3

Major Requirements

Core Requirements (37 hours)

BIOL 331 Human Anatomy & Physiology I	4
BIOL 332 Human Anatomy & Physiology II	4
CHEM 211 General Chemistry I	4
CHEM 212 General Chemistry II	4
PHYS 201 General Physics I	4
PHYS 202 General Physics II	4
MATH 240 Statistical Procedures	3
HHPE 394 Kinesiology	3
PSYC 420 Abnormal Psychology	3

Students must choose one of the following courses:

BIOL 475 Field Experience	4
HHPE 475 Fitness Management Field Experience	4

Required Electives (15 hours)

Students must choose at least 15 semester hours from the following courses:

BIOL 211 General Biology I	4
BIOL 212 General Biology II	4
BIOL 322 Comparative Vertebrate Anatomy	4
BIOL 330 Animal Physiology	4
BIOL 350 Genetics	4
BIOL 370 Microbiology	4
BIOL 420 Cell Biology	4
CHEM 331 Organic Chemistry I	4
CHEM 332 Organic Chemistry II	4

CHEM 341 Biochemistry I	4
CHEM 342 Biochemistry II	4
HHPE 390 Care and Prevention of Athletic Injuries	3
HHPE 400 Recognition of Athletic Injuries	3
HHPE 430 Exercise Physiology	3
HHPE 470 Motor Development and Motor-Skill Learning	3
MATH 201 Calculus I	4
PSYC 310 Lifespan Human Development	3

Bachelors (BA) in Biology

This major offers a 55-63 semester-hour course of study, enabling students to pursue a variety of careers that include research, the health professions, teaching, and non-science fields that require critical-thinking skills. Students are required to obtain a minimum grade of C- in all courses taken for the major.
Requirements for the BA in Biology consist of 10-12 semester hours in core biology courses, 11-15 hours in chemistry and mathematics, 20 hours of biology electives, and 14-16 hours of courses based on a selected liberal arts emphasis.

Special General Education Requirements

The biology, chemistry, and mathematics courses (listed below) also fulfill up to 12 hours of the sciences requirement for general education. A minimum grade of C- must be obtained in all biology, chemistry, and mathematics courses for graduation.

Major Requirements

Biology (10-12 hours)

BIOL 490 Biological Exploration	2
Students must choose one of the following sequences of courses:	
BIOL 211 General Biology I *and* BIOL 212 General Biology II	8
(Alternative) BIOL 331 Human Anatomy and Physiology I, BIOL 332 Human Anatomy and Physiology II, *and* BIOL 220 Fundamentals of Cellular and Organismal Biology	10

Chemistry (8-12 hours)

Students must select one of the following sequences of courses:	
CHEM 151 General, Organic, and Biological Chemistry I *and* CHEM 152 General, Organic, and Biological Chemistry II	8
(Alternative) CHEM 211 General Chemistry I, CHEM 212 General Chemistry II, *and* CHEM 331 Organic Chemistry I	12

Mathematics (3 hours)

MATH 180 College Algebra (MATH 240 Statistics required if MATH GE Requirement is waived)	3

Students who complete MATH 180 College Algebra are strongly encouraged to take MATH 240 Statistics (3) as well.

Biology Electives (20 hours)

Courses listed in two areas below may meet requirements for both areas of emphasis. (For example, if BIOL 390 is taken to meet the field studies requirement then it may also fulfill the diversity emphasis as well.)

Students must choose one of the following field studies courses:

BIOL 360 Ecology	4
BIOL 380 Ornithology	4

BIOL 390 Systematic Botany	4
BIOL 460 Invertebrate Zoology	4
Students must choose one of the following diversity courses:	
BIOL 322 Comparative Vertebrate Anatomy	4
BIOL 367 Essentials of Microbiology	4
BIOL 370 Microbiology	4
BIOL 380 Ornithology	4
BIOL 390 Systematic Botany	4
BIOL 460 Invertebrate Zoology	4
Students must choose one of the following form/function courses:	
BIOL 310 Developmental Biology	4
BIOL 320 Pathophysiology	3
BIOL 322 Comparative Vertebrate Anatomy	4
BIOL 330 Advanced Physiology	4
BIOL 340 Plant Physiology	4
BIOL 440 Advanced Human Anatomy	4
Students must choose one of the following molecular/cell courses:	
BIOL 350 Genetics	4
BIOL 367 Essentials of Microbiology	4
BIOL 370 Microbiology	4
BIOL 410 Molecular Biology	4
BIOL 420 Cell Biology	4
Upper-division BIOL electives (BIOL 331 Human Anatomy and Physiology I and BIOL 332 Human Anatomy and Physiology II cannot apply to this requirement)	4-9

Liberal Arts Emphasis (14-16 hours)

Art (15 hours)

ARTS 101 Basic Design 1	3
Students must choose 12 hours of electives from the following courses:	
ARTS 111 Drawing I	3
ARTS 112 Drawing II	3
ARTS 201 Beginning Painting	3
ARTS 221 Beginning Sculpture	3
ARTS 230 Beginning Photography	3
ARTS 250 Introduction to Graphic Design	3
ARTS 301 Intermediate Painting	3
ARTS 321 Intermediate Sculpture	3
ARTS 330 Intermediate Photography	3
ARTS 350 Graphic Design II	3
ARTS 360 Illustration	3

ARTS 401 Advanced Painting	3
ARTS 421 Advanced Sculpture	3
ARTS 430 Advanced Photography	3
ARTS 450 Graphic Design III	3
ARTS 475 Field Experience†	1-3

†Up to 3 hours of the Art emphasis requirement may be earned from internship credit.

Christian Ministries (15 hours)

CHMN 130 Christian Discipling	4
CHMN or RELI electives	11

Global and Cultural Diversity (14-16 hours)

Option 1

Students must choose one of the following sequences of courses:

FREN 201 Intermediate French, FREN 202 Intermediate French, FREN 301 Intermediate/Advanced French, *and* FREN 302 Intermediate/Advanced French	16
SPAN 201 Intermediate Spanish, SPAN 202 Intermediate Spanish, SPAN 301 Intermediate/Advanced Spanish, *and* SPAN 302 Intermediate/Advanced Spanish	16

Option 2

Students must choose one of the following sequences of courses:

FREN 201 Intermediate French *and* FREN 202 Intermediate French	8
SPAN 201 Intermediate Spanish *and* SPAN 202 Intermediate Spanish	8
JPNS 201 Intermediate Japanese *and* JPNS 202 Intermediate Japanese	6

Students must choose 6-8 hours of Global/Cultural Understanding electives from the following courses:

COMM 410 Gender Communication Across Cultures	3
ECON 370 Global Political Economy	3
ESLA 240 Adjunct Listening	3
ESLA 250 Adjunct Reading	3
ESLA 260 Academic Writing	3
ESLA 280 Speech	3
FCSC 310 Food, Culture, and Society	3
FREN 301 Intermediate/Advanced French I	4
FREN 302 Intermediate/Advanced French II	4
GEED 355 Cross-Cultural Experience (Domestic)	3
GEED 365 Cross-Cultural Experience (International)	3

GEOG/INTL 200 Cultural Geography and Global Relationships	3
HIST 250 Latin America	3
HIST 340 History of the Middle East	3
HIST 343 History of Southern Africa	3
HIST 360 Modern Russia	3
HIST 370 Modern China and Japan	3
HIST 380 The African-American Experience	3
LITR 236 Ancient World Literature	3
LITR 237 World Literature, Medieval to Modern	3
LITR 238 Contemporary World Literature	3
LITR 480 International Women's Voices	3
MUSI 130 Music in World Cultures	2
PSCI/INTL 230 Introduction to International Relations	3
PSCI/INTL 303 International Conflict and Peace	3
PSYC 353 Culture and Psychology	3
RELI/INTL 330 Introduction to the World Christian Movement	3
RELI 360 Cross-Cultural Christian Outreach	3
RELI/INTL 440 World Religions	3
SOCI/INTL 310 Cultural Anthropology	3
SOCI 380 Race, Ethnicity, and Class	3
SPAN 301 Intermediate/Advanced Spanish I	4
SPAN 302 Intermediate/Advanced Spanish II	4

English (15 hours)

LITR electives 200-level or above	6
Students must choose 9 hours from the following courses:	
WRIT 210 Practical Grammar and Editing	3
WRIT 230 Introduction to Journalism	3
WRIT 250 Biography and Autobiography	3
WRIT 310 Desktop Publishing and Design	3
WRIT 330 Writing for Publication	3

Philosophy (15 hours)

PHIL 150 Introduction to Philosophy	3
PHIL electives	12

Political Science (15 hours)

PSCI 150 Introduction to Political Science	3
PSCI electives	12

Psychology (15-16 hours)

PSYC 150 General Psychology	3
PSYC 310 Lifespan Human Development	3
PSYC electives	9-10

Sociology (15 hours)

SOCI 150 Principles of Sociology	3
SOCI electives	12

Bachelors (BS) in Biology

This major offers a 54-semester-hour course of study, enabling students to pursue a variety of careers that include research, the health professions, teaching, and non-science fields that require critical-thinking skills. Requirements for the biology major consist of 10 semester hours in core biology courses, and 20 hours in chemistry and mathematics, and 24 hours of biology courses based on a selected concentration. Students are required to obtain a minimum grade of C- in all courses taken for the major.

Special General Education Requirements

The biology, chemistry, and mathematics courses (listed below) also fulfill up to 12 hours of the sciences requirement for general education. A minimum grade of C- must be obtained in all biology and chemistry courses for graduation.

Major Requirements

Biology (10 hours)

BIOL 211 General Biology I	4
BIOL 212 General Biology II	4
BIOL 490 Biological Exploration	2

Chemistry (16 hours)

CHEM 211 General Chemistry I	4
CHEM 212 General Chemistry II	4
CHEM 331 Organic Chemistry I	4
CHEM 332 Organic Chemistry II	4

Mathematics (4 hours)

MATH 190 Precalculus Mathematics or above†	4

†MATH 201 Calculus I (4) or MATH 202 Calculus II highly recommended (4)

Concentrations (24 hours)

General

Courses listed in two areas under the General Concentration may meet requirements for both areas of emphasis. (For example, if BIOL 390 is taken to meet the field studies requirement then it may also fulfill the diversity emphasis as well.)

Students must choose one of the following field studies courses:

BIOL 360 Ecology	4
BIOL 380 Ornithology	4
BIOL 390 Systematic Botany	4
BIOL 460 Invertebrate Zoology	4

Students must choose one of the following diversity courses:

BIOL 322 Comparative Vertebrate Anatomy	4
BIOL 370 Microbiology	4
BIOL 380 Ornithology	4

BIOL 390 Systematic Botany	4
BIOL 460 Invertebrate Zoology	4
Students must choose one of the following form/function courses:	
BIOL 310 Developmental Biology	4
BIOL 322 Comparative Vertebrate Anatomy	4
BIOL 330 Advanced Physiology	4
BIOL 340 Plant Physiology	4
BIOL 440 Advanced Human Anatomy	4
Students must choose one of the following molecular/cell courses:	
BIOL 350 Genetics	4
BIOL 370 Microbiology	4
BIOL 410 Molecular Biology	4
BIOL 420 Cell Biology	4
Biology (BIOL) electives (300-level or above)	8-12

Cell and Molecular Biology

BIOL 350 Genetics	4
BIOL 370 Microbiology	4
BIOL 410 Molecular Biology	4
BIOL 420 Cell Biology	4
Students must choose one of the following courses:	
BIOL 310 Developmental Biology	4
BIOL 322 Comparative Vertebrate Anatomy	4
BIOL 330 Advanced Physiology	4
BIOL 430 Histology	4
Students must choose one of the following field studies courses:	
BIOL 360 Ecology	4
BIOL 380 Ornithology	4
BIOL 390 Systematic Botany	4
BIOL 460 Invertebrate Zoology	4

NOTE: Students are strongly encouraged to take both CHEM 341 and CHEM 342 Biochemistry (8)

Systems and Structural Biology

BIOL 330 Advanced Physiology	4
BIOL 420 Cell Biology	4
Students must choose one of the following courses:	
BIOL 322 Comparative Vertebrate Anatomy	4
BIOL 440 Advanced Human Anatomy	4
Students must choose one of the following courses:	
BIOL 310 Developmental Biology	4
BIOL 340 Plant Physiology	4
Students must choose one of the following field studies courses:	
BIOL 360 Ecology	4

BIOL 380 Ornithology	4
BIOL 390 Systematic Botany	4
BIOL 460 Invertebrate Zoology	4
Students must choose one of the following molecular/cell courses:	
BIOL 350 Genetics *strongly recommended*	4
BIOL 370 Microbiology	4
BIOL 410 Molecular Biology	4
BIOL 420 Cell Biology	4

Ecology and Field Biology

BIOL 360 Ecology	4
BIOL 322 Comparative Vertebrate Anatomy	4
BIOL 350 Genetics	4
Students must choose two of the following courses:	
BIOL 330 Advanced Physiology	4
BIOL 340 Plant Physiology	4
BIOL 380 Ornithology	4
BIOL 390 Systematic Botany	4
BIOL 460 Invertebrate Zoology	4
Students must choose one of the following molecular/cell courses:	
BIOL 350 Genetics	4
BIOL 370 Microbiology	4
BIOL 410 Molecular Biology	4
BIOL 420 Cell Biology	4

NOTE: Students are strongly encouraged to take MATH 240 Statistical Procedures (3).

Thesis Option

Students can petition the department thesis committee by the end of the fall semester of their junior year for permission to do original research as part of their degree requirement. Students allowed to pursue the thesis option must:

1. Complete an acceptable research proposal and the Research Methods course (BIOL 384) by the end of the spring semester of the junior year.
2. Take up to 4 hours of Biological Research (BIOL 465) between the spring semester of their junior year and graduation, and Senior Thesis (BIOL 496) during the spring semester of their senior year.
3. Complete a written thesis acceptable to the thesis committee by April 1 of their senior year.
4. Prepare a poster and give an oral presentation of their research prior to graduation.
5. The department considers this an honor to be noted on the student's transcript. The thesis is designed to enhance a student's preparation for graduate or professional school.

Biology Minor

20 credit hours

Minor Requirements

Students must choose one of the following groups of courses:

BIOL 211 General Biology I *and*	8
BIOL 212 General Biology II	
BIOL 331 Human Anatomy & Physiology I *and*	8
BIOL 332 Human Anatomy & Physiology II	
Biology (BIOL) coursework (300-level or above)	12

Business and Economics Department

The following majors and minors are offered by the Business and Economics Department at George Fox University.

Majors

- BA in Accounting
- BA in Economics
- BA in Entrepreneurship
- BA in Finance
- BA in Management
- BA in Marketing

In addition, an interdisciplinary BA in Organizational Communication is offered by the Communication Arts Department that includes coursework in business and other course disciplines.

Minors

- Accounting
- Economics
- Finance
- Management
- Marketing

In addition, an interdisciplinary minor in leadership is offered in conjunction with Student Life that includes coursework in business and other course disciplines.

Bachelors (BA) in Accounting

This major offers a 69-semester-hour course of study, enabling students to acquire the necessary technical and professional skills for successful careers in public, managerial, or governmental accounting. Like other majors in the Department of Business and Economics, it requires completion of a general business core and COMM 100 Introduction to Communication as well as specialized courses. Students are required to obtain a minimum grade of C- in all major courses. Field experiences and internships are strongly encouraged.

Special General Education Requirements

COMM 100 Introduction to Communication	3

Major Requirements

Business Core (42 hours)

ACCT 271 Principles of Financial Accounting	3
ACCT 272 Principles of Managerial Accounting	3
BUSN 110 Introduction to Business	3
BUSN 240 Statistics for Business and Economics	3
BUSN 290 Business Ethics	3
BUSN 360 Business Law	3
BUSN 486 Strategic Management	3
BUSN 491 Senior Capstone — Strategy and Planning	2
BUSN 492 Senior Capstone — Strategy and Implementation	1
ECON 201 Principles of Microeconomics	3
ECON 202 Principles of Macroeconomics	3
FINC 260 Business Finance	3
GBSN 300 Global Business	3
MGMT 260 Principles of Management	3
MKTG 260 Principles of Marketing	3

Accounting Core (27 hours)

ACCT 350 Principles of Taxation	3
ACCT 370 Accounting Information Systems	3
ACCT 371 Financial Accounting and Reporting I	3
ACCT 372 Financial Accounting and Reporting II	3
ACCT 373 Financial Accounting and Reporting III	3
ACCT 471 Advanced Accounting	3
ACCT 472 Auditing	3
ACCT 480 Corporate Taxation	3
ACCT 481 Management Accounting	3
Students are encouraged to choose the following electives to enhance their major:	
ACCT 405 Volunteer Tax Assistance	1
ACCT 475 Field Experience	3-6

ACCT 485 Special Topics 1-3

Faculty will work with students on an individual basis to prepare them for the national certified public accounting examination. The broad educational experience provided by George Fox University should enable an accounting major the flexibility to design his or her own program.

Bachelors (BA) in Entrepreneurship

This major offers a 60-semester-hour course of study, designed for persons who aspire to create and operate their own business. In addition to providing the requisite business skills, this course of study will focus on the business idea and the innovative thinking behind that idea. After the generation of a good idea, the major will specifically take the student through the processes necessary to prepare a business plan and to present that plan to various potential sources of funding. In addition to presenting a comprehensive plan to potential investors, students will be required to complete an internship with a business startup or entrepreneurial venture. Like other majors in the School of Business, it requires completion of the general business core and COMM 100 Introduction to Communications as well as specialized courses.

Special General Education Requirements

COMM 100 Introduction to Communication	3

Major Requirements

Business Core (42 hours)

ACCT 271 Principles of Financial Accounting	3
ACCT 272 Principles of Managerial Accounting	3
BUSN 110 Introduction to Business	3
BUSN 240 Statistics for Business and Economics	3
BUSN 290 Business Ethics	3
BUSN 360 Business Law	3
BUSN 486 Strategic Management	3
BUSN 491 Senior Capstone — Strategy and Planning	2
BUSN 492 Senior Capstone — Strategy and Implementation	1
ECON 201 Principles of Microeconomics	3
ECON 202 Principles of Macroeconomics	3
FINC 260 Business Finance	3
GBSN 300 Global Business	3
MGMT 260 Principles of Management	3
MKTG 260 Principles of Marketing	3

Entrepreneurship Core (18 hours)

ENPR 300 Entrepreneurship I: New Venture Feasibility	3
ENPR 400 Entrepreneurship II: Business Plan Development	3
ENPR 410 Entrepreneurship III: Funding New Ventures	3
ENPR 475 Field Experience	3
MKTG 420 Marketing Communications	3
MKTG 450 Marketing Research and Decision Making	3

Bachelors (BA) in Finance

This major offers a 60-semester-hour course of study, enabling students to acquire the necessary financial management tools required for analyzing and executing the financial aspects of managerial decisions. The curriculum will help prepare students for careers in corporate financial management, personal financial planning and investment services. Like other majors in the Department of Business and Economics, it requires completion of a general business core and COMM 100, Introduction to Communication, as well as specialized courses. Students are required to obtain a minimum grade of C- in all major courses. Field experiences and internships are strongly encouraged.

Special General Education Requirements

COMM 100 Introduction to Communication	3

Major Requirements

Business Core (42 hours)

ACCT 271 Principles of Financial Accounting	3
ACCT 272 Principles of Managerial Accounting	3
BUSN 110 Introduction to Business	3
BUSN 240 Statistics for Business and Economics	3
BUSN 290 Business Ethics	3
BUSN 360 Business Law	3
BUSN 486 Strategic Management	3
BUSN 491 Senior Capstone — Strategy and Planning	2
BUSN 492 Senior Capstone — Strategy and Implementation	1
ECON 201 Principles of Microeconomics	3
ECON 202 Principles of Macroeconomics	3
FINC 260 Business Finance	3
GBSN 300 Global Business	3
MGMT 260 Principles of Management	3
MKTG 260 Principles of Marketing	3

Finance Core (18 hours)

ECON 462 International Finance	3
FINC 300 Intermediate Financial Management	3
FINC 340 Financial Markets and Institutions	3
FINC 450 Investments	3
FINC 460 Financial Analysis and Strategy	3
FINC 490 Seminar in Finance	3
Students are strongly encouraged to consider the following elective:	
FINC 475 Field Experience	3-6

Bachelors (BA) in Global Business

This major offers a 60 semester-hour course of study, designed for students who have a strong desire to work in companies or situations that are directly related to global commerce. In addition to providing the basic CORE of business knowledge, this major will focus on the applications of these areas that are unique to global enterprises. Students are given the opportunity to complete part of their major classes through the International Business Institute program. This is a 10-week summer experience that students would normally complete between their junior and senior year. Students are also required to complete an internship with a global business or company. Like other majors in the School of Business, it requires completion of the general business core and COMM 100 Introduction to Communications as well as specialized courses.

Special General Education Requirements

COMM 100 Introduction to Communication	3

Major Requirements

Business Core (42 hours)

ACCT 271 Principles of Financial Accounting	3
ACCT 272 Principles of Managerial Accounting	3
BUSN 110 Introduction to Business	3
BUSN 240 Statistics for Business and Economics	3
BUSN 290 Business Ethics	3
BUSN 360 Business Law	3
BUSN 486 Strategic Management	3
BUSN 491 Senior Capstone — Strategy and Planning	2
BUSN 492 Senior Capstone — Strategy and Implementation	1
ECON 201 Principles of Microeconomics	3
ECON 202 Principles of Macroeconomics	3
FINC 260 Business Finance	3
GBSN 300 Global Business	3
MGMT 260 Principles of Management	3
MKTG 260 Principles of Marketing	3

Global Business Core (18 hours)

Option 1

ECON 461 International Trade	3
ECON 462 International Finance	3
INTL 230 Introduction to International Relations	3
MGMT 440 International Management	3
MKTG 340 Global Marketing	3

Students must choose one of the following courses:

GBSN 399 Cross-Cultural Study	3
GBSN 475 Field Experience	3

Option 2

Students may opt to complete coursework through the International Business

Institute (IBI) during the summer.

GBSN 340 Comparative Economic Systems	3
GBSN 460 International Trade and Finance	3
GBSN 480 Global Business Strategy	3
INTL 230 Introduction to International Relations	3
MKTG 340 Global Marketing	3
Students must choose one of the following courses:	
GBSN 399 Cross-Cultural Study	3
GBSN 475 Field Experience	3

Bachelors (BA) in Management

This major offers a 60-semester-hour course of study, intended to engage students in developing an understanding of management and leadership principles, including history and theory that are important for one to be an effective manager and leader in today's business world. This includes for-profit and not-for-profit organizations. Like other majors in the Department of Business and Economics, it requires completion of a general business core and COMM 100, Introduction to Communication, as well as specialized courses. Students are required to obtain a minimum grade of C- in all major courses. Field experiences and internships are strongly encouraged.

Special General Education Requirements

COMM 100 Introduction to Communication	3

Major Requirements

Business Core (42 hours)

ACCT 271 Principles of Financial Accounting	3
ACCT 272 Principles of Managerial Accounting	3
BUSN 110 Introduction to Business	3
BUSN 240 Statistics for Business and Economics	3
BUSN 290 Business Ethics	3
BUSN 360 Business Law	3
BUSN 486 Strategic Management	3
BUSN 491 Senior Capstone — Strategy and Planning	2
BUSN 492 Senior Capstone — Strategy and Implementation	1
ECON 201 Principles of Microeconomics	3
ECON 202 Principles of Macroeconomics	3
FINC 260 Business Finance	3
GBSN 300 Global Business	3
MGMT 260 Principles of Management	3
MKTG 260 Principles of Marketing	3

Management Core (18 hours)

ENPR 300 Entrepreneurship I: New Venture Feasibility	3
MGMT 300 Leading and Managing People	3
MGMT 440 International Management	3
MGMT 450 Operations Management	3
MGMT 480 Organizational Behavior	3
Students must choose one of the following courses:	
ECON 301 Intermediate Microeconomics	3
ECON 410 Introduction to Applied Econometrics	3
ENPR 400 Entrepreneurship II: Business Plan Development	3
FINC 300 Intermediate Financial Management	3
MGMT 475 Field Experience	3-6
MKTG 480 Marketing Management and Strategy	3

Bachelors (BA) in Marketing

This major offers a 60 semester-hour course of study enabling students to acquire skills required to be a marketing professional. Courses cover topics such as target market analysis, customer need identification, communication strategies, research, product pricing and understanding international markets and cultures. These marketing foundations along with the other complimentary classes will prepare students for career choices upon graduation that may include management-level jobs in marketing, sales, retail merchandising, promotions, product development, marketing research and international marketing. Like other majors in the School of Business, it requires completion of the general business core and COMM 100 Introduction to Communications as well as specialized courses. Students are required to obtain a minimum grade of C- in all major courses. Field experiences and internships are strongly encouraged.

Special General Education Requirements

COMM 100 Introduction to Communication	3

Major Requirements

Business Core (42 hours)

ACCT 271 Principles of Financial Accounting	3
ACCT 272 Principles of Managerial Accounting	3
BUSN 110 Introduction to Business	3
BUSN 240 Statistics for Business and Economics	3
BUSN 290 Business Ethics	3
BUSN 360 Business Law	3
BUSN 486 Strategic Management	3
BUSN 491 Senior Capstone — Strategy and Planning	2
BUSN 492 Senior Capstone — Strategy and Implementation	1
ECON 201 Principles of Microeconomics	3
ECON 202 Principles of Macroeconomics	3
FINC 260 Business Finance	3
GBSN 300 Global Business	3
MGMT 260 Principles of Management	3
MKTG 260 Principles of Marketing	3

Marketing Core (18 hours)

MKTG 300 Consumer Behavior	3
MKTG 340 Global Marketing	3
MKTG 420 Marketing Communications	3
MKTG 450 Marketing Research and Decision Making	3
MKTG 480 Marketing Management and Strategy	3
Students must choose one of the following courses:	
MKTG 475 Field Experience	3-6
MKTG 485 Selected Topics	3
Additional course as approved by faculty advisor	3

Accounting Minor

18 credit hours

The accounting minor is designed to provide students in other majors a deeper understanding of accounting and how it impacts organizations.

Minor Requirements

ACCT 271 Principles of Financial Accounting	3
ACCT 272 Principles of Managerial Accounting	3
ACCT 371 Financial Accounting and Reporting I	3
ACCT 372 Financial Accounting and Reporting II	3
Students must choose six semester hours from the following courses:	
ACCT 350 Principles of Taxation	3
ACCT 370 Accounting Information Systems	3
ACCT 373 Financial Accounting and Reporting III	3
ACCT 471 Advanced Accounting	3
ACCT 472 Auditing	3
ACCT 480 Corporate Taxation	3
ACCT 481 Management Accounting	3
ACCT 485 Special Topics	1-3

Economics Minor

18 credit hours

The economics minor is designed to provide students in other majors with a broader view of how the economy impacts organizations both domestically and internationally.

Minor Requirements

ECON 201 Principles of Microeconomics	3
ECON 202 Principles of Macroeconomics	3
Students must choose 12 semester hours from the following courses:	
BUSN 240 Statistics for Business and Economics	3
ECON 301 Intermediate Microeconomics	3
ECON 302 Intermediate Macroeconomics	3
ECON 340 Public Economics	3
ECON 370 Global Political Economy	3
ECON 410 Introduction to Applied Econometrics	3
ECON 461 International Trade	3
ECON 462 International Finance	3
ECON 485 Selected Topics	3

Finance Minor

18 credit hours

The finance minor is designed to provide students in other majors a deeper understanding of finance and how it impacts organizations.

Minor Requirements

BUSN 110 Introduction to Business	3
FINC 260 Business Finance	3
Students must choose three of the following courses:	
ECON 462 International Finance	3
FINC 300 Intermediate Financial Management	3
FINC 340 Financial Markets and Institutions	3
FINC 450 Investments	3
FINC 460 Financial Analysis and Strategy	3
FINC 490 Seminar in Finance	3
Additional Business and Economics coursework†	3

†Courses may come from the ACCT, BUSN, ECON, ENPR, FINC, GBSN, MGMT, or MKTG disciplines.

Global Business Minor

18 credit hours

The global business minor is designed to provide students in other majors a deeper understanding of globalization and how it impacts organizations.

Minor Requirements

BUSN 110 Introduction to Business	3
GBSN 300 Global Business	3
Students must choose three of the following courses:	
ECON 461 International Trade	3
ECON 462 International Finance	3
MGMT 440 International Management	3
MKTG 340 Global Marketing	3
PSCI 230 Introduction to International Relations	3
Additional Business and Economics coursework†	3

†Courses may come from the ACCT, BUSN, ECON, ENPR, FINC, GBSN, MGMT, or MKTG disciplines.

Leadership Studies Minor

18-20 credit hours

The leadership studies minor is designed to help students develop their leadership skills through study and practice. Participants will learn important leadership concepts and theories and put these principles into action through hands-on leadership experiences. Courses applied to the leadership studies minor cannot count toward both a major and a minor or for general education.

Minor Requirements

Required Core:	
COMM 380 Leadership Communication	3
COMM 390 Small Group Communication	3
Experiential Core: (6 hours chosen from among the following)	
CHMN 235/435 Walkabout	1
LEAD 260 Leadership Advance I	1
LEAD 270 Leadership Advance II	1
LEAD 360 Student Leader Development I	1
LEAD 370 Student Leader Development II	1
LEAD 435 Advanced Residence Life Seminar	1
LEAD 475 Leadership Experience	1-3
LEAD 491 Leadership Seminar I	1
LEAD 492 Leadership Seminar II	1
Students must choose two of the following courses:	
BUSN 290 Business Ethics	3
MGMT 300 Leading and Managing People	3
MGMT 480 Organizational Behavior	3
COMM 210 Interpersonal Communication	3
PHIL 180 Ethics	3
RELI 350 Spiritual Formation	3
PSYC/SOCI 350 Social Psychology	3

Management Minor

18 credit hours

The management minor is designed to provide students in other majors a deeper understanding of management and leadership in organizations.

Minor Requirements

BUSN 110 Introduction to Business	3
MGMT 260 Principles of Management	3
Students must choose three of the following courses:	
ENPR 300 Entrepreneurship I: New Venture Feasibility	3
MGMT 300 Leading and Managing People	3
MGMT 440 International Management	3
MGMT 450 Operations Management	3
MGMT 480 Organizational Behavior	3
Additional Business and Economics coursework†	3

†Courses may come from the ACCT, BUSN, ECON, ENPR, FINC, GBSN, MGMT, or MKTG disciplines.

Marketing Minor

18 credit hours

The marketing minor is designed to provide students in other majors a deeper understanding of marketing and how it impacts organizations.

Minor Requirements

BUSN 110 Introduction to Business	3
MKTG 260 Principles of Marketing	3
Students must choose three of the following courses:	
MKTG 300 Consumer Behavior	3
MKTG 340 Global Marketing	3
MKTG 420 Marketing Communications	3
MKTG 450 Marketing Research and Decision Making	3
MKTG 480 Marketing Management and Strategy	3
Additional Business and Economics coursework†	3

†Courses may come from the ACCT, BUSN, ECON, ENPR, FINC, GBSN, MGMT, or MKTG disciplines.

Chemistry Department

The following majors and minors are offered by the Chemistry Department at George Fox University.

Majors
BS in Chemistry

Minors
Chemistry

Bachelors (BS) in Chemistry

The chemistry major offers a 58-75-semester-hour course of study with concentrations in chemistry, biochemistry, and forensics. The major is designed for students who plan to enter a variety of careers, including teaching, chemical research, environmental chemistry, forensic science, pharmacy, graduate school, and medicine. Students are required to obtain a minimum grade of C- in all courses taken for the major.

Major Requirements

The mathematics and physics courses listed below also fulfill up to 12 hours of the science requirements for general education.

Major Requirements

Chemistry Core (28 hours)

CHEM 211 General Chemistry I	4
CHEM 212 General Chemistry II	4
CHEM 310 Analytical Chemistry	4
CHEM 331 Organic Chemistry I	4
CHEM 332 Organic Chemistry II	4
CHEM 401 Physical Chemistry I	4
CHEM 402 Physical Chemistry II	4

Mathematics (11 hours)

MATH 201 Calculus I	4
MATH 202 Calculus II	4
MATH 301 Calculus III	3

Physics (8 hours)

Students must choose one of the following sequences:

PHYS 201 General Physics I *and* PHYS 202 General Physics II	8
PHYS 211 General Physics with Calculus I *and* PHYS 212 General Physics with Calculus II	8

Concentrations

Students must select one of the following concentrations:

Chemistry (11-12 hours)

CHEM 320 Advanced Inorganic Chemistry	4

Students must choose two of the following courses:

CHEM 341 Biochemistry I	4
CHEM 380 Advanced Organic Chemistry	4
CHEM 430 Advanced Instrumental Analysis	3

Biochemistry (27-28 hours)

BIOL 211 General Biology I	4
BIOL 212 General Biology II	4
CHEM 341 Biochemistry I	4
CHEM 342 Biochemistry II	4
Students must choose three of the following courses (at least one course must be from CHEM and one from BIOL):	
BIOL 310 Developmental Biology	4
BIOL 330 Animal Physiology	4
BIOL 350 Genetics	4
BIOL 410 Molecular Biology	4
BIOL 420 Cell Biology	4
CHEM 320 Advanced Inorganic Chemistry	4
CHEM 380 Advanced Organic Chemistry	4
CHEM 430 Advanced Instrumental Analysis	3

Forensics (23-24 hours)

BIOL 211 General Biology I	4
BIOL 212 General Biology II	4
CHEM 341 Biochemistry I	4
CHEM 380 Advanced Organic Chemistry	4
Students must choose two of the following courses (at least one course must be from CHEM and one from BIOL):	
BIOL 310 Developmental Biology	4
BIOL 330 Animal Physiology	4
BIOL 350 Genetics	4
BIOL 410 Molecular Biology	4
BIOL 420 Cell Biology	4
CHEM 320 Advanced Inorganic Chemistry	4
CHEM 342 Biochemistry II	4
CHEM 430 Advanced Instrumental Analysis	3

Thesis Option

Philosophy: The opportunity to pursue a chemistry thesis is an honor. Consequently, the thesis option will be noted on a student's transcript. The thesis is designed to enhance a student's preparation for graduate or professional school. The heart of the thesis is original research conducted under the guidance of a chemistry faculty member.

Eligibility: The thesis option may be pursued by any chemistry major in good academic standing. Students wishing to pursue a thesis must:

1. Consult with their research advisor about an acceptable research project.
2. In writing, notify the chemistry thesis committee (composed of the chemistry department faculty) of their intention to conduct research. The thesis committee must receive notification by the end of the fall semester of the student's junior year.

After the beginning of the spring semester of a student's junior year, students must petition the department thesis committee for permission to pursue thesis research. Students who pursue the thesis option must:

1. Enroll in at least 1 hour of Chemical Research (CHEM 465) each semester, beginning the spring semester of their junior year, through the spring semester of their senior year.
2. Submit the first copy of a written thesis to the thesis committee by April 1 of their senior year. The final, edited copy is due to the thesis committee the last day of classes during the spring semester.
3. Prepare a poster and give an oral presentation of their research.
4. In some cases, students may apply research conducted off campus to the CHEM 465 requirement. Students who participate in off-campus research programs may petition the thesis committee for special consideration of the thesis option. The thesis committee must receive the petition by the beginning of the fall semester of the student's senior year. The thesis committee may elect to substitute the off-campus experience for a portion of the CHEM 465 requirement.

Chemistry Minor

23-24 credit hours

Minor Requirements

CHEM 211 General Chemistry I	4
CHEM 212 General Chemistry II	4
CHEM 331 Organic Chemistry I	4
CHEM 332 Organic Chemistry II	4
Students must choose two of the following courses:	
CHEM 310 Analytical Chemistry	4
CHEM 320 Advanced Inorganic Chemistry	4
CHEM 341 Biochemistry I	4
CHEM 342 Biochemistry II	4
CHEM 380 Advanced Organic Chemistry	4
CHEM 401 Physical Chemistry I	4
CHEM 402 Physical Chemistry II	4
CHEM 430 Advanced Instrumental Analysis	3

Communication Arts Department

The Communication Arts Department includes communication arts, video production, foreign languages (including Spanish and French), and English as a second language. The following majors and minors are offered by the Communication Arts Department at George Fox University.

Majors

- BA in Cinema and Media Communications
- BA in Communication Arts
- BA in Journalism
- BA in Organizational Communication
- BA in Spanish
- BA (Post Baccalaureate) in American Culture and Language

Minors

- Cinema and Media Communications
- Communication Arts
- French
- Romance Languages
- Spanish
- Teaching English to Speakers of Other Languages (TESOL) *(offered in conjunction with the* Undergraduate Teacher Education Department*)*

English Language Institute

The English Language Institute (ELI) is a program within the Communication Arts Department. Additional information is available regarding ELI programs for international and immigrant students learning English as a second language.

Bachelors (BA) in Cinema and Media Communication

The cinema and media communication major offers a 45-semester-hour course of study that combines the liberal arts emphasis of communication arts with hands-on experiences in video, film, and digital media production. An extensive selection of electives allows the student to design a program that fits individual needs or interests.

Major Requirements

Theory Core (9 hours)

CMCO 160 Introduction to Film Studies (3)
COMM 230 Mass Media and Popular Culture (3)
COMM 400 Critical Approaches to Communication (3)

Production Core (18 hours)

CMCO 230 Introduction to Video Production (3)
CMCO 243 Introduction to Audio (3)
CMCO 250 Digital Multimedia Production (3)
CMCO 260 Scriptwriting for Media (3)
CMCO 350 Editing Video (3)
CMCO 475 Field Experience (2)
CMCO 490 Senior Portfolio (1)

Concentrations (18 hours)

Students must choose one of the following concentrations:

Audio Production

Students in the audio production concentration focus on audio techniques for music recording and mixing; sound design for film, video, and new media; and production for radio.
Required (6 hours):
CMCO 343 Sound Design (3)
CMCO 344 Studio Sound Recording (3)
Electives (12 hours):
CMCO 233 Contemporary Christian Songwriting and Producing (3)
CMCO 481 Advanced Production Workshop I (3)
CMCO 482 Advanced Production Workshop II (3)
MUSI 110 Understanding Jazz (2)
MUSI 180 Introduction to Music Technology (2)
THEA 330 Stage Lighting and Sound (3)
-- OR --
Up to 16 semester hours of coursework at the Contemporary Music Center Program in Martha's Vineyard.

Film Studies

Although the lines between video and film are blurring more and more with each passing year, this concentration is designed to allow those who prefer working with film to gain experience working with 8mm and/or 16mm film.
Required (15 hours):
CMCO 320 Dramatic Scriptwriting (3)

CMCO 333 Camera and Lighting (3)
CMCO 430 Producing and Directing Video (3)
Students must choose 3 semester hours from the following courses:
CMCO 475 Field Experience (2-10)
CMCO 495 Special Study (1-3)
Students must choose one of the following courses:
CMCO 481 Advanced Production Workshop I (3)
CMCO 482 Advanced Production Workshop II (3)
Electives (3 hours):
CMCO 220 International Film Studies (3)
CMCO 310 Intermediate Directing (3)
CMCO 343 Sound Design (3)
CMCO 355 Event Video Production (3)
CMCO 360 Animation I (3)
CMCO 363 Motion Graphics and Special Effects (3)
-- OR --
Up to 15 semester hours of course work at the Los Angeles Film Studies Center
Students may also receive credit for hands-on classes offered at the Northwest Film Center (NWFC), allowing them to work more extensively in the film medium. Since NWFC offerings are subject to change, students should check to see if NWFC classes in which they are interested may be counted toward their degree.

Journalism

The journalism concentration encompasses writing, editing, and producing material for print, radio, television, and Internet news media, as well as opportunities for documentary video production.
Required (12 hours):
CMCO 270 Broadcast News I (3)
CMCO 370 Broadcast News II (3)
CMCO 470 Journalism II (3)
WRIT 230 Introduction to Journalism (3)
Electives (6 hours):
CMCO 333 Camera and Lighting (3)
CMCO 355 Event Video Production (3)
CMCO 430 Producing and Directing Video (3)
CMCO 475 Field Experience (2-10)
CMCO 481 Advanced Production Workshop I (3)
CMCO 482 Advanced Production Workshop II (3)
CMCO 495 Special Study (1-3)
--OR --
Up to 15 semester hours of credit of course work at the Summer Institute for Journalism in Washington, D.C.

Multimedia/Animation

Students in the multimedia/animation concentration study techniques for designing Internet websites, producing 2-D and 3-D animation, and special effects using a combination of creativity, aesthetics, and computer software.
Required (6 hours):

CMCO 360 Animation I (3)
CMCO 363 Motion Graphics and Special Effects (3)
Electives (12 hours):
ARTS 230 Beginning Photography (3)
ARTS 330 Intermediate Photography (3)
ARTS 350 Graphic Design 2: Typography (3)
ARTS 450 Graphic Design 3: Design Applications (3)
CMCO 333 Camera and Lighting (3)
CMCO 355 Event Video Production (3)
CMCO 460 Advanced Animation (3)
CMCO 475 Field Experience (2-10)
CMCO 481 Advanced Production Workshop I (3)
CMCO 482 Advanced Production Workshop II (3)
CSIS 314 Client-Server Systems (3)
CSIS 330 Computer Graphics (3)
-- OR --
Up to 15 semester hours from the Australia Studies Center or the ORU Media Technology Summer Institute.

Production

Students in the production concentration learn all the basics of film and video production, from scriptwriting to postproduction. In addition, students have the opportunity to concentrate on their favorite aspects of production, including directing, cinematography, editing, and sound.
Required (6 hours):
CMCO 333 Camera and Lighting (3)
CMCO 481 Advanced Production Workshop I (3)
Electives (12 hours):
CMCO 310 Intermediate Directing (3)
CMCO 320 Dramatic Scriptwriting (3)
CMCO 343 Sound Design (3)
CMCO 355 Event Video Production (3)
CMCO 360 Animation I (3)
CMCO 363 Motion Graphics and Special Effects (3)
CMCO 430 Producing and Directing Video (3)
CMCO 475 Field Experience (2-10)
CMCO 482 Advanced Production Workshop II (3)
CMCO 495 Special Study (1-3)

Bachelors (BA) in Communication Arts

The communication arts major offers a 39-semester-hour course of study that features an interdisciplinary approach to communication that integrates the interests of speech communication, journalism, and media with a common core of courses in communication and rhetorical theory. Students are required to obtain a minimum grade of C- in all courses taken for the major.

Major Requirements

Performance Core (15 hours)

COMM 200 Persuasive Communication	3
COMM 210 Interpersonal Communication	3
COMM 220/420 Intercultural Communication	3
COMM 324 Argumentation and Critical Thinking	3
Students must choose one of the following courses:	
WRIT 230 Introduction to Journalism	3
WRIT 310 Desktop Publishing and Design	3

Theory Core (9 hours)

COMM 300 Communication Theory and Research	3
COMM 400 Critical Approaches to Communication	3
COMM 480 Senior Capstone: Ethical and Spiritual Dimensions of Communication	3

Practicum (3 hours)

Students must choose 3 semester hours from the following courses:	
COMM 305 Professional Communication Activities	1-3
COMM 275/475 Field Experience (pass/no pass grading only)	1-3

Electives (12 hours)

(Students should choose their electives under the guidance of their advisors. Not more than 3 hours should be in practicum courses.)

CHMN 420 Speaking as Ministry	3
Students may also choose up to 6 semester hours of writing courses toward their major electives from the following:	
WRIT 210 Practical Grammar and Editing	3
WRIT 230 Introduction to Journalism	3
WRIT 310 Desktop Publishing and Design	3
WRIT 330 Writing for Publication	3
Communication arts (COMM) coursework	3-12
Cinema and media communication (CMCO) coursework	3-12

Bachelors (BA) in Journalism

The journalism major offers a 39-semester-hour course of study that combines aspects from communications, cinema and media, and writing. The major requires that students take courses in print and broadcast as well as advanced coursework in an area of specialization. Students are required to obtain a minimum grade of C- in all courses taken for the major.

Major Requirements

Core Requirements (21 hours)
CMCO 270 Broadcast News I (3)
COMM 200 Persuasive Communication (3)
COMM 230 Mass Media and Popular Culture (3)
COMM 480 Senior Capstone: Ethical and Spiritual Dimensions of Communication (3)
JOUR 230 Introduction to Journalism (3)
JOUR 470 Journalism II (3)
WRIT 210 Practical Grammar and Editing (3)

Concentrations (18 hours)

Broadcast
COMM 475 Field Experience (3) — One semester on–campus in broadcast
COMM 475 Field Experience (3) — One semester off–campus
Students must take the following courses:
CMCO 230 Introduction to Video Production (3)
CMCO 260 Scriptwriting for Media (3)
CMCO 370 Broadcast News II (3)
COMM 320 Introduction to Public Relations (3)

Print
WRIT 475 Field Experience (3) — One semester with *The Crescent*
WRIT 475 Field Experience (3) — One semester off–campus
Students must take the following courses:
CMCO 320 Dramatic Scriptwriting (3)
COMM 320 Introduction to Public Relations (3)
WRIT 310 Desktop Publishing and Design (3)
WRIT 330 Writing for Publication (3)

Bachelors (BA) in Organizational Communication

The 39-semester-hour organizational communication major combines communication and writing courses that are particularly useful in organizational settings with marketing or management classes from the business curriculum. Graduates of the program can fill a wide range of positions, including public relations, sales, consulting, training, promotions, fund raising, and customer service. Due to the interdisciplinary nature of the major, double counting of courses will not be allowed between this major and other majors.

Major Requirements

Core Courses (30 hours)

BUSN 110 Introduction to Business (3)
COMM 210 Interpersonal Communication (3)
COMM 220/420 Intercultural Communication (3)
COMM 270 Introduction to Organizational Communication (3)
COMM 300 Communication Theory and Research (3)
COMM 320 Introduction to Public Relations (3)
COMM 480 Senior Capstone: Ethical and Spiritual Dimensions of Communication (3)
WRIT 310 Professional Writing and Desktop Publishing (3)
Students must choose one of the following courses:
COMM 200 Persuasive Communication (3)
COMM 324 Argumentation and Critical Thinking (3)
Students must choose one of the following courses:
COMM 305 Professional Communication Activities (3)
COMM 475 Field Experience (3)

Concentrations (9 hours)

Students must choose one of the following concentrations:

Internal Organizational Communication

COMM 380 Leadership Communication (3)
MGMT 480 Organizational Behavior (3)
Students must choose one of the following courses:
COMM 390 Small Group Communication (3)
MGMT 260 Principles of Management (3)

External Organizational Communication

MKTG 260 Principles of Marketing (3)
MKTG 420 Marketing Communications (3)
Students must choose one of the following courses:
CMCO 250 Digital Multimedia Production (3)
CMCO 260 Scriptwriting for Media (3)
WRIT 230 Introduction to Journalism (3)

Bachelors (BA) in Spanish

The Spanish major offers a 39-semester-hour course of study that is designed to move students toward advanced proficiency in the four skills (reading, writing, listening, and speaking) defined by the American Council on the Teaching of Foreign Languages (ACTFL). The program emphasizes the unique relationship between culture and language. Central to all course work is an examination of issues of faith and culture. In keeping with the mission of George Fox University, service components are required in some courses. Advanced course work includes historically important works of literature and a survey of Iberian and Latin American history and culture. One semester studying abroad in a Spanish-speaking country is required to complete the Spanish major. Students are required to obtain a minimum grade of C- in all courses taken for the major.

Prerequisite for Major Entry

Students must demonstrate proficiency in SPAN 202 Intermediate Spanish II (4) (or placement exam) prior to entry into the Spanish major.

Major Requirements

SPAN 301 Intermediate/Advanced Spanish I (4)
SPAN 302 Intermediate/Advanced Spanish II (4)
SPAN 340 Spanish Culture and Civilization (3)
SPAN 350 Latin American Culture and Civilization (3)
SPAN 410 Introduction to Spanish Literature (3)
SPAN 420 Introduction to Latin American Literature (3)
SPAN 480 Senior Capstone (3)
Students must choose 16 semester hours during a semester studying abroad

BA (Post Baccalaureate) in American Culture and Language

The American language and culture major is a 30-semester-hour course of study for international students who have earned a bachelor's degree at a university outside of the United States and whose native language is not English. The American language and culture program is designed to equip such students with the advanced academic English language skills and foundational cultural knowledge of the United States needed to excel in graduate degree programs at George Fox University. The program will help them adapt to academic expectations and practices of the United States and develop greater familiarity with the cultural context of graduate study. Students are required to obtain a minimum grade of B- in all core ACLA courses and a minimum grade of C- in all other courses required for the major with a cumulative GPA of 3.0 or above.

Major Requirements

ACLA 481 Reading and Vocabulary for Academia	3
ACLA 482 Writing and Research for Academia	5
ACLA 483 Speech and Listening for Academia	3
ACLA 484 Research and Study Skills	4
BIBL 103 Introduction to Biblical Knowledge	3
Students must choose one of the following courses:	
ACLA 490 United States Culture	3
COMM 420 Intercultural Communication	3
Students must choose one of the following courses:	
HIST 151 United States to 1865	3
HIST 152 United States from 1865	3
Students must choose one of the following courses:	
PSCI 150 Introduction to Political Science	3
PSCI 190 American Government	3
Students must choose at least three semester hours of electives in consultation with their advisor†	3

Notes:
†Students who are applying to a graduate program at George Fox University with outstanding prerequisite coursework are encouraged to take those prerequisites as part of their electives for the American language and culture major.

Cinema and Media Communication Minor

18 credit hours

Minor Requirements

CMCO 230 Introduction to Video Production	(3)

Students must choose one of the following courses:

COMM 230 Mass Media and Popular Culture	(3)
CMCO 160 Introduction to Film Studies	(3)

Students must choose 12 semester hours from any CMCO courses or:

COMM 230 Mass Media and Popular Culture	(3)
COMM 320 Introduction to Public Relations	(3)
COMM 400 Critical Approaches to Communication	(3)
WRIT 310 Professional Writing	(3)

Limited to 3 hours each: CMCO 475 Field Experience and/or CMCO 495 Special Study

Communication Arts Minor

20 credit hours

Minor Requirements

COMM 100 Introduction to Communication	3
COMM 300 Communication Theory and Research	3

Students must choose one of the following courses:

COMM 200 Persuasive Communication	3
COMM 210 Interpersonal Communication	3

Students must choose 11 semester hours from the following courses:

CMCO 230 Introduction to Video Production	3
COMM 230 Mass Media and Popular Culture	3
COMM 305 Professional Communication Activities (2 hours maximum)	2
COMM 310 Conflict Resolution	3
COMM 320 Introduction to Public Relations	3
COMM 340 General and Cultural Linguistics	3
COMM 360 Nonverbal Communication	3
COMM 380 Leadership Communication	3
COMM 400 Critical Approaches to Communication	3
THEA 220 Oral Interpretation of Literature	3
WRIT 230 Introduction to Journalism	3

French Minor

20-24 credit hours

The French minor is designed to enable students to acquire an intermediate high to advanced proficiency in French in all four skills (reading, writing, listening, and speaking) as defined by the American Council on the Teaching of Foreign Languages (ACTFL). Students are required to spend one semester abroad in a French-speaking country to complete the French minor, gaining cross-cultural experience and literacy in the process.

Prerequisite for Minor Entry

Students must demonstrate proficiency in French 202 Intermediate French II (4) (or placement exam) prior to entry into the French minor.

Minor Requirements

FREN 301 Intermediate/Advanced French I	4
FREN 302 Intermediate/Advanced French II	4
FREN 490 Study Abroad (hours depending on placement exam, in an approved program in a French-speaking country)	12-16

Romance Languages Minor

22 credit hours

The romance languages minor is designed for students who are already proficient in either French or Spanish and who wish to acquire an intermediate high to advanced proficiency in both French and Spanish in all four skills (reading, writing, listening, and speaking) as defined by the American Council on the Teaching of Foreign Languages (ACTFL). Students may complete the minor through coursework in Spanish at George Fox or may choose to spend one semester abroad in either a French-speaking or Spanish-speaking country gaining cross-cultural experience and literacy in the process.

Prerequisite for Minor Entry

Students must demonstrate proficiency in the following prior to entry into the romance languages minor:
FREN 201 Intermediate French I (4) *and* FREN 202 (4) Intermediate French II (or placement exam)
SPAN 201 Intermediate Spanish I (4) *and* SPAN 202 (4) Intermediate Spanish II (or placement exam)

Minor Requirements

FREN 301 Intermediate/Advanced French I (4)
FREN 302 Intermediate/Advanced French II (4)
SPAN 301 Intermediate/Advanced Spanish I (4)
SPAN 302 Intermediate/Advanced Spanish II (4)

Students must choose one of the following options:

1. Students must choose 2 of the following courses:
2. SPAN 350 Latin American Culture and Civilization (3)
3. SPAN 410 Introduction to Spanish Literature (3)
4. SPAN 420 Introduction to Latin American Literature (3)

5. Students must choose at least 6 semester hours in an approved study abroad program in a Spanish-speaking or French-speaking country *(credits abroad must be 300-level or above)*.

Spanish Minor

20 credit hours

Prerequisite for Minor Entry

Students must demonstrate proficiency in SPAN 201 and SPAN 202 Intermediate Spanish (4 hours each) (or placement exam) prior to entry into the Spanish minor.

Minor Requirements

Students must choose one of the following options:

Option 1

SPAN 301 Intermediate/Advanced Spanish I	(4)
SPAN 302 Intermediate/Advanced Spanish II	(4)
SPAN 340 Spanish Culture and Civilization	(3)
SPAN 350 Latin American Culture and Civilization	(3)
SPAN 410 Introduction to Spanish Literature	(3)
SPAN 420 Introduction to Latin American Literature	(3)

Option 2

SPAN 301 Intermediate/Advanced Spanish I	(4)
SPAN 302 Intermediate/Advanced Spanish II	(4)

Students must choose 12 semester hours in an approved study abroad program in a Spanish-speaking country *(credits abroad must be at 300-level or above)*

TESOL Minor

21-23 credit hours

The TESOL minor is designed to provide a basic foundation for students who are interested in teaching English to speakers of other languages, including teaching English as a foreign language overseas, and tutoring or teaching English as a second language in local church or community programs.

NOTE: Students interested in pursuing TESOL as a profession should continue their studies at the graduate level. A master's degree program is recommended for those interested in teaching at a college or community college.

Minor Requirements

COMM 340 General and Cultural Linguistics	(3)
COMM 350 Introduction to TESOL	(3)
COMM 343 Second Language Acquisition	(3)
SOCI 310 Cultural Anthropology	(3)
One year of a foreign language or, for non-native speakers of English, two of these courses: ESLA 281, ESLA 282, ESLA 283	(6-8)
Students must choose one of the following courses:	
COMM 220/420 Intercultural Communication	(3)
RELI 360 Cross-Cultural Christian Outreach	(3)

Bachelors (Post Baccalaureate BA) in Interdisciplinary Studies: Sheng–te

The interdisciplinary studies major is a 30-semester-hour course of study for international students who have earned a bachelor's degree at Sheng–te Christian College. Students are required to obtain a minimum grade of C- in all courses taken for the major.

Major Requirements

English as a Second Language (15 hours)

ESLA 250 Adjunct Reading	3
ESLA 280 Speech	3
ESLA 260 Academic Writing	5
ESLA 240 Adjunct Listening	3
ESLA 295 Writing Tutorial	1

Biblical Studies/Religion (3 hours)

Students must choose one of the following courses:

BIBL 101 Literature of the Old Testament	3
BIBL 102 Literature of the New Testament	3
BIBL 250 The Psalms	3
BIBL 260 Life of Christ	3
BIBL 390 Biblical Basis for Peacemaking	3

Concentrations (12 hours)

Communication Arts

Students must choose 12 semester hours from the following courses:

CMCO 230 Introduction to Video Production	3
CMCO 243 Introduction to Audio	3
CMCO 250 Digital Multimedia Production	3
COMM 100 Introduction to Communication	3
COMM 200 Persuasive Communication	3
COMM 210 Interpersonal Communication	3
COMM 230 Mass Media and Popular Culture	3
COMM 270 Introduction to Organizational Communication	3
COMM 310 Conflict Resolution	3
COMM 320 Introduction to Public Relations	3
COMM 324 Argumentation and Critical Thinking	3
COMM 340 General and Cultural Linguistics	3
COMM 350 Introduction to TESOL (Teaching English to Speakers of Other Languages)	3
COMM 360 Nonverbal Communication	3
COMM 380 Leadership Communication	3
COMM 410 Gender Communication Across Cultures	3

Music

Students must choose 8 semester hours from the following courses:

MUSI 180 Introduction to Music Technology	2
MUSI 200 Basic Conducting	1.5
MUSI 221 Theory III	4
MUSI 222 Theory IV	4
MUSI 270 Music Techniques Instrumental I	1
MUSI 271 Music Techniques Instrumental II	1
MUSI 272 Music Techniques Vocal	1
MUSI 310 Counterpoint	2
MUSI 311 Music History I	3
MUSI 312 Music History II	3
MUSI 320 Form and Analysis	2
MUSI 400 Music and Christian Faith	2
MUSI 410 Elementary Music Methods	3
MUSI 411 Middle Level and High School Music Methods	3
MUSI 425 Composition II	1.5
MUSI 430 Instrumentation and Orchestration	2
MUSI 460 Advanced Conducting	2

Students must choose 4 semester hours from the following:

MUSA 105/305 Applied Music

MUSA Ensembles

Western Culture

Students must choose 3 semester hours from the following courses:

HIST 110 Western Civilization to 1648	3
HIST 120 Western Civilization from 1648	3
HIST 280 Introduction to Political Philosophy	3
HIST 300 American Political Theory	3
HIST 330 The American West	3
HIST 363 War and Conscience in the United States	3
HIST 401 Christianity in History I	3
HIST 456 Classics of American History	3
HIST 457 The Colonial Experience, 1607-1763	3
HIST 458 The Making of the American Republic, 1754-1825	3
HIST 459 The Era of the Civil War, 1825-1898	3
HIST 468 America in the Time of the Two World Wars, 1898-1945	3
HIST 469 Recent America, 1945-Present	3
HLTH 320 Contemporary Health Issues	3
MUSI 110 Understanding Jazz	2
PSCI 150 Introduction to Political Science	3

PSCI 190 American Government	3
PSCI 240 State and Local Government	3
PSCI 260 Introduction to Law	3
PSCI 430 Women and Politics in American History	3
PSCI 440 Christianity and Politics in America	3

Students must choose 3 semester hours from the following courses:

COMM 100 Introduction to Communication	3
COMM 230 Mass Media and Popular Culture	3
COMM 310 Conflict Resolution	3
COMM 350 Introduction to TESOL (Teaching English to Speakers of Other Languages)	3
COMM 410 Gender Communication Across Cultures	3
THEA 100 Acting I — Fundamentals	3
THEA 220 Oral Interpretation of Literature	3
WRIT 110 College Writing	3

Students must choose 3 semester hours from the following courses:

ECON 201 Principles of Microeconomics	3
ECON 202 Principles of Macroeconomics	3
EDUC 240 Perspectives in Education	2
EDUC 250 Teaching as a Profession	2
FCSC 351 Interior Design I	3
FCSC 380 Evolution of World Dress	3
PSYC 150 General Psychology	3
SOCI 150 Principles of Sociology	3
SOCI 230/430 Sociology of Religion	3
SOCI 310 Cultural Anthropology	3
SOCI 323 Sociology of Families	3

Students must choose 3 semester hours from the following courses:

ARTS 382 Twentieth-Century Art	3
LITR 100 Introduction to Literature	3
LITR 220 Great American Writers	3
LITR 236 Ancient World Literature	3
LITR 237 World Literature, Medieval to Modern	3
LITR 238 Contemporary World Literature	3
LITR 240 Understanding Drama	3
LITR 270 Great British Writers	3
LITR 360 Values Through Story and Myth	3
PHIL 150 Introduction to Philosophy	3
PHIL 180 Ethics	3

PHIL 250 Thinking Well: Logic and Life	3
PHIL 270 Philosophy of the Arts	3
PHIL 330 Religion and Reason	3

Computer and Information Science Department

The function and influence of the computer is pervasive throughout society. Computers process data from banks, communications satellites, video games, and even the fuel and ignition systems of automobiles. Computer software is as commonplace in the areas of education and recreation as it is in science and business. Every field or profession relies upon computer science for the problem-solving skills and the production expertise required in the efficient processing of information. Computer scientists, therefore, function in a wide variety of roles ranging from pure theory and design to programming and marketing.

The computer and information science curriculum places an emphasis on both theoretical and practical computer science. A broad range of upper-division courses is available in such areas as artificial intelligence, the analysis of algorithms, client-server systems, computer architecture and design, computer communications, database management, and software engineering.

The following majors and minors are offered by the Computer and Information Science Department at George Fox University.

Majors

- BS in Computer Science
- BS in Information Systems

Minors

- Computer and Information Science

Bachelors (BS) in Computer Science

The computer science major offers a 43-semester-hour course of study. Students are required to obtain a minimum grade of C- in all courses taken for the major.

Special General Education Requirements

The mathematics courses listed below also fulfill the 3 hour mathematics requirement for general education. A minimum grade of C- must be obtained in all mathematics courses for graduation.

Major Requirements

Computer Science Core

CSIS 201 Introduction to Computer Science I (3)
CSIS 202 Introduction to Computer Science II (3)
CSIS 310 Data Structures and File Processing (3)
CSIS 360 Computer Architecture and Assembly Language (3)
CSIS 420 Structures of Programming Languages (3)
CSIS 430 Analysis of Algorithms (3)
CSIS 460 Operating Systems (3)
CSIS 471 Senior System Development I (1)
CSIS 472 Senior System Development II (3)
MATH 201 Calculus I (4)
MATH 260 Discrete Mathematics (3)

Students must choose 18 semester hours from the following:
CSIS 220 Digital Logic Design (4)
CSIS 300 Numerical Methods (3)
CSIS 314 Client-Server Systems (3)
CSIS 321 Software Engineering (3)
CSIS 330 Computer Graphics (3)
CSIS 340 Database Systems (3)
CSIS 350 Data Communications and Networks (3)
CSIS 370 Object-Oriented Programming (3)
CSIS 434 Parallel Computing (3)
CSIS 440 Artificial Intelligence (AI) (3)
CSIS 450 Network Administration (3)
CSIS 480 Principles of Compiler Design (3)

Bachelors (BS) in Information Systems

The information systems major offers a 49-semester-hour course of study . Students are required to obtain a minimum grade of C- in all courses taken for the major.

Special General Education Requirements

MATH 260 - Discrete Mathematics	(3)

Students must choose one of the following courses:

ECON 201 Principles of Microeconomics	(3)
ECON 202 Principles of Macroeconomics	(3)

Major Requirements

Business Core (21 hours):

BUSN 110 Introduction to Business	(3)
ACCT 271 Principles of Financial Accounting	(3)
ACCT 272 Principles of Managerial Accounting	(3)
BUSN 240 Statistics for Business and Economics	(3)
BUSN 290 Business Ethics	(3)
MGMT 260 Principles of Management	(3)
MKTG 260 Principles of Marketing	(3)

Computer Science Core (24 hours):

CSIS 130 Web-Based Programming	(3)
CSIS 201 Introduction to Computer Science I	(3)
CSIS 202 Introduction to Computer Science II	(3)
CSIS 314 Client-Server Systems	(3)
CSIS 321 Software Engineering	(3)
CSIS 340 Database Systems	(3)
CSIS 350 Data Communications and Networks	(3)
CSIS 450 Network Administration	(3)

Senior Capstone Experience (4 hours)

CSIS 471 Senior System Development I	(1)
CSIS 472 Senior System Development II	(3)

Computer and Information Science Minor

18 credit hours

Minor Requirements

CSIS 201 Introduction to Computer Science I	(3)
CSIS 202 Introduction to Computer Science II	(3)
CSIS 310 Data Structures and File Processing	(3)

Students must choose 9 additional semester hours of upper-division computer and information science (CSIS) coursework

Teacher Education Department

The teacher education program at George Fox University is designed to prepare teachers for careers in public and private schools through a curriculum that builds on a broad foundation in Christian liberal arts education through specialization in elementary education with methods, clinical studies in teaching, and learning theory. Teacher education and licensure in Oregon operates under the approved program approach. Teaching licenses are issued to qualified applicants who have completed a teacher education program approved by the Oregon Teacher Standards and Practices Commission (TSPC), and who are able to satisfy other state requirements in effect at the time they complete graduation requirements and apply for a teaching license.

George Fox University is approved by the TSPC to offer initial licensure for early childhood and elementary education.

Secondary Education

The music education program is the only undergraduate program at George Fox University designed for the preparation of preK-12 teachers. Students who wish to teach content other than music at the secondary level complete a content major at the undergraduate level and prepare to enter a Master of Arts in Teaching (MAT) Program to meet the requirements for the Initial Teaching License. Education department faculty and undergraduate faculty in the content major are able to advise the students regarding movement toward admission to the MAT program. Students are encouraged to take EDUC 250 Teaching as a Profession (2) designed to introduce the role of the secondary teacher in the educational system and to introduce the George Fox MAT program and admission process. (See the MAT program catalog listing for admission information and course descriptions.)

Admission to Teacher Education

Students wishing to explore or prepare to enter a teaching career at the early childhood and elementary levels or in music education should consult with a teacher education advisor early in their freshman year.

Students make formal application for admission to the teacher education program during the introductory education class, EDUC 240 Perspectives in Education (2), generally taken fall or spring of the sophomore year by elementary and music education majors. Students enrolled in EDUC 240 Perspectives in Education are required to submit fingerprints and sign the PA-1 Character Question Form as outlined by TSPC.

Admission to the program is based upon attainment of a cumulative GPA of 2.75 or better on all college-level courses, including transfer credits; passing scores on approved basic skills tests; acceptable recommendations; and exemplary social and moral behavior. In addition, an admission interview may also be conducted. Admission to the program is required before students may register for the professional education core courses. Continuation in teacher education is based on academic achievement and satisfactory evidence of characteristics needed for successful performance in the teaching profession. Students admitted to the programs are expected to maintain a cumulative GPA of 2.75 or better on all college-level classes, including transfer credits; attain grades of C- or better on all teaching major and professional education classes; and receive satisfactory evaluations of performance in field experiences. Admitted elementary and music education students are subject to the policies contained in the Teacher Education Guidelines purchased when they take EDUC 240 Perspectives in Education.

Transfer Students in Elementary and Music Education

Any student transferring to George Fox University must meet the same requirements for admission as those who have entered the university as incoming freshmen. Admission to the university does not guarantee admission to the teacher education program. This application must be directed to the teacher education department when the student is in his/her first professional course, usually during the first semester at the university.

Residency Requirements

Elementary education majors must complete the following courses in residence at George Fox University:

EDUC 240 Perspectives in Education	(2)
(fingerprints and Character Question Form are required)	
EDUC 313 Elementary Mathematics Methods	(2)
EDUC 370 Curriculum and Instruction	(3)
EDUC 375 Student Teaching I and Classroom Management	(2)
EDUC 380 Social Studies Methods	(2)
EDUC 383 Science Methods	(2)
EDUC 401 Language Arts and Children's Literature	(4)
EDUC 402 Literacy Methods	(4)
EDUC 475 Student Teaching II	(12)
EDUC 490 Senior Seminar	(3)

MATH 211 Foundations of Elementary Mathematics I (3) and MATH 212 Foundations of Elementary Mathematics II (3) (exception: transfer of completed sequence of MATH 211, 212, 213)

Music education majors must complete the following courses in residence at George Fox University:

EDUC 240 Perspectives in Education	(2)
(fingerprints and Character Question Form are required)	
EDUC 370 Curriculum and Instruction	(3)
EDUC 375 Student Teaching I and Classroom Management	(2)
EDUC 475 Student Teaching II	(12)
EDUC 490 Senior Seminar	(3)
MUSI 410 Elementary Music Methods	(3)
MUSI 411 Middle Level and High School Music Methods	(3)

A student transferring from a nonaccredited college will be granted conditional admission to the program until the student demonstrates ability by completing 12 semester hours in the university and the student's professional education courses with a GPA of 2.75 or better.

Special Students: Teaching Credential Only

Students holding college degrees who enroll at George Fox University for the purpose of qualifying for an Oregon Initial Teaching License must be advised by the chair of undergraduate teacher education prior to enrollment in courses and meet requirements for admission to teacher education.

Planning the Program

Students should plan to finish their general education requirements and some of their lower-level teaching major requirements during their first two years of college. Professional courses in education and the advanced teaching major course requirements should be completed during the last two years. Some of these

courses, listed under Transfer Students in Education, must be taken in residence, and professional education courses must be taken before student teaching.

The Oregon Teacher Standards and Practices Commission requires that candidates for teaching licenses have passed required standardized tests. These are taken by students in conjunction with their professional courses. Students must complete the bachelor's degree and meet all state requirements before being recommended for teaching licensure.

Waiver of Requirements

Students enrolled in the teacher education program who believe they have had experience or education that has provided the competencies certain courses and experiences in the program are designed to develop may request a waiver of that portion of the requirements. Waivers may be granted in writing by the chair of undergraduate teacher education on the basis of satisfactory evidence submitted by the student through one or more of these means:

- Examination and/or demonstration of competence. The student may demonstrate competence in written or verbal ways or in the execution of specific tasks.
- Experience. The student may request that recent directly related experiences be accepted in satisfaction for course work or field experience. The student is required to submit documentation to support this request.
- The student may request evaluation of other academic work completed satisfactorily to be granted equivalent credit.
-

Majors

- BS in Elementary Education
- BA in Music Education *(offered in conjunction with the* Performing Arts Department*)*
- The Teaching English to Speakers of Other Languages (TESOL) Minor(offered by the Communication Arts Department) is also available. More information about the programs and faculty of the Undergraduate Teacher Education Department can be found on the Undergraduate Education Degree Program page.

Bachelors (BS) in Elementary Education

The elementary education major offers a 62-semester-hour course of study that is designed for the preparation of elementary school teachers with authorizations at the early childhood (age 3 years to grade 4) and elementary (grades 3-8) levels. Upon entering, students interested in majoring in elementary education should contact an elementary education advisor. There is a recommended sequence for courses in the major. Students are required to obtain a minimum grade of C- in all courses taken for the major.

Special General Education Requirements

Elementary education majors shall complete the following 53-hour general education requirement (the following summaries note total hours and exceptions to the university general education policy. Refer to the general education section of this catalog for specific course options):

1. Senior Capstone: 3 hours.
2. Bible and Religion: 10 hours from stated options.
3. Communication: 6 hours from stated options.
4. Health and Human Performance: HHPA 120 Lifelong Fitness (2).
5. Humanities: 11-12 hours from stated options, including:
6. Mathematics: This requirement is fulfilled within the major.
7. Natural Science: 6 hours from stated options.
8. Social Science: 6 hours from stated options, including PSYC 150 General Psychology (3).
9. Global and Cultural Understanding: 3 hours. This requirement is fulfilled by GEOG 200 Cultural Geography and Global Relationships (3).

- MUSI 120 The World of Music (2), ARTS 216 Art History Survey to 1450 (3), or ARTS 217 Art History Survey from 1450 (3)
- At least two courses in history (including HIST 151 United States to 1865 [3] or HIST 152 United States from 1865 [3])
- At least one course in literature.

Major Requirements

Elementary education admissions requirements, policies, and procedures are listed in the Teacher Education Majors and Minors section.

EDUC 240 Perspectives in Education (2)
EDUC 313 Elementary Mathematics Methods (2)
EDUC 321 Early Childhood Education (3)
EDUC 322 Early Childhood Methods (3)
EDUC 334 Health and Physical Education Methods (3)
EDUC 341 Learning Theory (2)
EDUC 342 Inclusion (2)
EDUC 370 Curriculum and Instruction (3)
EDUC 373 Fine Arts Methods (2)
EDUC 375 Student Teaching I and Classroom Management (2)
EDUC 380 Social Studies Methods (2)
EDUC 383 Science Methods (2)
EDUC 401 Language Arts and Children's Literature (4)
EDUC 402 Literacy Methods (4)
EDUC 475 Student Teaching II (12)

EDUC 490 Senior Seminar (3)
MATH 211 Foundations of Elementary Mathematics I (4)
MATH 212 Foundations of Elementary Mathematics II (4)
PSYC 311 Child Development (3)

Optional: Middle-Level Authorization (7 hours)
Students may add the middle-level authorization (grades 5-10) to the elementary/early childhood authorization if they meet the testing/course work requirements in a content area, take the required courses, and complete an additional student teaching at the middle level.
EDUC 352 Middle-Level Methods (3)
EDUC 376 Student Teaching I for Middle-Level Authorization (1)
Students must choose one of the following courses:
EDUC 351 Middle-Level Education (3)
PSYC 314 Adolescent Development (3)
Additional authorizations are available through the graduate department of Educational Foundations and Leadership.

Admission to Student Teaching
Acceptance into the teacher education program does not guarantee assignment for student teaching. Application for admission to full-time student teaching is made by filling out required forms during the semester preceding the semester for which the assignment is requested. Admission to student teaching is based upon continued good standing; favorable recommendations; an attained cumulative GPA of 2.75 or better on all college-level courses, including transfer credits, and an average GPA of 2.75 or better in the teaching major; completion of the required teaching major and professional courses with no grade below C-; passing scores on appropriate basic skills and having taken content area examinations; successful completion of the student teaching interview; and a minimum of 15 semester hours completed in residence prior to student teaching.

Bachelors (BA) in Music Education

The music education major offers a 78.5-79-semester-hour course of study that is designed to prepare students for pre-K-12 music education. Students are required to obtain a minimum grade of C- in all courses taken for the major. Music education admissions requirements, policies, and procedures are listed on the teacher education department page.

Special General Education Requirements

Music education majors shall complete the following 51-hour general education requirement (the following summaries note total hours and exceptions to the university general education policy. Refer to the general education requirements of this catalog for specific course options):

1. Senior Capstone: 3 hours
2. Bible and Religion: 10 hours from stated options
3. Communication: 6 hours from stated options
4. Health and Human Performance: 3 hours from stated option
5. Humanities: 11 hours from stated options. No more than one course in music allowed for music majors, and all music majors are strongly advised to take visual arts and literature courses rather than music courses for their general education options.
6. Mathematics: 3 hours from stated options
7. Natural Science: 6 hours from stated options
8. Social Science: 6 hours from stated options, including PSYC 150 General Psychology (3)
9. Global and Cultural Understanding: 3 hours from stated options (since MUSI 130 Music in World Cultures is only 2 hours, it will not fulfill this requirement)

Major Requirements

Music Core (32.5 hours)

MUSI 121 Theory I	3
MUSI 122 Theory II	3
MUSI 130 Music in World Cultures	2
MUSI 131 Sight Singing and Ear Training I	1
MUSI 132 Sight Singing and Ear Training II	1
MUSI 180 Introduction to Music Technology	2
MUSI 200 Basic Conducting	1.5
MUSI 221 Theory III	4
MUSI 222 Theory IV	4
MUSI 311 Music History I	3
MUSI 312 Music History II	3
MUSI 320 Form and Analysis	2
MUSI 400 Music and Christian Faith	2
MUSI 490 Degree Recital/Project	1

Applied Music, Ensembles and Proficiencies (7.5 hours)

MUSA 105/305 Applied Music (six consecutive semesters)	4
MUSA Ensemble coursework (seven consecutive semesters)	3.5

Students must pass the departmental keyboard proficiency requirements and

successfully complete a junior recital

Professional Courses (36 hours)

EDUC 240 Perspectives in Education	2
EDUC 341 Learning Theory	2
EDUC 370 Curriculum and Instruction	3
EDUC 375 Student Teaching I and Classroom Management	2
EDUC 475 Student Teaching II	12
EDUC 490 Senior Seminar	3
MUSI 190 Foundation of Music Education	1
MUSI 410 Elementary Music Methods	3
MUSI 411 Middle Level and High School Music Methods	3
MUSI 460 Advanced Conducting	2
PSYC 310 Lifespan Human Development	3

Tracks (2.5-3 hours)

Instrumental Track

MUSI 270 Music Techniques Instrumental I	1
MUSI 271 Music Techniques Instrumental II	1
Private voice lessons (.5) or Class voice (1)	.5-1

Choral Track

MUSI 272 Music Techniques Vocal	1
MUSI 273 Instrumental Music Techniques for Choral Conductors	1
Class guitar or vocal diction	1

Engineering Department

The following majors and minors are offered by the Engineering Department at George Fox University.

Majors

- BS in Applied Science
- BS in Engineering

Bachelors (BS) in Applied Science

This major offers a 58-semester-hour course of study, enabling students to pursue engineering in a discipline other than those currently offered at George Fox University. This dual degree 3/2 program is offered for students interested in pursuing engineering in a discipline such as chemical,* environmental, or aerospace engineering. Students attend George Fox for three years, taking most of their general education, mathematics, science, and lower-division engineering courses. They may then qualify to transfer to any other engineering school where they spend two more years completing their engineering degree. Students completing this five-year program will receive two bachelor of science degrees: a degree in applied science from George Fox University after their fourth year, and a degree in engineering from the cooperating engineering school after their fifth year.

Special General Education Requirements

The chemistry and mathematics courses (listed below) also fulfill up to 9 hours of the sciences requirement for general education.

Major Requirements (58 hours)

CHEM 211 General Chemistry I	(4)
CHEM 212 General Chemistry II	(4)
ENGE 250 Electric Circuit Analysis	(4)
ENGM 210 Statics and Dynamics	(4)
ENGM 311 Engineering Thermodynamics	(3)
ENGR 151 Engineering Principles I	(2)
ENGR 152 Engineering Principles II	(2)
ENGR 250 Principles of Materials Science	(3)
MATH 201 Calculus I	(4)
MATH 202 Calculus II	(4)
MATH 301 Calculus III	(3)
MATH 310 Differential Equations with Linear Algebra	(4)
PHYS 211 General Physics with Calculus I	(4)
PHYS 212 General Physics with Calculus II	(4)

Students must choose at least 3 semester hours from the following:

ENGE 220 Digital Logic Design	(4)
ENGE 311 Electronic Devices and Circuits	(4)
ENGE 330 Electrical Signals and Networks	(4)
ENGM 312 Applications of Engineering Thermodynamics	(3)
ENGM 320 Mechanics of Materials	(3)
ENGM 330 Fluid Mechanics	(3)

Students must choose 6 semester hours from the following:

MATH 300 Numerical Methods	(3)
MATH 320 Linear Algebra	(3)
MATH 331 Probability	(3)

Students must transfer 12 additional semester hours in engineering courses from the cooperating engineering school.

The remainder of the engineering curriculum will be taken in two years at the cooperating engineering

school. For a complete list of required courses, consult the engineering advisor or the registrar. General education requirements are substantially different for 3/2 engineering students. Details are available from the engineering advisor or the registrar.
*It is strongly recommended that students interested in pursuing the 3/2 option in chemical engineering also enroll in CHEM 331 Organic Chemistry (4), CHEM 332 Organic Chemistry (4), CHEM 401 Physical Chemistry (4), and CHEM 402 Physical Chemistry (4) during their three years at George Fox University.

Bachelors (BS) in Engineering

Engineering is the application of mathematical and scientific knowledge to provide for the technological needs of society. This major offers a 90-semester-hour course of study with a concentration in civil, computer, electrical, or mechanical engineering. Design work is integrated throughout the curriculum, utilizing current methodologies and computer tools. The engineering major will prepare students for the engineering profession, graduate programs, and professional licensure. All engineering majors will be required to take the Fundamentals of Engineering exam prior to graduation.

Those students interested in pursuing an engineering degree in other areas, such as chemical or aerospace engineering, should see Applied Science.

Upon entering, students interested in majoring in engineering should contact an engineering advisor. There are specific general education requirements for engineering majors (see below). There is also a sequence for courses in the major.

Special General Education Requirements

Engineering majors shall complete the following general education requirements.
The following summaries note total hours and exceptions to the university general education policy. Refer to the general education section of this catalog for specific course options.

1. Senior Capstone: 3 hours
2. Bible and Religion: 7 hours from stated options, including RELI 300 Christian Foundations (3)
3. Communication: 6 hours, including:
   WRIT 110 College Writing (3) (may be waived by verbal SAT of 670 or above)
   COMM 100 Introduction to Communication (3)
4. Health and Human Performance: HHPA 120 Lifelong Fitness (2)
5. Humanities: 8-9 hours from stated options, including PHIL 230 Ethics (3). Other courses must include a minimum of two courses from the general education humanities requirements for fine arts, history and literature. Each course must be in a different area of the humanities.
6. Mathematics: 4 hours:
   MATH 201 Calculus I (4)
7. Natural Science: 8 hours, including:
   CHEM 211 General Chemistry I (4)
   PHYS 211 General Physics with Calculus I (4)
8. Social Science: 6 hours from the following:
   Students must choose one of the following courses:
   ECON 201 Principles of Microeconomics (3)
   ECON 202 Principles of Macroeconomics (3)
   Students must also choose one of the following courses:
   PSCI 150 Introduction to Political Science (3)
   PSYC 150 General Psychology (3)
   SOCI 150 Principles of Sociology (3)
9. Global and Cultural Understanding: 3 hours from stated options. (Since Music in World Cultures is only 2 hours, it will not fulfill this requirement)

Major Requirements

The major requires course work to be completed in the following areas:

Engineering Core (30 hours)
ENGE 220 Digital Logic Design (4)
ENGE 250 Electrical Circuit Analysis (4)
ENGM 210 Statics and Dynamics (4)
ENGM 311 Engineering Thermodynamics (3)
ENGR 151 Engineering Principles I (3)
ENGR 152 Engineering Principles II (3)
ENGR 351 Servant Engineering I (1)
ENGR 352 Servant Engineering II (1)
ENGR 451 Servant Engineering III (1)
ENGR 452 Servant Engineering IV (1)
ENGR 481 Senior Design I (1)
ENGR 482 Senior Design II (3)
ENGR 490 Senior Seminar (1)

Mathematics and Natural Science (23 hours)
MATH 201 Calculus I (4)
MATH 202 Calculus II (4)
MATH 301 Calculus III (3)
MATH 310 Differential Equations with Linear Algebra (4)
PHYS 211 General Physics with Calculus I (4)
PHYS 212 General Physics with Calculus II (4)

Concentrations (37 hours)

Civil Engineering
ENGC 310 Environmental Engineering (3)
ENGC 320 Engineering Surveying (2)
ENGC 330 Structural Analysis and Design (4)
ENGC 340 Geotechnical Engineering (4)
ENGC 350 Water Resources Engineering (4)
ENGC 370 Transportation Engineering (2)
ENGC 430 Reinforced Concrete Design (3)
ENGC 450 Construction Management and Professional Practice (3)
ENGC 460 Design of Steel Structures (3)
ENGM 320 Mechanics of Materials (3)
ENGM 330 Fluid Mechanics (3)
ENGR 250 Principles of Materials Science (3)

Students must choose one of the following courses:
MATH 240 Statistical Procedures (3)
MATH 300 Numerical Methods (3)
MATH 331 Probability (3)

Computer Engineering
CSIS 202 Introduction to Computer Science II (3)

CSIS 310 Data Structures and File Processing (3)
CSIS 360 Computer Architecture and Assembly Language (3)
CSIS 460 Operating Systems (3)
ENGE 300 C Programming with Applications (3)
ENGE 311 Electronic Devices and Circuits (4)
ENGE 312 Applications of Electronic Devices (4)
ENGE 330 Electrical Signals and Networks (4)
ENGE 420 Microprocessors (4)
ENGE 480 Digital Signal Processing (3)
MATH 260 Discrete Mathematics (3)

Electrical Engineering
ENGE 300 C Programming with Applications (3)
ENGE 311 Electronic Devices and Circuits (4)
ENGE 312 Applications of Electronic Devices (4)
ENGE 330 Electrical Signals and Networks (4)
ENGE 360 Electromagnetic Fields and Waves (3)
ENGE 420 Microprocessors (4)
ENGE 480 Digital Signal Processing (3)

Students must choose 6 semester hours from the following courses:
ENGE 410 Digital System Design (3)
ENGE 430 Communication Systems (3)
ENGE 440 Electric Machines and Power Systems (3)
ENGE 460 Microwave Engineering and Applications (3)

Students must choose one of the following courses:
CSIS 202 Introduction to Computer Science II (3)
ENGR 250 Principles of Materials Science (3)

Students must choose one of the following courses:
MATH 240 Statistical Procedures (3)
MATH 300 Numerical Methods (3)
MATH 331 Probability (3)

Mechanical Engineering
ENGM 300 Computational Methods (2)
ENGM 312 Applications of Engineering Thermodynamics (3)
ENGM 320 Mechanics of Materials (3)
ENGM 330 Fluid Mechanics (3)
ENGM 350 Machine Dynamics and Vibrations (3)
ENGM 380 Heat Transfer (4)
ENGM 400 Mechanical Engineering Design (4)
ENGM 480 Control Systems Engineering (3)
ENGR 250 Principles of Materials Science (3)

Students must choose 6 semester hours from the following courses:

ENGM 410 Materials and Processes in Manufacturing (3)
ENGM 430 Acoustics and Noise Control (3)
ENGM 450 Vehicle Systems Dynamics (3)
ENGM 470 Energy Systems Engineering (3)

Students must choose one of the following courses:
MATH 240 Statistical Procedures (3)
MATH 300 Numerical Methods (3)
MATH 331 Probability (3)

English Department

Majors

- BA in English

Minors

- Literature
- Women's Studies
- Writing

Bachelors (BA) in English

The english major offers a 36-semester-hour course of study that teaches students to read and write with attention to truthfulness, logic, rhetoric, and aesthetics. Graduates pursue careers in teaching, writing, publishing, and other fields that demand perceptive attention to textual detail and the ability to communicate with clarity and grace. Students are required to obtain a minimum grade of C- in all courses taken for the major.

Students may select a literature or a writing focus for their senior experience. Students may select a literature or writing focus for their senior experience.

Major Requirements

Literature Core (24 hours)

LITR 180 Studies in Literature	3
LITR 335 Advanced Studies in American Literature	3
LITR 350 Literary Criticism	3
LITR 365 A Advanced Studies in British Literature	3

Students must choose 2 of the following sequences and complete 2 courses from each sequence:

1. LITR 236 Ancient World Literature — 6
   LITR 237 World Literature, Medieval to Modern
   LITR 238 Contemporary World Literature
2. LITR 326 American Literature to 1865 — 6
   LITR 327 American Literature, 1865-1914
   LITR 328 American Literature, 1914-Present
3. LITR 376 British Literature to 1660 — 6
   LITR 377 British Literature, 1660-1830
   LITR 378 British Literature, 1830-Present

Writing Core (9 hours)

WRIT 200 Studies in Writing	3

Students must choose two of the following courses:

WRIT 230 Introduction to Journalism	3
WRIT 240 Technical Writing	3
WRIT 250 Creative Nonfiction	3
WRIT 330 Magazine and Feature Writing	3
WRIT 360 Writing Fiction	3
WRIT 370 Writing Poetry	3

English Senior Capstone (3 hours)

Students may select a literature or writing focus for their senior experience.

LITR 490 Senior Experience	3
WRIT 490 Senior Experience	3

Optional Concentrations (for an additional 12-18 hours)

Creative Writing (12 hours)

Students must choose four of the following courses:

WRIT 230 Introduction to Journalism	3
WRIT 250 Creative Nonfiction	3
WRIT 330 Magazine and Feature Writing	3
WRIT 360 Writing Fiction	3
WRIT 370 Writing Poetry	3

Professional Writing (18 hours)

WRIT 210 Practical Grammar and Editing	3
WRIT 310 Professional Writing	3

Students must choose four of the following courses:

ARTS 250 Introduction to Graphic Design	3
CMCO 250 Digital Multimedia	3
CMCO 260 Scriptwriting for Media	3
COMM 320 Introduction to Public Relations	3
WRIT 230 Introduction to Journalism	3
WRIT 240 Technical Writing	3

Teacher Preparation for Graduate Studies of English (12 hours)

Students must choose two out of the three courses listed for the Literature Sequence not previously taken for the Literature Core.	6
One additional literature course	3
One additional writing course	3

Teacher Preparation for Secondary Teachers of English (14 hours)

Students must choose two out of the three courses listed for the Literature Sequence not previously taken for the Literature Core.	6
One additional literature course	3
One additional writing course	3
EDUC 250 Teaching as a Profession	2

†Electives may not include WRIT 100 English Skills, WRIT 103 Individualized English Skills, or WRIT 110 College Writing.

Literature Minor

18 credit hours

Minor Requirements

LITR 180 Studies in Literature (3 hours)
Students must choose 6 semester hours of writing (WRIT)* or literature (LITR) coursework
Students must choose 9 additional semester hours of literature (LITR) coursework above the 300 level
*WRIT electives may not include WRIT 100, 103, or 110

Women's Studies Minor

18 credit hours

Minor Requirements

LITR 280 Literary Foundations of Women's Studies	(3)
LITR 380 Gender Theory	(3)
LITR 480 International Women's Voices	(3)

Students must choose 9 semester credits from the following:

BIBL 360 Women and the Bible	(3)
COMM 410 Gender Communication Across Cultures	(3)
RELI 320 American Women of Faith	(3)
SOCI 320 Men and Women in Society	(3)
SOCI 323 Sociology of Families	(3)
SOCI 326 Sociology of Sexuality	(3)

Writing Minor

18 credit hours

Minor Requirements

WRIT 200 Studies in Writing (3)
Students must choose 6 semester hours of writing (WRIT)* or literature (LITR) coursework
Students must choose 9 additional semester hours of writing (WRIT)* coursework
*WRIT electives may not include WRIT 100, 103, or 110

Family and Consumer Sciences Department

Majors

- BS in Family and Consumer Sciences

Minors

- Family and Consumer Sciences
- Fashion Merchandising/Interior Design
- Foods and Nutrition

Bachelors (BS) in Family and Consumer Sciences

Major Requirements

Students may choose among three concentrations in family and consumer sciences. Descriptions and course requirements follow.

Concentrations

Family and Consumer Sciences Concentration (44 hours)

Family and consumer sciences are grounded in the sciences and humanities. At the core is an educational discipline designed to empower students to become professionals. Through education, research, cooperative programs, and public information, graduates work to improve the quality and standard of individuals and family life in an ever-changing world.

The family and consumer sciences major graduates with a bachelor of science degree. Graduates find employment in the traditional areas: cooperative extension, food research, nutrition research, food service management, child care, fashion design, textile design, residential and commercial design, kitchen and bath design, retail merchandising, dietetics, equipment sales, and journalism. They also find current, nontraditional careers in these and other fields: debt counseling, energy conservation management, event planning, advertising, equipment promotion, and public relations.

FCSC 120 Apparel Construction (3)
FCSC 211 Foods I (3)
FCSC 212 Foods II (3)
FCSC 220 Fashion and Society (2)
FCSC 230 Textiles Science (3)
FCSC 290 Meal Management (2)
FCSC 300 Nutrition (3)
FCSC 311 Child Development (3)
FCSC 323 Sociology of Families (3)
FCSC 330 Residential Architecture (2)
FCSC 350 Resource Management (2)
FCSC 351 Interior Design I (3)
FCSC 354 Kitchen and Bath Planning (3)
FCSC 360 Consumer Buying (3)
FCSC 490 Senior Seminar (3)

Students must choose one of the following courses:
FCSC 320 Fashion Merchandising (3)
FCSC 370 Pattern Drafting and Apparel Design (3)

Fashion Merchandising/Interior Design Concentration (44-45 hours)

The fields of fashion merchandising and interior design share a common base of knowledge grounded in the academic fields of family and consumer sciences and business. A background in apparel construction and design, merchandising of fashion, and market analysis prepares students for careers in fashion merchandising.

Residential architecture, kitchen and bath planning, and a variety of interior design classes prepare students

for positions as interior designers. Career opportunities include visual merchandising, buying, entrepreneurship, apparel design, textile design, fashion analysis, interior design, housing and home planning, kitchen and bath design, equipment specialist, energy conservation management in the home, home furnishings, and business management and administration. A field experience (internship) in the Portland metropolitan area helps to provide valuable workplace experience for students before graduation.

BUSN 110 Introduction to Business (3)
FCSC 120 Apparel Construction (3)
FCSC 220 Fashion and Society (2)
FCSC 230 Textiles Science (3)
FCSC 320 Fashion Merchandising (3)
FCSC 330 Residential Architecture (2)
FCSC 350 Resource Management (2)
FCSC 351 Interior Design I (3)
FCSC 354 Kitchen and Bath Planning (3)
FCSC 360 Consumer Buying (3)
FCSC 370 Pattern Drafting and Apparel Design (3)
FCSC 475 Field Experience (3)
FCSC 490 Senior Seminar (3)

Students must choose one of the following courses:
MGMT 260 Principles of Management (3)
MKTG 260 Principles of Marketing (3)

Students must choose 2 of the following courses:
FCSC 352 Interior Design II (2)
FCSC 353 Interior CAD (3)
FCSC 378 Apparel CAD (3)
FCSC 460 Apparel Market Analysis (3)

Foods and Nutrition in Business Concentration (43 hours)

Foods and nutrition in business is a multidisciplinary concentration incorporating academic cores in consumer-oriented food science education, human nutrition, and business. Course work in food composition and preparation, analysis of consumer trends, and recognition of global food issues prepares students as food professionals, while course work in human nutrition and contemporary nutrition issues equips the student with the experience necessary to work in areas of consumer nutrition education. Business courses prepare students for careers in industries requiring the skills of food specialists, including new product development, test kitchens, recipe development, and food product sales and marketing, catering, event planning, and food service management.

Special General Education Requirements

CHEM 151 General, Organic, and Biological Chemistry I (4)
ECON 201 Principles of Microeconomics (3)

Concentration Requirements

ACCT 271 Principles of Financial Accounting (3)
BUSN 110 Introduction to Business (3)

FCSC 211 Foods I (3)
FCSC 212 Foods II (3)
FCSC 290 Meal Management (2)
FCSC 300 Nutrition (3)
FCSC 310 Food, Culture, and Society (3)
FCSC 344 Quantity Food Production and Management (3)
FCSC 350 Resource Management (2)
FCSC 360 Consumer Buying (3)
FCSC 430 Nutrition and the Life Cycle (3)
FCSC 475 Field Experience (3)
FCSC 490 Senior Seminar (3)
MGMT 260 Principles of Management (3)
MKTG 260 Principles of Marketing (3)

Cooperative 3-1 Degree Program Concentration with the Fashion Institute of Design and Merchandising

George Fox University offers a cooperative degree program with the Fashion Institute of Design and Merchandising (FIDM) in Los Angeles, California. This cooperative program allows students to attend George Fox University for three years during which the student completes all general education classes, elective classes, and a minimum of 14 specified hours in the fashion merchandising/interior design concentration.

Students electing to pursue this option apply in their junior year and attend FIDM their senior year to complete a specialized major. The broad spectrum of related courses at FIDM is more varied in content and specific in focus, which allows for the following specializations: interior design, merchandise marketing, and fashion design.

Graduates receive a bachelor of science degree in family and consumer sciences with a concentration in interior design, merchandise marketing, or fashion design from George Fox University and an associate of arts degree from FIDM.

Application to FIDM is solely the student's responsibility and is independent of acceptance to or enrollment at George Fox University. Students considering this option should seek advisement early in their academic careers in order to meet the requirements of both FIDM and GFU. Financial assistance is not available from George Fox University to students enrolling in FIDM. Grants and scholarships funded by George Fox University are not transferable to FIDM. Contact FIDM directly for information regarding admission requirements, tuition rates, and financial aid.

Family and Consumer Sciences Minor

20-23 credit hours

Minor Requirements

FCSC 120 Apparel Construction (3)
FCSC 211 Foods I (3)
FCSC 212 Foods II (3)
FCSC 220 Fashion and Society (2)
FCSC 351 Interior Design I (3)

Students must choose at least 3 of the following courses:
FCSC 230 Textiles Science (3)
FCSC 290 Meal Management (2)
FCSC 300 Nutrition (3)
FCSC 310 Food, Culture, and Society (3)
FCSC 311 Child Development (3)
FCSC 320 Fashion Merchandising (3)
FCSC 323 Sociology of Families (3)
FCSC 330 Residential Architecture (2)
FCSC 344 Quantity Food Production and Management (3)
FCSC 350 Resource Management (2)
FCSC 352 Interior Design II (2)
FCSC 353 Interior CAD (3)
FCSC 354 Kitchen and Bath Planning (3)
FCSC 360 Consumer Buying (3)
FCSC 370 Pattern Drafting and Apparel Design (3)
FCSC 380 Evolution of World Dress (3)
FCSC 460 Apparel Market Analysis (3)
FCSC 490 Senior Seminar (3)

Fashion Merchandising/Interior Design Minor

18-20 credit hours

Minor Requirements

FCSC 120 Apparel Construction (3)
FCSC 220 Fashion & Society (2)
FCSC 230 Textiles Science (3)
FCSC 351 Interior Design I (3)

Students must choose at least 3 of the following courses:
FCSC 320 Fashion Merchandising (3)
FCSC 330 Residential Architecture (2)
FCSC 352 Interior Design II (2)
FCSC 353 Interior CAD (3)
FCSC 354 Kitchen and Bath Planning (3)

FCSC 370 Pattern Drafting and Apparel Design (3)
FCSC 378 Apparel CAD (3)
FCSC 380 Evolution of World Dress (3)
FCSC 460 Apparel Market Analysis (3)

Foods and Nutrition Minor

20 credit hours

Minor Requirements

FCSC 211 Foods I (3)
FCSC 212 Foods II (3)
FCSC 290 Meal Management (2)
FCSC 300 Nutrition (3)
FCSC 310 Food, Culture and Society (3)
FCSC 344 Quantity Food Production and Management (3)
FCSC 430 Nutrition During the Life Cycle (3)

Health and Human Performance Department

Majors

- BS in Allied Health*(offered in conjunction with the* Biology Department*)*
- BS in Health and Human Performance
- BS in Health and Human Performance: Interdisciplinary

Minors

- Coaching
- Health
- Health Teaching
- Recreation
- Bachelor of Science in Athletic Training (BSAT)

Bachelors (BS) in Health and Human Performance

The health and human performance major offers a 38-45 credit hour course of study (depending on concentration selected) that is designed to prepare students in pre-physical education teaching and pre-health teaching for entrance into an MAT program; to prepare students in fitness management for sitting for the NSCA and ACSM certification exams and/or for employment in the fitness industry. Students are required to obtain a minimum grade of C- in all courses taken for the major.

Students may choose among three concentrations in health and human performance. Students who wish to become health teachers are essentially entering a five-year program. They will take the health preteaching concentration within the Department of Health and Human Performance. Upon successful completion of this four-year concentration, students are directed to enter a one-year Master of Arts in Teaching Program. Upon completion of the MAT program the student will have completed the master's degree and be certified to teach health.

Students who wish to become physical education teachers are essentially entering a five-year program. They will take the physical education preteaching concentration within the Department of Health and Human Performance. Upon successful completion of this four-year concentration students are directed to enter a one-year Master of Arts in Teaching Program. Upon completion of the MAT program the student will have completed the master's degree and be certified to teach physical education.

Special General Education Requirements

BIOL 331 Human Anatomy and Physiology I	4
BIOL 332 Human Anatomy and Physiology II	4
PSYC 150 General Psychology	3

All human performance majors are exempt from the general education human performance activity class requirement.

Major Requirements

Concentrations

Fitness Management (41-42 hours)

HHPA 130 Aquatics†	1
HHPE 200 History and Principles of Physical Education	2
HHPE 223 Tumbling/Gymnastics	1
HHPE 228 Conditioning/Body Mechanics and Aerobics	1
HHPE 360 Organization and Administration of Health, Physical Education, and Athletic Training	2
HHPE 380 Experiential Recreational Leadership	3
HHPE 390 Care and Prevention of Athletic Injuries	3
HHPE 394 Kinesiology	3
HHPE 420 Exercise Prescription	3
HHPE 430 Exercise Physiology	3
HHPE 460 Physical Education for the Exceptional Student	3
HHPE 470 Motor Development and Motor-Skill Learning	3

HHPE 475 Fitness Management Field Experience	6
HHPE 490 Senior Seminar	1
HLTH 230 First Aid and Safety	1
HLTH 300 Nutrition	3
Students must choose one of the following courses:	
HHPE 400 Recognition of Athletic Injuries	3
HHPE 480 Tests and Measurements in Physical Education	2
HLTH 240 Stress Management	3

Health Preteaching (37 hours)

EDUC 250 Teaching as a Profession	2
EDUC 334 Health and Physical Education Methods	3
HHPE 200 History and Principles of Physical Education	2
HHPE 360 Organization and Administration of Health, Physical Education, and Athletic Training	2
HHPE 394 Kinesiology	3
HHPE 430 Exercise Physiology	3
HHPE 460 Physical Education for the Exceptional Student	3
HHPE 490 Senior Seminar	1
HLTH 210 Drug Education	2
HLTH 230 First Aid and Safety	1
HLTH 240 Stress Management	3
HLTH 300 Nutrition	3
HLTH 320 Contemporary Health Issues	3
HLTH 323 Sociology of Families	3
PSYC 340 Statistical Procedures	3

Physical Education Preteaching (44-45 hours)

EDUC 250 Teaching as a Profession	2
EDUC 334 Health and Physical Education Methods	3
HHPA 109 Ballroom Dance	1
HHPA 130 Aquatics†	1
HHPE 200 History and Principles of Physical Education	2
HHPE 221 Basketball/Golf	1
HHPE 222 Field Sports	1
HHPE 223 Tumbling/Gymnastics	1
HHPE 226 Tennis/Volleyball	1
HHPE 300 Coaching Theory and Practice	2
HHPE 301 Sports Psychology	2
HHPE 360 Organization and Administration of Health, Physical Education, and Athletic Training	2
HHPE 394 Kinesiology	3
HHPE 410 Teaching Physical Education	2

HHPE 420 Exercise Prescription	3
HHPE 430 Exercise Physiology	3
HHPE 460 Physical Education for the Exceptional Student	3
HHPE 470 Motor Development and Motor-Skill Learning	3
HHPE 480 Tests and Measurements in Physical Education	2
HHPE 490 Senior Seminar	1
HLTH 210 Drug Education	2
HLTH 230 First Aid and Safety	1
Students must choose one of the following courses:	
HHPE 310 Coaching Basketball	2
HHPE 320 Coaching Baseball/Softball	2
HHPE 330 Coaching Soccer	2
HHPE 340 Coaching Track	2
HHPE 350 Coaching Volleyball	2
HHPE 390 Care and Prevention of Athletic Injuries	3
HLTH 300 Nutrition	3

†A Red Cross Lifeguarding or Water Safety Instructor Certificate can be used to fulfill this requirement

Bachelors (BS) in Interdisciplinary Studies: Health and Human Performance

An interdisciplinary studies major may be elected through application and approval of the health and human performance faculty. The student must show how the proposed major meets reasonable academic and vocational objectives. An interdisciplinary studies major in Health and Human Performance consists of 48 semester hours; 24 semester hours as specified below and 24 semester hours in another major field.

Major Requirements

EDUC 334 Health and Physical Education Methods	3
HHPA 109 Ballroom Dancing	1
HHPA 130 Aquatics†	1
HHPE 228 Conditioning/Body Mechanics and Aerobics	1
HHPE 370 Camp Programming and Counseling	3
HHPE 380 Experiential Recreational Leadership	3
HHPE 440 Camp Administration	2
HLTH 230 First Aid and Safety	1
Health education (HLTH) or human performance (HHPA or HHPE) coursework (5 semester hours must be 200-level or above)	9

†A Red Cross Lifeguarding or Water Safety Instructor Certificate can be used to waive this requirement

Bachelors (BSAT) in Athletic Training

The Athletic Training Education Program (ATEP) is accredited by the Commission on Accreditation for Athletic Training Education (CAATE). The athletic training major offers a 51 credit hour course of study that is designed to prepare students for work in professional and collegiate sports, secondary and intermediate schools, sports medicine clinics, hospital ER and rehab clinics, occupational settings, fitness centers, and physicians' offices. Certified athletic trainers are medical professionals who are experts in injury prevention, assessment, treatment and rehabilitation, particularly in the orthopedic and musculoskeletal disciplines. Students who are accepted into the ATEP and complete all requirements will be prepared to sit for the athletic training Board of Certification exam.

Students are required to obtain a minimum grade of C- in all courses taken for the degree.

Admission to Athletic Training Program

Students wishing to prepare for a career in athletic training should consult with the athletic training program director within the first two weeks of the fall semester of their freshman year. Students must complete a minimum of 40 observational hours in the athletic training room to be eligible for acceptance in the Athletic Training Education Program.

Students make formal application for admission to the Athletic Training Education Program through the program director in the spring of their freshman year. Application must be made by March 15 of the semester prior to formal entry into the Athletic Training Education Program. A maximum of 10 qualified students will be accepted into the Athletic Training Education Program each year.

Admission to the program is based on a minimum cumulative GPA of 2.75 on all college-level courses including required prerequisites (PSYC 150, BIOL 331, BIOL 332, HHPE 390, and HLTH 233); two written recommendations; two written essays; a minimum predicted college GPA of 2.65 using the George Fox University admission and financial aid standards; meeting technical standards as described in the *Athletic Training Education Program Policies and Procedures Manual* (ATEP PPM); good standing with Student Life as described in the George Fox University *Student Handbook*; and submission of the formal application no later than March 15. Generally, any application submitted after March 15 will not be considered for admission the following school year. Admission to the program is required before applicants may gain experience as athletic training students within the Athletic Training Education Program or declare athletic training as a major.

Transfer students must demonstrate the completion of a basic college-level first aid/CPR-PR course and the completion of at least 75 athletic training internship hours working under the guidance of a BOC certified athletic trainer. In addition, the supervising certified athletic trainer must write one of the letters of recommendation. Upon acceptance into the program, the student must follow the academic course plan as described in the ATEP PPM. Guidelines covering transfer credit are stated in the ATEP PPM. Transfer credit generally will not be granted for practicum (sequence courses: HHPE 374 through HHPE 379).

Generally, continuation in the Athletic Training Education Program is dependent upon maintaining a minimum 2.75 GPA within the athletic training major, maintaining a minimum overall GPA of 2.5, and receiving satisfactory evaluations within the clinical educational experience. In addition, continuation is based upon satisfactory evidence of good standing with student life and the physical health needed for successful performance in the athletic training environment. Admitted students are subject to the policies and procedures contained within the ATEP PPM. Students failing to meet expectations will normally be

placed on probation for one semester. Continued failure to meet expectations during the probationary period will generally result in dismissal from the athletic training concentration. Athletic training students are required to obtain the hepatitis B immunization series in the first year and yearly tuberculosis screens in order to remain in the program.

Special General Education Requirements

BIOL 331 Human Anatomy and Physiology I	4
BIOL 332 Human Anatomy and Physiology II	4
PSYC 150 General Psychology	3

All human performance majors are exempt from the general education human performance activity class requirement.

Major Requirements (51 hours)

HHPA 136 Weight Training	1
HHPE 228 Conditioning/Body Mechanics and Aerobics	1
HHPE 360 Organization and Administration of Health, Physical Education, and Athletic Training	2
HHPE 364 Psychosocial Intervention and Referral in Athletic Training	3
HHPE 366 General Medical Conditions in Athletic Training	2
HHPE 374 Athletic Training Practicum I	1
HHPE 375 Athletic Training Practicum II	1
HHPE 376 Athletic Training Practicum III	3
HHPE 377 Athletic Training Practicum IV	3
HHPE 378 Athletic Training Practicum V	3
HHPE 379 Athletic Training Practicum VI	3
HHPE 384 Pharmacology in Athletic Training	1
HHPE 390 Care and Prevention of Athletic Injuries	3
HHPE 394 Kinesiology	3
HHPE 400 Recognition of Athletic Injuries	3
HHPE 413 Therapeutic Exercise	2
HHPE 414 Therapeutic Modalities	2
HHPE 430 Exercise Physiology	3
HHPE 490 Senior Seminar	1
HLTH 210 Drug Education	2
HLTH 233 Responding to Emergencies	2
HLTH 300 Nutrition	3
PSYC 340 Statistical Procedures	3

Coaching Minor

21 credit hours

Minor Requirements

HHPE 300 Coaching Theory and Practice	2
HHPE 360 Organization and Administration of Health, Physical Education, and Athletic Training	2
HHPE 390 Care and Prevention of Athletic Injuries	3
HHPE 430 Exercise Physiology	3
HHPE 470 Motor Development and Motor-Skill	3

Learning

HLTH 230 First Aid and Safety	1
PSYC 311 Child Development	3

Students must choose 4 semester hours from the following:

HHPE 310 Coaching Basketball	2
HHPE 320 Coaching Baseball/Softball	2
HHPE 330 Coaching Soccer	2
HHPE 340 Coaching Track	2
HHPE 350 Coaching Volleyball	2

Health Minor

18 credit hours

Minor Requirements

HLTH 210 Drug Education	(2)
HLTH 230 First Aid and Safety	(1)
HLTH 240 Stress Management	(3)
HLTH 300 Nutrition	(3)
HLTH 320 Contemporary Health Issues	(3)
HLTH 323 Sociology of Families	(3)
HLTH 485 Special Topics	(3)

Health Teaching Minor

21-23 credit hours

Minor Requirements

HLTH 210 Drug Education	(2)
HLTH 230 First Aid and Safety	(1)
HLTH 240 Stress Management	(3)
HLTH 280 Marriage and the Family	(3)
HLTH 300 Nutrition	(3)

HLTH 320 Contemporary Health Issues (3)

Students must choose 2 of the following courses:
BIOL 331 Human Anatomy and Physiology I (4)
BIOL 332 Human Anatomy and Physiology II (4)
HHPE 430 Exercise Physiology (3)
PSYC 311 Child Development (3)
SOCI/SWRK 450 Aging in Society (3)

Recreation Minor

18 credit hours

Minor Requirements

HHPA 130/330 Aquatics (1)
HHPE 200 History and Principles of Physical Education (2)
HHPE 370 Camp Programming and Counseling (3)
HHPE 380 Experiential Recreational Leadership (3)
HHPE 440 Camp Administration (2)
HLTH 230 First Aid & Safety (1)
HLTH 240 Stress Management (3)
Students must choose one of the following options for 3 semester hours:
Choose 3 courses from the following:

1. HHPA 103/303 Backpacking (1)
2. HHPA 108/308 Canoeing (1)
3. HHPA 109/309 Ballroom Dance (1)
4. HHPA 122/322 Survival Techniques (1)
5. HHPA 126/326 Skiing/Snowboarding (1)
6. HHPE 485 Selected Topics (3)

History Department

Majors

- BA in History

Minors

- History

Bachelors (BA) in History

The history major offers a 36-semester-hour course of study. A minimum of 24 semester hours must be upper-division courses. Students are required to obtain a minimum grade of C- in all courses taken for the major.

Major Requirements

HIST 290 Introduction to Historical Studies	3
HIST 490 History Seminar	3

Students must choose one of the following courses:

HIST 110 Western Civilization to 1648	3
HIST 120 Western Civilization from 1648	3

Students must choose one of the following courses:

HIST 151 United States to 1865	3
HIST 152 United States from 1865	3
History (HIST) coursework	21

History Minor

18 credit hours

Minor Requirements

Students must choose one of the following courses:

HIST 110 Western Civilization to 1648	3
HIST 120 Western Civilization from 1648	3

Students must choose one of the following courses:

HIST 151 United States to 1865	3
HIST 152 United States from 1865	3
History (HIST) coursework	12

International Studies Department

The following majors and minors are offered by the International Studies Program at George Fox University.

Majors

- BA in International Studies

Minors

- International Studies

Bachelors (BA) in International Studies

International studies is an interdisciplinary major that offers a 38-40-semester-hour course of study, designed to prepare students for work in such fields as foreign missions, international commerce, economic development, and government service. It also provides excellent preparation for graduate study in international relations and diplomacy, missiology, and area studies. The major includes a strong international fieldwork emphasis. Students are required to obtain a minimum grade of C- in all courses taken for the major.

Major Requirements

INTL 230 Introduction to International Relations	3
INTL 310 Cultural Anthropology	3
INTL 440 World Religions	3
INTL 475 Culture-Oriented Fieldwork	8
INTL 490 International Studies Senior Seminar	3
The second year of a modern foreign language	6-8
Students must take one of the following courses:	
INTL 330 Introduction to the World Christian Movement	3
RELI 360 Cross-Cultural Christian Outreach	3
Students must choose one of the following courses:	
ECON 370 Global Political Economy	3
INTL 461 International Trade	3
INTL 462 International Finance	3
Students must choose 2 additional courses from the following:	
COMM 300 Communication Theory and Research	3
COMM 340 General and Cultural Linguistics	3
COMM 350 Introduction to TESOL (Teaching English to Speakers of Other Languages)	3
ECON 370 Global Political Economy	3
INTL 461 International Trade	3
INTL 462 International Finance	3
FREN 495 Special Study (French)	1-4
HIST 250 Latin America	3
HIST 331 England to 1688	3
HIST 332 England Since 1688	3
HIST 340 History of the Middle East	3
HIST 343 History of Southern Africa	3
HIST 360 Modern Russia	3
HIST 370 Modern China and Japan	3
HIST 421 Europe from the Age of Enlightenment to 1890	3

HIST 422 Europe 1890-Present	3
INTL 303 International Conflict and Peace	3
LITR 236 Ancient World Literature	3
LITR 237 World Literature, Medieval to Modern	3
LITR 238 Contemporary World Literature	3
RELI 360 Cross-Cultural Christian Outreach	3
RELI 460 Issues in Contemporary Missions	3
SOCI 380 Race, Ethnicity, and Class	3
SPAN 495 Special Study (Spanish)	1-4

Supporting Minors for International Studies

International studies is an interdisciplinary major designed for students with an interest in international vocations. Students taking this major as preparation for foreign missionary service or graduate studies in missions and intercultural concerns are encouraged to take a minor in the Religious Studies Department(in biblical studies, missions, or religion). Students with interest in diplomacy or politics are encouraged to consider a minor in political science or peace studies. Those wishing to prepare for work in relief and development should consider a minor in management or economics.

International Studies Minor

18 credit hours

Minor Requirements

INTL 490 Senior Seminar	3
INTL 230 Introduction to International Relations	3
INTL 310 Cultural Anthropology	3
INTL 440 World Religions	3

Students must choose one of the following courses:

ECON 370 Global Political Economy	3
INTL 461 International Trade	3
INTL 462 International Finance	3

Students must choose one of the following courses:

INTL 330 Introduction to the World Christian Movement	3
RELI 360 Cross-Cultural Christian Outreach	3

Other appropriate courses may be substituted with written approval from the International Studies Faculty Advisor.

Mathematics Department

Majors

- BS in Mathematics

Minors

- Mathematics

Bachelors (BS) in Mathematics

The math major offers a 44-semester-hour course of study. Students are required to obtain a minimum grade of C- in all courses taken for the major.

Major Requirements

CSIS 201 Introduction to Computer Science I	3
MATH 201 Calculus I	4
MATH 202 Calculus II	4
MATH 290 Introduction to Proofs	3
MATH 301 Calculus III	3
MATH 310 Differential Equations with Linear Algebra	4
MATH 331 Probability	3
MATH 420 Real Analysis	3
MATH 490 Senior Seminar	2
Students must choose 15 semester hours from the following:	
MATH 300 Numerical Methods	3
MATH 260 Discrete Mathematics	3
MATH 320 Linear Algebra	3
MATH 332 Mathematical Statistics	3
MATH 340 Number Theory	3
MATH 410 Algebraic Structures	3

Mathematics Minor

20 credit hours

Minor Requirements

MATH 201 Calculus I (4)	4
MATH 202 Calculus II (4)	4
MATH 290 Introduction to Proofs (3)	3
Mathematics (MATH) coursework (300-level or above)	9

Nursing Department

The profession of nursing and nursing education is in a state of continual development. As the profession and health care have advanced, the need for nurses who are committed to a high level of intellectual inquiry is constantly increasing.

Nursing Admissions and Progression Criteria

To be considered for admission into the nursing major, the following criteria MUST be met:

1. Cumulative GPA of 2.8 on all pre-requisite courses. Cumulative grade point average should include all transfer courses.
2. Satisfactory scores on Test of Essential Academic Skills (TEAS).
3. Essay
4. Two letters of reference.
5. Health Certification Requirements. Students applying to the nursing program must complete and submit the following information along with completed application to the nursing major. If not completed, your application will not be considered for admission into the nursing major:
    - Proof of current immunizations for polio, diphtheria, tetanus, second MMR, and hepatitis B vaccination.
    - Titer for varicella (chicken pox) is required only if you do not know if and when you have had chicken pox. If you have had chicken pox, include year of disease on health record.
    - Negative Mantoux or PPD (TB) test needs to be current through the school year. (Students must provide a copy of an updated test for their files each year.) If the student has had a positive Mantoux or PPD, (2-step) he/she will need documentation of a negative chest X-ray to be submitted with the application. If chest X-ray is positive, the student needs to see his/her health care provider. Admission to the nursing program may occur only after the department receives verification of a negative sputum culture.
    - Current CPR certification - American Heart Association. All students are required to provide proof of current CPR certification with application.

Priority Admission to the Bachelor of Science Nursing Program at George Fox University

Once admitted to George Fox University, freshman students pursuing a Bachelor of Science in Nursing who meet the following expectations of academic and personal achievement during their freshman and sophmore years will be eligible for priority admission into the BSN program.

1. Maintain a 3.3 minimum cumulative GPA in all classes.
2. Maintain a 3.3 minimum cumulative GPA in math and science classes including MATH 180, Chemisty 151 & 152, Anatomy & Physiology BIOL 331 & 332, Microbiology BIOL 367.
3. Meet other nursing application criteria including the TEAS Exam, an Essay, and Letters of Reference are also required.
4. Demonstrate evidence of good citizenship and responsibility while on campus.
5. Attend a Nursing Community Meeting each semester.
6. Maintain full time student status at George Fox University.
7. Students whose GPA fall below the benchmark of a 3.3, but do meet the 2.8 GPA minimum requirement are still eligible to apply for the nursing program, however priority admission to the major is not guaranteed.
8. Once admitted into the nursing program, continuation in the program is not guaranteed.

Nursing Program Continuation

Continuation in the nursing program is dependent on satisfactory academic performance and the demonstration of the character and ethics needed for success in the profession. Students must:

1. Maintain a cumulative GPA of 2.8 or higher
2. Attain grades of C or better in all professional coursework
3. Achieve satisfactory evaluations of performance in clinical experiences
4. Meet Nursing major individual milestones

Nursing students are subject to the policies contained in the *Nursing Policies and Procedures Handbook*.

Majors

- BS in Nursing

Bachelors (BS) in Nursing

The nursing major offers a 70-semester-hour course of study that is designed to prepare students to function in increasingly complicated health care environments. Students are required to obtain a minimum grade of C in all courses taken for the major and to maintain a minimum major GPA of 2.8.

Special General Education Requirements

Nursing majors shall complete the following general education requirements (refer to the general education section of this catalog for specific course options):

1. Senior Capstone: GEED 490 Liberal Arts and Critical Issues (3)
2. Bible and Religion: at least 10 hours from stated options
3. Communications: COMM 100 Introduction to Communication (3)
4. Health and Human Performance: 3 hours from stated options
5. Humanities: 11-12 hours from stated options to include PHIL 180 Ethics (3)
6. Mathematics: 3 hours, MATH 180 College Algebra required unless waived by SAT score
7. Natural Sciences: BIOL 331 Human Anatomy and Physiology I (4) and BIOL 332 Human Anatomy and Physiology II (4)
8. Social Sciences: PSYC 150 General Psychology (3) and SOCI 150 Principles of Sociology (3)
9. Globalization: 6 hours from stated options to include SOCI 310 Cultural Anthropology (3)

Graduation Requirements

All nursing majors are required to pass sophomore, junior, and senior level mastery of content through standardized measurement testing. These individual milestones will be used as prerequisites for progression in the nursing major. Nursing majors will not be recommended for graduation until all milestones have been met.

Major Requirements

Nursing Core (46 hours)

NURS 200 Nursing Fundamentals	2
NURS 203 Nursing Fundamentals Practicum	2
NURS 210 Health Assessment	2
NURS 300 Medical-Surgical Nursing I	2
NURS 303 Medical-Surgical Nursing I Practicum	3
NURS 320 Medical-Surgical Nursing II	2
NURS 323 Medical-Surgical Nursing II Practicum	3
NURS 330 Nursing Research	2
NURS 350 Pharmacology	3
NURS 360 Health Promotion	2
NURS 370 Nursing of Children & Families	2
NURS 400 Public Health Nursing	2
NURS 403 Public Health Nursing Practicum	3
NURS 410 Nursing Administration/Leadership	2
NURS 413 Nursing Administration/Leadership	3

Practicum

NURS 420 Maternity Nursing	2
NURS 423 Maternity Nursing Practicum	3
NURS 440 Mental Health Nursing	2
NURS 443 Mental Health Nursing Practicum	3
NURS 492 Senior Synthesis	1

Additional Required Courses (24 hours)

BIOL 320 Pathophysiology	3
BIOL 367 Essentials of Microbiology	4
CHEM 151 General, Organic, and Biological Chemistry I	4
CHEM 152 General, Organic, and Biological Chemistry II	4
HLTH 300 Nutrition	3
PSYC 240 Statistical Procedures	3
PSYC 310 Lifespan Human Development	3

Performing Arts Department

Majors

- BA in Music
- BA in Music: Interdisciplinary
- BA in Music Education *(offered in conjunction with the Undergraduate Education Department)*
- BA in Theatre
- BA in Theatre: Interdisciplinary

Minors

- Church Music
- Music
- Music Theatre
- Theatre

Bachelors (BA) in Music

The music major offers a 44.5-64-semester-hour course of study. Students are required to obtain a minimum grade of C- in all courses taken for the major.

The music major consists of a music core required of all majors, plus one of four concentrations: composition, general, performance, or preteaching. The preteaching concentration in music prepares the student to take the Oregon Praxis Examination in music as preparation for application to George Fox University's Master of Arts in Teaching Program or another similar program.

Major Requirements

Music Core (32.5-33 hours)

MUSI 121 Theory I	3
MUSI 122 Theory II	3
MUSI 130 Music in World Cultures	2
MUSI 131 Sight Singing and Ear Training I	1
MUSI 132 Sight Singing and Ear Training II	1
MUSI 180 Introduction to Music Technology	2
MUSI 221 Theory III	4
MUSI 222 Theory IV	4
MUSI 311 Music History I	3
MUSI 312 Music History II	3
MUSI 320 Form and Analysis	2
MUSI 400 Music and Christian Faith	2
MUSI 490 Degree Recital/Project	1
Students must choose one of the following courses:	
MUSI 200 Basic Conducting	1.5
MUSI 460 Advanced Conducting (with permission)	2

Concentrations

Students must select one of the following concentrations:

Composition (22 hours)

MUSI 310 Counterpoint	2
MUSI 430 Instrumentation and Orchestration	2
Students must complete 8 semester hours as follows:	
MUSI 225 Composition I (two semesters)	2
MUSI 425 Composition II (four semesters)	6
Students must complete 10 total semester hours from the following courses, with no fewer than four semesters in either area:	10
MUSA 105/305 (Applied Music)	
MUSA Ensembles	

General (15 hours)

Students must complete 10 semester hours from the following courses, with no fewer than four semesters in either area:	10
MUSA 105/305 (Applied Music)	
MUSA Ensembles	
Students must take 5 semester hours of music theory and literature (MUSI) courses, at least 3 of which must be upper division.	5

Performance (12 hours)

Students must take 8 semesters of the following courses:	
MUSA 105/305 Applied Music	4-8
Students must take 8 semesters of the following courses:	
MUSA 115-365 Large Ensemble (Chehalem Symphony Orchestra, Concert Choir, Master Chorus, or Symphonic Band is required in addition to other ensembles)	4-8

Preteaching (31 hours)

EDUC 250 Teaching as a Profession	2
MUSI 270 Music Techniques Instrumental I	1
MUSI 271 Music Techniques Instrumental II	1
MUSI 272 Music Techniques Vocal	1
MUSI 410 Elementary Music Methods	3
MUSI 411 Middle Level and High School Music Methods	3
Students must complete 10 semester hours from the following courses, with no fewer than four semesters in either area:	10
MUSA 105/305 (Applied Music)	
MUSA Ensembles	

Supportive Music Studies

Supportive music studies allow the student to choose an interest area with his or her advisor to pursue courses that supplement the student's interest in performance, composition, or sacred music. The *Fine Arts Handbook* at the music office serves as a guide for student and advisor.

Music majors must be enrolled in a major ensemble each semester. A solo recital and achievement of upper-division standing is required of all music majors. The recital is given in the senior year after the student has been granted upper-division standing and has passed a recital hearing given before the applied music faculty.

All music majors also are required to pass a piano proficiency examination administered at the end of the sophomore year. Students are required to register for MUSA 105/305 Applied Piano (1) or MUSI 135 Class Piano (1) until the proficiency has been met. Music majors will not be recommended for graduation until the proficiency has been passed.

Individual instruction is offered in voice, piano, organ, strings, woodwinds, brass, percussion, drum set, bass guitar, and guitar. Music majors are required to enroll in applied music lessons each semester.

Each semester will include:

1. Thirteen 30-minute lessons.
2. A jury (on the Monday of each final exam week).
3. A minimum of 10 lessons (or roughly 75 percent of the lessons) must be attended by a student in order to receive a passing grade in applied music.
4. Incomplete grades will only be given for applied lessons with instructor approval. (Further instruction fees may apply.)

Students are charged a $260 instructional fee each semester per credit. Each credit reflects 13 thirty-minute lessons at a rate of $20 per lesson.

Lessons will be made up if the teacher had to be absent or a student was unable to come to a lesson due to extended illness (with the appropriate nurse's or doctor's verification). It is the responsibility of the teacher or student to notify the other in advance if a lesson cannot be attended. Make-up lessons for any other reasons generally will not be given.

Through the second full week of lessons in each semester, students may discontinue study and be charged only for the number of scheduled lessons to date. Any of the lessons missed during the two-week period because of an extended illness will be made up. Any lesson missed because the teacher had to be absent will also be made up. Any lessons missed without a valid reason, as stated above, will not be made up but will still be charged to the student's account.

Students who discontinue lessons after the end of the second week may officially withdraw without receiving a grade providing the registrar's office is apprised before the official "last day to withdraw from class" printed in the current class schedule, BUT they will forfeit the instructional fee charged for the entire semester. The applied teacher will receive the total amount. One exception to this manner of dealing with charges is when students are incapacitated or have an official doctor's order to discontinue study (legitimate examples include a drummer who breaks an arm or a vocalist who develops vocal nodules and must be silent for a significant period of time). Any refund in these special cases will be given only for the remaining weeks of study after the student has met with the applied instructor.

All students enter the applied program at the 100- level. Before being advanced to upper-division study, the student must pass a faculty jury. All applied music students are expected to perform periodically in studio or public recital, but only students who have advanced to upper-division study levels will be permitted to present a half or full recital. These recitals may be given only by permission after the student has performed the recital repertoire in a faculty hearing.

Bachelors (BA) in Music Education

The music education major offers a 78.5-79-semester-hour course of study that is designed to prepare students for pre-K-12 music education. Students are required to obtain a minimum grade of C- in all courses taken for the major. Music education admissions requirements, policies, and procedures are listed on the teacher education department page.

Special General Education Requirements

Music education majors shall complete the following 51-hour general education requirement (the following summaries note total hours and exceptions to the university general education policy. Refer to the general education requirements of this catalog for specific course options):

1. Senior Capstone: 3 hours
2. Bible and Religion: 10 hours from stated options
3. Communication: 6 hours from stated options
4. Health and Human Performance: 3 hours from stated option
5. Humanities: 11 hours from stated options. No more than one course in music allowed for music majors, and all music majors are strongly advised to take visual arts and literature courses rather than music courses for their general education options.
6. Mathematics: 3 hours from stated options
7. Natural Science: 6 hours from stated options
8. Social Science: 6 hours from stated options, including PSYC 150 General Psychology (3)
9. Global and Cultural Understanding: 3 hours from stated options (since MUSI 130 Music in World Cultures is only 2 hours, it will not fulfill this requirement)

Major Requirements

Music Core (32.5 hours)

MUSI 121 Theory I	3
MUSI 122 Theory II	3
MUSI 130 Music in World Cultures	2
MUSI 131 Sight Singing and Ear Training I	1
MUSI 132 Sight Singing and Ear Training II	1
MUSI 180 Introduction to Music Technology	2
MUSI 200 Basic Conducting	1.5
MUSI 221 Theory III	4
MUSI 222 Theory IV	4
MUSI 311 Music History I	3
MUSI 312 Music History II	3
MUSI 320 Form and Analysis	2
MUSI 400 Music and Christian Faith	2
MUSI 490 Degree Recital/Project	1

Applied Music, Ensembles and Proficiencies (7.5 hours)

MUSA 105/305 Applied Music (six consecutive semesters)	4
MUSA Ensemble coursework (seven consecutive semesters)	3.5

Students must pass the departmental keyboard proficiency requirements and

successfully complete a junior recital

Professional Courses (36 hours)

EDUC 240 Perspectives in Education	2
EDUC 341 Learning Theory	2
EDUC 370 Curriculum and Instruction	3
EDUC 375 Student Teaching I and Classroom Management	2
EDUC 475 Student Teaching II	12
EDUC 490 Senior Seminar	3
MUSI 190 Foundation of Music Education	1
MUSI 410 Elementary Music Methods	3
MUSI 411 Middle Level and High School Music Methods	3
MUSI 460 Advanced Conducting	2
PSYC 310 Lifespan Human Development	3

Tracks (2.5-3 hours)

Instrumental Track

MUSI 270 Music Techniques Instrumental I	1
MUSI 271 Music Techniques Instrumental II	1
Private voice lessons (.5) or Class voice (1)	.5-1

Choral Track

MUSI 272 Music Techniques Vocal	1
MUSI 273 Instrumental Music Techniques for Choral Conductors	1
Class guitar or vocal diction	1

Bachelors (BA) in Interdisciplinary Studies: Music

Major Requirements

An interdisciplinary studies major may be elected through application and approval of the music faculty. The student must show how the proposed major meets reasonable academic and vocational objectives. An interdisciplinary studies major in Music consists of 48 semester hours; 24 semester hours as specified by music faculty and 24 semester hours in another major field. Many creative options are possible. Common majors include music and religion, or music and Christian ministries.

Bachelors (BA) Theatre

The theatre major offers a 45-semester-hour course of study that is designed to prepare students for entry into the competitive field of theatre as actors, directors, designers, technicians, and managers. The major offers a concentration in acting/directing and a concentration in design/technology. Each concentration features a balance between theory and performance courses and requires students to apply their knowledge through laboratory classes in conjunction with the university theatre's main stage season. Students are required to obtain a minimum grade of C- in all courses taken for the major.

Major Requirements

Theory Core (18 hours)

LITR 379 Shakespeare	3
THEA 130 Stagecraft	3
THEA 240 Understanding Drama	3
THEA 340 Theatre as Ministry	3
THEA 420 Theatre Management	3
THEA 440 Theatre History	3

Electives (6 hours)

Students must choose 6 semester hours from the following courses:

CMCO 320 Dramatic Scriptwriting	3
CMCO 430 Producing and Directing Video	3
COMM 230 Mass Media and Popular Culture	3
THEA 160/360 Improvisational Theatre Workshop	3
THEA 220 Oral Interpretation of Literature	3
THEA 285/485 Selected Topics	3
THEA 350 Music Theatre Performance	3

Practicum (6 hours)

Students must choose 6 semester hours from the following courses:

THEA 165/365 George Fox University Players: Drama Touring Troupe	1
THEA 125/325 A Theatre Laboratory — Acting	1
THEA 125/325 B Theatre Laboratory — Directing	1
THEA 125/325 C Theatre Laboratory — Technical	1
THEA 125/325 D Theatre Laboratory — Design	1
THEA 275/475 Field Experience	1-6
THEA 495 Special Study	1-3

Concentrations (15 hours)

Students must select one of the following concentrations:

Acting/Directing

THEA 200 Acting II — Stage Voice and Movement	3
THEA 300 Acting III — Contemporary Scene Study	3

THEA 370 Directing for Theatre	3
THEA 400 Acting IV — Acting Shakespeare	3
Students must choose one of the following courses:	
THEA 330 Stage Lighting and Sound	3
THEA 430 Scenic Design	3

Design/Technology

THEA 125/325 D Theatre Laboratory — Design	3
THEA 330 Stage Lighting and Sound	3
THEA 430 Scenic Design	3
Students must choose one of the following courses:	
FCSC 120 Apparel Construction	3
FCSC 380 Evolution of World Dress	3
Students must choose one of the following courses:	
THEA 300 Acting III — Contemporary Scene Study	3
THEA 370 Directing for Theatre	3
THEA 400 Acting IV — Acting Shakespeare	3

Bachelors (BA) in Interdisciplinary Studies: Theatre

Major Requirements

An interdisciplinary studies major may be elected through application and approval of the theatre faculty. The student must show how the proposed major meets reasonable academic and vocational objectives. An interdisciplinary studies major in Theatre consists of 48 semester hours; 24 semester hours as specified by theatre faculty and 24 semester hours in another major field. Creative options include theatre and music, theatre and Christian ministries, theatre and literature, theatre and communication media and broadcast, and theatre and business administration (marketing/management).

Church Music Minor

19 credit hours

Minor Requirements

MUSA 105/305VC Applied Voice	2
MUSI 121 Theory I	3
MUSI 131 Sight Singing and Ear Training	1
MUSI 200 Basic Conducting	1.5
MUSI 272 Music Techniques Vocal	1
MUSI 340 Church Music (History and Administration)	3
MUSI 400 Music and Christian Faith	2
Students must choose 1.5 semester hours from the following courses:	
MUSA 125C/325C Concert Choir	.5-1
MUSA 135A/335A Chamber Singers	.5
MUSA 135B/335B Chorale	.5
MUSA 135J/335J Vocal Jazz Ensemble	.5
Students must choose 2 semester hours from the following courses:	
MUSA 105PN Applied Piano	1-2
MUSA 105OR Applied Organ	1-2
MUSI 135 Class Piano	1
Students must choose 2 semester hours from the following options based on their specialty:	
Keyboard specialists	
MUSI 380 Keyboard Improvisation and Service Playing	2
Non-keyboard specialists	
Music theory and literature (MUSI) coursework	2

Music Minor

19.5 - 21.5 credit hours

Minor Requirements

MUSI 121 Theory I	3
MUSI 122 Theory II	3
MUSI 131 Sight Singing and Ear Training I	1
MUSI 132 Sight Singing and Ear Training II	1
MUSI 200 Basic Conducting	1.5
MUSI 311 Music History I	3
MUSI 312 Music History II	3
MUSA 105/305 Applied Music	2
Students must choose 4 semesters from:	2-4
Ensemble (MUSA 115 or above) coursework	

Music Theatre Minor

21 credit hours

Minor Requirements

Music Theory (4 hours)

MUSI 121 Theory I	3
MUSI 131 Sight Singing and Ear Training	1

Applied Music (3 hours)

Students must choose at least one of the following courses:	
MUSA 125/325 C - Concert Choir	.5-1
MUSA 135/335 B - Chorale	.5
Students must choose at least one of the following courses:	
MUSA 105 VC - Applied Voice	1-2
MUSI 125 - Voice Class	1

Dance (1 hour)

Students must choose one of the following courses:	
HHPA 107/307 Dance Performance	1
HHPA 109/309 Ballroom Dance	1

Theatre (10 hours)

THEA 100 Acting I - Fundamentals	3
THEA 200 Acting II - Stage Voice and Movement	3
THEA / MUSI 350 Music Theatre Performance	3
Students must choose at least one of the following courses:	
THEA 125/325 A Theatre Laboratory — Acting	1
THEA 125/325 B Theatre Laboratory — Directing	1
THEA 125/325 C Theatre Laboratory — Technical	1
THEA 125/325 D Theatre Laboratory — Design	1

Electives (3 hours)

Theatre (THEA) or music theory and literature (MUSI) coursework	3

Theatre Minor

19 credit hours

Minor Requirements

Theatre Minor Core (13 hours)

THEA 100 Acting 1 — Fundamentals	3
THEA 130 Stagecraft	3
THEA 340 Theatre as Ministry	3
THEA 440 Theatre History	3
Students must choose 1 of the following:	
THEA 125/325 A Theatre Laboratory — Acting	1
THEA 125/325 B Theatre Laboratory — Directing	1
THEA 125/325 C Theatre Laboratory — Technical	1
THEA 125/325 D Theatre Laboratory — Design	1

Electives (6 hours)

Students must choose 6 semester hours from the following courses:	
LITR 240 Understanding Drama	2
THEA 125/325 A Theatre Laboratory — Acting	1
THEA 125/325 B Theatre Laboratory — Directing	1
THEA 125/325 C Theatre Laboratory — Technical	1
THEA 125/325 D Theatre Laboratory — Design	1
THEA 160/360 Improvisational Theatre Workshop	2
THEA 165/365 George Fox University Players: Drama Touring Troupe	1
THEA 200 Acting II — Stage Voice and Movement	3
THEA 220 Oral Interpretation of Literature	3
THEA 275 Field Experience	1-6
THEA 285 Selected Topics	3
THEA 300 Acting III — Contemporary Scene Study	3
THEA 330 Stage Lighting and Sound	3
THEA 350 Music Theatre Performance	3
THEA 370 Directing for Theatre	3
THEA 400 Acting IV — Shakespeare	3
THEA 420 Theatre Management	3
THEA 430 Scenic Design	3
THEA 475 Field Experience	1-6
THEA 485 Selected Topics	3
THEA 495 Special Study	1-3

Political Science Department

Majors

- BA in Political Science

Minors

- Peace Studies
- Political Science

In addition to the major and minors listed above, the political science department also administers the program leading to the Certificate in Conflict Management.

Bachelors (BA) in Political Science

The political science major offers a 36-semester-hour course of study. A minimum of 21 semester hours must be upper-division courses. Students are required to obtain a minimum grade of C- in all courses taken for the major.

Major Requirements

PSCI 150 Introduction to Political Science	3
PSCI 275/475 Field Experience†	3-6
PSCI 490 Senior Seminar	3

Students must take at least one class in each of the following fields:

American Government

PSCI 190 American Government	3
PSCI 243 Introduction to Public Administration	3
PSCI 240 State and Local Government	3
PSCI 320 Constitutional Law: Issues of National Power	3
PSCI 353 Constitutional Law: Civil Rights and Liberties	3
PSCI 440 Christianity and Politics in America	3
PSCI 450 Campaigns and Elections	3

Comparative Government

PSCI 253 Introduction to Comparative Government	3
PSCI 330 Politics of the Developing World	3
PSCI 333 European Politics	3

International Relations

PSCI 230 Introduction to International Relations	3
PSCI 303 International Conflict and Peace	3
PSCI 380 American Foreign Policy	3
PSCI 383 International Organizations and International Law	3
PSCI 480 Global Environmental Politics and Policy	3

Political Theory

PSCI 280 Introduction to Political Philosophy	3
PSCI 300 American Political Theory	3

Peace Studies

PSCI 310 Conflict Resolution	3
PSCI 363 War and Conscience in the United States	3
PSCI 410 Community Mediation	3
PSCI 460 Peace Theory	3

Electives (9-12 hours)

In addition to courses listed above, students may select from the following courses to bring total to 36 semester hours:

PSCI 260 Introduction to Law	3
PSCI 285 Selected Topics	3
PSCI 485 Selected Topics	3
ECON 370 Global Political Economy	3
PSYC 340 Statistical Procedures *-or-* SOCI 340 Statistical Procedures *(highly recommended)*	3

†Only 3 hours of credit may be earned from one internship. Up to 6 hours of major requirements may be earned from internship credit, but of these only 3 hours may be upper-division credit.

Peace Studies Minor

21 credit hours

The Peace Studies minor explores the moral, strategic, and practical aspects of peacemaking at every level of human activity from the interpersonal to the international. Students study the origins of conflicts, dynamics that sustain them, opportunities they offer, destruction they cause, and various approaches available for peacemaking. Courses draw on a wide variety of disciplines -- political science, history, economics, communications, and religion. For more information, students should see the Director of the Center for Peace and Justice.

Minor Requirements

PSCI 303 International Conflict and Peace	3
PSCI 390 Peace Research	3
PSCI 475 Field Experience	3
Students must choose 4 of the following courses:	
BIBL 390 Biblical Basis for Peacemaking	3
COMM 310 Conflict Resolution	3
PSCI 363 War and Conscience in the United States	3
PSCI 230 Introduction to International Relations	3
PSCI 410 Community Mediation	3
SOCI 370 Global Political Economy	3

Political Science Minor

18 credit hours

Minor Requirements

PSCI 150 Introduction to Political Science	3
PSCI 320 Constitutional Law: Issues of National Power	3
Political science (PSCI) coursework†	12

†No more than 3 hours of internship credit may apply.

Certificate in Conflict Management

15 credit hours

The Center for Peace and Justice coordinates a special course of study in conflict management designed to give students concentrated preparation for practical peacemaking in their work, church, community, and family. Students will study the theory of communication and conflict resolution, be introduced to relevant skills, and equip themselves to apply this learning in a variety of action settings.

Credits taken toward the certificate may also be applied also toward general education, major, or minor requirements. Successful students will receive a certificate of completion upon graduation.

Certificate Requirements

PSCI 310 Conflict Resolution (3)	3
PSCI 410 Community Mediation (3)	3
Students must choose one of the following courses:	
COMM 200 Persuasive Communication (3)	3
COMM 210 Interpersonal Communication (3)	3
Students must choose one of the following courses:	
PSYC 381 Counseling (3)	3
MGMT 480 Organizational Behavior (3)	3
SOCI 300 Group Dynamics (3)	3
Field experience in a conflict resolution or mediation program or agency tailored to the individual student's needs†	3

†Should be taken after PSCI 410 Community Mediation or concurrently with it

Psychology Department

Majors

- BS in Cognitive Science
- BA in Psychology
- BS in Psychology

Minors

- Psychology

Bachelors (BS) in Cognitive Science

This major offers a 43-semester-hour course of study. The major is an interdisciplinary study of the mind that draws on several disciplines to provide a broad foundation from which to understand and study mental processes. Students are provided flexibility within the major to explore that aspect of the mind that most interests them (e.g., psychological, physiological, philosophical, computational). Students are required to obtain a minimum grade of C- in all courses taken for the major.

Special General Education Requirements

BIOL 331 Human Anatomy and Physiology I	4
PHIL 150 Introduction to Philosophy	3
PSYC 150 General Psychology	3
SOCI 310 Cultural Anthropology	3
Students must choose one of the following courses:	
MATH 201 Calculus I	4
MATH 260 Discrete Mathematics	3

Major Requirements

PSYC 320 Neuroscience	3
PSYC 450 History and Systems of Psychology	3
PSYC 490 Senior Seminar	1

Methods Courses (15 hours)

CSIS 201 Introduction to Computer Science I	3
CSIS 202 Introduction to Computer Science II	3
PSYC 340 Statistical Procedures	3
PSYC 391 Research Methods	3
PSYC 392 Advanced Research Methods	3

Survey Courses (21 hours)

Students must choose 7 of the following courses:

COMM 340 General and Cultural Linguistics	3
CSIS 440 Artificial Intelligence (AI)	3
LITR 360 Values Through Story and Myth	3
MATH 290 Introduction to Proofs	3
PHIL 250 Thinking Well: Logicand Life	3
PSYC 350 Social Psychology	3
PSYC 360 Learning	3
PSYC 370 Cognition	3
PSYC 410 Sensation and Perception	3

Students have the option to choose an additional 3-6 semester hours of research or special study in field of emphasis

Bachelors (BA) in Psychology

This major offers a 37-semester-hour course of study, designed to acquaint students with the field of psychology and the implications of its principles for human behavior. The bachelor of arts degree has a greater emphasis on applied learning than does the bachelor of science. Students are required to obtain a minimum grade of C- in all courses taken for the major.

Special General Education Requirements

PSYC 150 General Psychology	3
SOCI 150 Principles of Sociology	3

Major Requirements

PSYC 340 Statistical Procedures	3
PSYC 391 Research Methods	3
PSYC 450 History and Systems of Psychology	3
PSYC 490 Senior Seminar	1
Students must choose one course from the following:	
PSYC 330 Personality Theories	3
PSYC 350 Social Psychology	3
PSYC 353 Culture and Psychology	3
PSYC 440 Psychology of Religion	3
Students must choose one course from the following:	
PSYC 311 Child Development	3
PSYC 312 Adult Development	3
PSYC 314 Adolescent Development	3
Students must choose one course from the following:	
PSYC 381 Counseling	3
PSYC 400 Psychological Testing	3
PSYC 420 Abnormal Psychology	3
PSYC 430 Drugs and Alcohol	3
Students must choose 2 courses from the following:	
PSYC 320 Neuroscience	3
PSYC 360 Learning	3
PSYC 370 Cognition	3
PSYC 410 Sensation and Perception	3
Students must choose one course from the following:	
PSYC 475 Field Experience	3
PSYC 495 Special Study	3
Psychology (PSYC) coursework	9

Bachelors (BS) in Psychology

This major offers a 37-semester-hour course of study, designed to acquaint students with the field of psychology and the implications of its principles for human behavior. The bachelor of science degree has a greater emphasis on scientific methodology than does the bachelor of arts. Students are required to obtain a minimum grade of C- in all courses taken for the major.

Special General Education Requirements

PSYC 150 General Psychology	3
SOCI 150 Principles of Sociology	3

Major Requirements

PSYC 340 Statistical Procedures	3
PSYC 391 Research Methods	3
PSYC 392 Advanced Research Methods	3
PSYC 450 History and Systems of Psychology	3
PSYC 490 Senior Seminar	1
Students must choose one course from the following:	
PSYC 330 Personality Theories	3
PSYC 350 Social Psychology	3
PSYC 353 Culture and Psychology	3
PSYC 440 Psychology of Religion	3
Students must choose one course from the following:	
PSYC 311 Child Development	3
PSYC 312 Adult Development	3
PSYC 314 Adolescent Development	3
Students must choose one course from the following:	
PSYC 381 Counseling	3
PSYC 400 Psychological Testing	3
PSYC 420 Abnormal Psychology	3
Students must choose two courses from the following:	
PSYC 320 Neuroscience	3
PSYC 360 Learning	3
PSYC 370 Cognition	3
PSYC 410 Sensation and Perception	3
Psychology (PSYC) coursework	9

Psychology Minor

18-19 credit hours

Minor Requirements

PSYC 150 General Psychology	3
PSYC 311 Child Development	3
PSYC 450 History and Systems of Psychology	3

Concentrations

Students must choose one concentration:

Experimental Psychology

Students must choose three of the following courses:

PSYC 320 Neuroscience	3
PSYC 350 Social Psychology	3
PSYC 360 Learning	3
PSYC 370 Cognition	3
PSYC 391 Research Methods	3
PSYC 400 Psychological Testing	3
PSYC 420 Abnormal Psychology	3

Counseling/Clinical Psychology

Students must choose three of the following courses:	3
PSYC 330 Personality Theories	3
PSYC 350 Social Psychology	3
PSYC 381 Counseling	3
PSYC 382 Advanced Counseling	3
PSYC 400 Psychological Testing	3
PSYC 420 Abnormal Psychology	3
PSYC 430 Drugs and Alcohol	

Educational Psychology (Education Majors)

EDUC 341 Learning Theory	2
EDUC 342 Inclusion	2

Students must choose two of the following courses:

PSYC 314 Adolescent Development	3
PSYC 330 Personality Theories	3
PSYC 370 Cognition	3
PSYC 381 Counseling	3
PSYC 400 Psychological Testing	3

Educational Psychology (Non-Education Majors)

Students must choose three of the following courses:	3
PSYC 312 Adult Development	3

PSYC 314 Adolescent Development	3
PSYC 330 Personality Theories	3
PSYC 350 Social Psychology	3
PSYC 360 Learning	3
PSYC 370 Cognition	3
PSYC 381 Counseling	3
PSYC 400 Psychological Testing	3

Religious Studies Department

Majors

- BA in Biblical Studies
- BA in Biblical Studies: Interdisciplinary
- BA in Christian Ministries
- BA in Christian Ministries: Interdisciplinary
- BA in Philosophy
- BA in Religion: Interdisciplinary

Minors

- Biblical Studies
- Camping: Administrative
- Camping: Programming
- Christian Ministries: Church Recreation
- Christian Ministries: Educational Ministry
- Christian Ministries: Missions
- Christian Ministries: Youth Ministries
- Philosophy
- Quaker Studies
- Religion

Bachelors (BA) in Biblical Studies

The biblical studies major offers a 37-38 semester-hour course of study that is designed to provide a good foundation for some church ministries, work with youth and parachurch organizations, teaching Bible in Christian school settings, and for further graduate work in Bible and theology. The student who majors in Bible will acquire an in-depth working knowledge of Scripture, its backgrounds, and methods of interpretation. Students are required to obtain a minimum grade of C- in all courses taken for the major. A minimum of 18 semester hours must be from upper-division courses (including at least 6 semester hours at the 400 level).

Major Requirements

BIBL 290 Biblical Interpretation	3
BIBL 490 Biblical Theology	3
Select one year of biblical language:	
GREK 201/202 Hellenistic Greek I and II or	8
HEBR 201/202 Introduction to Biblical Hebrew I and II	8
Students must choose one of the following courses:	
CHMN 320 Relational Bible Teaching	2
CHMN 420 Speaking as Ministry	3
Biblical studies (BIBL) coursework	18

- BIBL 100 Bible Survey (4) may not be applied to the major
- One semester of BIBL 101 Literature of the Old Testament (3) or BIBL 102 Literature of the New Testament (3) may be applied as biblical studies credit
- GREK 301/302 Hellenistic Greek III and IV may be applied as biblical studies credit
- No more than 2 semester hours in BIBL 495 Special Study may count toward major requirements

Bachelors (BA) in Interdisciplinary Studies: Biblical Studies

An interdisciplinary studies major may be elected through application and approval of the religious studies faculty. The student must show how the proposed major meets reasonable academic and vocational objectives. An interdisciplinary studies major in Biblical Studies consists of 48 semester hours; 24 semester hours as specified below and 24 semester hours in another major field.

Major Requirements

Biblical Studies (12 hours)

Biblical studies (BIBL) coursework	12

Christian Ministries (3 hours)

Students must choose one of the following courses:	
CHMN 360 Perspectives in Christian Education	3
CHMN 390 Theological Foundations of Christian Ministry	3

Religion (6 hours)

RELI 380 Christian Beliefs	3
Religious studies (RELI) coursework	3

Philosophy (3 hours)

Philosophy (PHIL) coursework	3

Bachelors (BA) in Christian Ministries

The Christian ministries major offers a 41-42-semester-hour course of study that is designed to prepare students to enter Christian service in local churches and parachurch organizations, providing biblical and theological preparation and an excellent base for graduate studies in a wide variety of ministry fields. Typical careers are positions as pastors, missionaries, youth pastors, and Christian education directors. Students are required to obtain a minimum grade of C- in all courses taken for the major. A minimum of 18 semester hours must be from upper-division courses. A limit of 4 semester hours of field experience may apply to the major.

Major Requirements

Required Core Courses (25 hours)

CHMN 130 Christian Discipling	4
RELI 380 Christian Beliefs	3
Students must take one of the following courses:	
RELI 401 Christianity in History I	3
RELI 402 Christianity in History II	3
Students must take two of the following courses:	
CHMN 390 Theological Foundations of Christian Ministry	3
CHMN 360 Perspectives in Christian Education	3
CHMN 420 Speaking as Ministry	3
Biblical studies (BIBL) coursework	6
Philosophy (PHIL) coursework	3

Concentrations (16-17 hours)

Church Recreation

CHMN 320 Relational Bible Teaching	2
CHMN 370 Camp Programming and Counseling	3
CHMN 440 Camp Administration	2
CHMN 475 Field Experience	2
HHPE 380 Experiential Recreational Leadership	3
HHPA 120 Lifelong Fitness	2
Students must choose one of the following courses:	
RELI 340 Christian Classics	3
RELI 350 Spiritual Formation	3
RELI 490 Contemporary Religious Life	3

Educational Ministry (Shared Praxis)

CHMN 391 Shared Praxis I: Introduction to Educational Ministry	4
CHMN 392 Shared Praxis II: Christian Theology Related to Ministry	4
CHMN 491 Shared Praxis III: Methods and Skills in Ministry	4
CHMN 492 Shared Praxis IV: Supervised Field Experience	4

Missions

CHMN 475 Field Experience	2
RELI 330 Introduction to the World Christian Movement	3
RELI 360 Cross-Cultural Christian Outreach	3
RELI 440 World Religions	3
RELI 460 Issues in Contemporary Missions	3
Christian ministries (CHMN) coursework	2

Youth Ministry

CHMN 330 Foundations of Youth Ministry	4
CHMN 381 Counseling	3
PSYC 311 Child Development	3
PSYC 314 Adolescent Development	3
Students must choose one of the following courses:	
CHMN 370 Camp Programming and Counseling	3
HHPE 380 Experiential Recreational Leadership	3

Bachelors (BA) in Interdisciplinary Studies: Christian Ministries

An interdisciplinary studies major may be elected through application and approval of the religious studies faculty. The student must show how the proposed major meets reasonable academic and vocational objectives. An interdisciplinary studies major in Christian Ministries consists of 48 semester hours; 24 semester hours as specified below and 24 semester hours in another major field.
For the Christian ministries block, the student will select one of four concentrations which will specify the CHMN coursework to be completed: church recreation, educational ministry (Shared Praxis), missions, or youth ministry.

Major Requirements

Biblical Studies (6 hours)

- Biblical studies (BIBL) coursework BIBL 100 Bible Survey (4) may not be applied to the major 6
- One semester of BIBL 101 Literature of the Old Testament (3) or BIBL 102 Literature of the New Testament (3) may be applied as biblical studies credit

Christian Ministries (12 hours)

CHMN 130 Christian Discipling (4)	4
CHMN 360 Perspectives in Christian Education (3)	3
Christian ministries (CHMN) coursework (as specified above)	5

Religion (3 hours)

RELI 380 Christian Beliefs (3)	3

Philosophy (3 hours)

Students must choose 3 semester hours of philosophy (PHIL) coursework	3

Also offered is an interdisciplinary block in the area of camping ministries utilizing the requirements of a camping minor.

Bachelors (BA) in Philosophy

The philosophy major offers a 39-semester-hour course of study that is designed to prepare students to think well and communicate clearly. A classic liberal arts major, philosophy prepares students for a wide variety of options in graduate school, including history, law, law enforcement, literature, philosophy, and theology. Skills in critical thinking and clear communication also prepare students well for careers in business and industry. Most important, philosophical skills are central to the active life of the mind. Students are required to obtain a minimum grade of C- in all courses taken for the major. A minimum of 21 semester hours must be upper-division courses.

Major Requirements

Philosophy Core (18 hours)

PHIL 150 Introduction to Philosophy	3
PHIL 180 Ethics	3
PHIL 250 Thinking Well: Logic and Life	3
PHIL 277 Spirituality and the Intellectual Life	3
PHIL 490 Philosophy Capstone	3
Students must choose one of the following courses:	
PHIL 311 History 1: Ancient and Medieval Philosophy	3
PHIL 312 History 2: Modern and Postmodern Philosophy	3

Specialization Tracks (21 hours)

Students must choose one of the specializations below and take the courses associated with it. Possible electives to meet the total 21 semester hours are listed below the tracks.

Creation Care

GSCI 120 Environmental Science	3
PHIL 320 Agrarian Philosophy: Humans and the Land	3
PHIL 415 Contemporary Philosophers	3
Students must choose one of the following courses to complete history sequence:	
PHIL 311 History 1: Ancient and Medieval Philosophy	3
PHIL 312 History 2: Modern and Postmodern Philosophy	3
Philosophy (PHIL) electives (from approved options below)	9

Graduate School

PHIL 270 Philosophy of the Arts	3
PHIL 332 Virtue Philosophy	3
PHIL 415 Contemporary Philosophers	3
Students must choose one of the following courses to complete history sequence:	
PHIL 311 History 1: Ancient and Medieval Philosophy	3
PHIL 312 History 2: Modern and Postmodern Philosophy	3

Philosophy (PHIL) electives (from approved options below)	9

Pre-Law

PHIL 280 Introduction to Political Philosophy	3
PHIL 312 History 2: Modern and Postmodern Philosophy	3
PHIL 330 Religion and Reason	3
PHIL 415 Contemporary Philosophers	3
PSCI 260 Introduction to Law	3
Philosophy (PHIL) electives (from approved options below)	6

Pre-Med

PHIL 330 Religion and Reason	3
PHIL 332 Virtue Philosophy	3
PHIL 415 Contemporary Philosophers	3
Philosophy (PHIL) electives (from approved options below)	9
Students must choose one of the following courses:	
CHEM 331 Organic Chemistry I	4
PHYS 201 General Physics I	4
MATH 201 Calculus I	4

Pre-Seminary

PHIL 310 Christian Apologetics	3
PHIL 415 Contemporary Philosophers	3
Students must choose one of the following courses to complete history sequence:	
PHIL 311 History 1: Ancient and Medieval Philosophy	3
PHIL 312 History 2: Modern and Postmodern Philosophy	3
Philosophy (PHIL) electives (from approved options below)	9
Students must choose one of the following courses:	
BIBL 340 Between the Testaments	3
RELI 380 Christian Beliefs	3

Social Justice

PHIL 312 History 2: Modern and Postmodern Philosophy	3
PHIL 315 Sex and Gender	3
PHIL 415 Contemporary Philosophers and Problems	3
Philosophy (PHIL) electives (from approved options below)	9
Students must choose one of the following courses:	
BIBL 390 Biblical Basis for Peacemaking	3
SOCI 366 Social Change	3

Specialized

Electives determined in consultation with department†	21

†The track must include a methodology course and an upper-division content course.

Approved Electives (used to meet 21 hours in Track coursework)

PHIL 270 Philosophy of the Arts	3
PHIL 310 Christian Apologetics	3
PHIL 311 History 1: Ancient and Medieval Philosophy	3
PHIL 312 History 2: Modern and Postmodern Philosophy	3
PHIL 315 Sex and Gender	3
PHIL 330 Religion and Reason	3
PHIL 324 Agrarian Philosophy: Humans and the Land	3
PHIL 332 Virtue Philosophy	3

Bachelors (BA) in Interdisciplinary Studies: Religion

An interdisciplinary studies major may be elected through application and approval of the religious studies faculty. The student must show how the proposed major meets reasonable academic and vocational objectives. An interdisciplinary studies major in Religion consists of 48 semester hours; 24 semester hours as specified below and 24 semester hours in another major field.

Major Requirements

Religion (10 hours)

RELI 380 Christian Beliefs (3)	3
Religious studies (RELI) coursework	7

Christian Ministries (3 hours)

Students must choose one of the following courses:

CHMN 360 Perspectives in Christian Education (3)	3
CHMN 390 Theological Foundations of Christian Ministry (3)	3

Biblical Studies (8 hours)

Biblical studies (BIBL) coursework	8

Philosophy (3 hours)

Philosophy (PHIL) coursework	3

Biblical Studies Minor

18 credit hours

A minimum of 12 semester hours must be from upper-division courses.

Minor Requirements

Biblical Studies (12 hours)	
Biblical studies (BIBL) coursework (200 level and above)	12
Christian Ministries (3 hours)	
Christian ministries (CHMN) coursework	3
Religious Studies (3 hours)	
Religious studies (RELI) coursework	3

Camping: Administrative Minor

19 credit hours

Minor Requirements

ACCT 271 Principles of Financial Accounting	3
BUSN 110 Introduction to Business	3
CHMN 370 Camp Programming and Counseling	3
CHMN 440 Camp Administration	3
CHMN 475 Field Experience	3
MGMT 260 Principles of Management	3
Students must choose one of the following courses:	
CHMN 230 The Christian and the Outdoors	3
SOCI 300 Group Dynamics	3

Camping: Programming Minor

19 credit hours

Minor Requirements

CHMN 230 The Christian and the Outdoors	3
CHMN 370 Camp Programming and Counseling	3
CHMN 440 Camp Administration	2
CHMN 475 Field Experience	2
HHP camp-related activity courses (e.g., HHPA 103, 108, etc.)	4
Students must choose 5 semester hours from the following:	
CHMN 320 Relational Bible Teaching	2
CHMN 330 Foundations of Youth Ministry	4
HHPE 380 Experiential Recreational Leadership	3

Christian Ministries: Church Recreation Minor

19-20 credit hours
A minimum of 12 semester hours must be from upper-division courses.

Minor Requirements

CHMN 370 Camp Programming and Counseling (3)	3
CHMN 440 Camp Administration (2)	2
CHMN 475 Field Experience (2)	2
HHPE 380 Experiential Recreational Leadership (3)	3
Biblical studies (BIBL) coursework (200 level or above)	3
Students must choose one of the following courses:	
CHMN 130 Christian Discipling (4)	4
CHMN 360 Perspectives in Christian Education (3)	3
CHMN 390 Theological Foundations of Christian Ministry (3)	3
Students must choose one of the following courses:	
RELI 340 Christian Classics (3)	3
RELI 350 Spiritual Formation (3)	3
RELI 490 Contemporary Religious Life (3)	3

Christian Ministries: Educational Ministry Minor

18-20 credit hours

Minor Requirements

CHMN 391 Shared Praxis I: Introduction to Educational Ministry	4
CHMN 392 Shared Praxis II: Christian Theology Related to Ministry	4
CHMN 491 Shared Praxis III: Methods and Skills in Ministry	4
CHMN 492 Shared Praxis IV: Supervised Field Experience	4
Students must choose one of the following courses:	
CHMN 130 Christian Discipling	4
CHMN 360 Perspectives in Christian Education	3
CHMN 390 Theological Foundations of Christian Ministry	3
Biblical studies (BIBL) coursework	3-4

- BIBL 100 Bible Survey (4) may not be applied to the minor
- One semester of BIBL 101 Literature of the Old Testament (3) or BIBL 102 Literature of the New Testament (3) may be applied as biblical studies credit

Christian Ministries: Missions Minor

18-20 credit hours
A minimum of 12 semester hours must be from upper-division courses.

Minor Requirements

RELI 330 Introduction to the World Christian Movement	3
RELI 360 Cross-Cultural Christian Outreach	3
RELI 440 World Religions	3
RELI 460 Issues in Contemporary Missions	3
Students must choose one of the following courses:	
CHMN 130 Christian Discipling	4
CHMN 360 Perspectives in Christian Education	3
CHMN 390 Theological Foundations of Christian Ministry	3
Biblical studies (BIBL) coursework	3-4

- BIBL 100 Bible Survey (4) may not be applied to the minor
- One semester of BIBL 101 Literature of the Old Testament (3) or BIBL 102 Literature of the New Testament (3) may be applied as biblical studies credit

Philosophy Minor

18 credit hours

Minor Requirements

PHIL 150 Introduction to Philosophy	3
PHIL 180 Ethics	3
PHIL 277 Spirituality and the Intellectual Life	3
Students must choose one of the following courses:	
PHIL 311 History 1: Ancient and Medieval Philosophy	3
PHIL 312 History 2: Modern and Postmodern Philosophy	3
Students must choose 6 semester hours from the following:	
PHIL 300 American Political Theory	3
PHIL 310 Christian Apologetics	3
PHIL 311 History 1: Ancient and Medieval Philosophy	3
PHIL 312 History 2: Modern and Postmodern Philosophy	3
PHIL 315 Sex and Gender	3
PHIL 320 Agrarian Philosophy: Life and Land	3
PHIL 330 Religion and Reason	3
PHIL 332 Virtue Philosophy	3
PHIL 335 Knowledge and What There Is	3
PHIL 373 Social Theory	3

PHIL 399 Cross-Cultural Study	3
PHIL 415 Contemporary Philosophers	3
PHIL 435 Contemporary Problems	3
PHIL 445 History Seminar	3

Quaker Studies Minor

19 credit hours

Minor Requirements

RELI 260 History and Doctrine of Friends	3
RELI 350 Spiritual Formation	3
RELI 385 Quaker Seminar	1
RELI 402 Christianity in History II	3
Students must choose one of the following courses:	
BIBL 390 Biblical Basis for Peacemaking	3
HIST 363 War and Conscience in the United States	3
PSCI 310 Conflict Resolution	3
Students must choose 2 of the following courses or sequences (6 credit hours):	
PHIL 330 Philosophy of Religion	3
PSYC 440 Psychology of Religion	3
RELI 230/430 Sociology of Religion	3
RELI 401 Christianity in History I	3
3 additional RELI 385 Quaker Seminars (1 hour each)	3

Religion Minor

20-21 credit hours

A minimum of 14 semester hours must be upper-division coursework

Minor Requirements

RELI 330 Introduction to the World Christian Movement	3
RELI 380 Christian Beliefs	3
RELI 385 Quaker Seminar	1
RELI 440 World Religions	3
Students must choose two of the following courses:	
RELI 340 Christian Classics	3
RELI 350 Spiritual Formation	3
RELI 490 Contemporary Religious Life	3
Students must choose one of the following courses:	
RELI 260 History and Doctrine of Friends	3
RELI 401 Christianity in History I	3

RELI 402 Christianity in History II	3
Biblical studies (BIBL) coursework (200-level or above)	3-4

Christian Ministries: Youth Ministry Minor

19-20 credit hours

A minimum of 12 semester hours must be from upper-division courses.

Minor Requirements

CHMN 330 Foundations of Youth Ministry	4
CHMN 381 Counseling	3
PSYC 314 Adolescent Development	3
Students must choose one of the following courses:	
CHMN 370 Camp Programming and Counseling	3
HHPE 380 Experiential Recreational Leadership	3
Students must choose one of the following courses:	
CHMN 130 Christian Discipling	4
CHMN 360 Perspectives in Christian Education	4
CHMN 390 Theological Foundations of Christian Ministry	3
Biblical studies (BIBL) coursework (200 level or above)	3

Sociology/Social Work Department

Sociology is the study of complex and changing social relationships. The sociology program prepares students to:

- Analyze human relationships from a sociological perspective
- Develop the theoretical, technical, and statistical skills necessary for asking and answering sociological questions
- Enhance awareness of relationships between personal events and the structure of societies.

Majors

- BA in Sociology

Minors

- Social Welfare
- Sociology

Bachelor of Social Work (BSW)

Bachelors (BA) in Sociology

The sociology major offers a 39-semester-hour course of study that is designed to prepare students for admission into graduate programs, careers in higher education or research, and/or entry-level practice positions within a variety of private and public settings where knowledge of human relationships and methodological skills is helpful. Students are required to obtain a minimum grade of C- in all courses taken for the major.

Major Requirements

SOCI 150 Principles of Sociology	3
SOCI 340 Statistical Procedures	3
SOCI 373 Social Theory	3
SOCI 390 Research Methods	3
SOCI 480 Senior Research Project	3
Sociology (SOCI) coursework	6

Concentrations (18 hours)

Students must select one of the following concentrations:

Community and Families

Students must choose 6 of the following courses:

SOCI 320 Men and Women in Society	3
SOCI 323 Sociology of Families	3
SOCI 326 Sociology of Sexuality	3
SOCI 360 Crime and Deviance	3
SOCI 363 Social Stratification	3
SOCI 370 Global Political Economy	3
SOCI 380 Race and Ethnicity	3
SOCI 461 International Trade	3
SOCI 475 Internship	3

Social Justice and Inequality

Students must choose 6 of the following courses:

SOCI 303 International Conflict and Peace	3
SOCI 320 Men & Women in Society	3
SOCI 360 Crime and Deviance	3
SOCI 363 Social Stratification	3
SOCI 366 Social Change	3
SOCI 380 Race and Ethnicity	3
SOCI 410 Juvenile Delinquency	3
SOCI 475 Internship	3

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Global and Cultural Studies

Students must choose 6 of the following courses:

SOCI 303 International Conflict and Peace	3
SOCI 310 Cultural Anthropology	3
SOCI 320 Men and Women in Society	3
SOCI 323 Sociology of Families	3
SOCI 326 Sociology of Sexuality	3
SOCI 363 Social Stratification	3
SOCI 366 Social Change	3
SOCI 380 Race and Ethnicity	3
SOCI 475 Internship	3

Bachelors (BSW) in Social Work

The bachelor of social work degree offers a 126-semester-hour course of study, 51 hours of which are prescribed social work course work that is designed to prepare students for professional social work practice with diverse populations in a variety of settings. This includes work with individuals and couples (micro level); families and small groups (mezzo level); and agencies, institutions, community, and church organizations (macro level). There is an emphasis on generalist practice that values the uniqueness, dignity, and needs of all people. Generalist practice is oriented toward analyzing and addressing problems with micro, mezzo, and macro skills and perspectives.

The program courses are designed to include academic social work and field experience/practicum requirements within a liberal arts context. This enables the student to link social research with social work practice. The program prepares students to work in a variety of social work and social welfare settings, as well as to seek admission into graduate programs. Students are required to obtain a minimum grade of C- in all courses taken for the major.

Admission to Social Work Degree (BSW)

Students interested in pursuing a degree in social work should consult with a social work advisor as soon as possible. All students interested in social work as a degree must make formal application to the program.

Each applicant shall:

1. Live in compliance with the university expectations and responsibilities (found in the *Undergraduate Student Handbook*).
2. Have an overall GPA of at least 2.0 prior to filing an application to the program.
3. Complete the following pre-entry courses with a GPA of at least 2.70 and a minimum of a C grade in each of the following courses:

PSYC 150 General Psychology	3
SOCI 150 Principles of Sociology	3
SWRK 180 Introduction to Social Welfare	3

4. Complete the program application process (which includes completion of a written application, recommendations, and interview) on or before Jan. 30 of the student's sophomore year. Transfer students should see a social work advisor prior to registration.
5. Receive written acceptance into the program from the program admission committee.
6. File a Declaration of Major form with the university's registrar's office.

Special General Education Requirements

PSYC 150 General Psychology	3
SOCI 150 Principles of Sociology	3
Students must choose one of the following courses:	
BIOL 100 Foundations of Biology	3
BIOL 211 General Biology I	4
BIOL 212 General Biology II	4
BIOL 331 Anatomy & Physiology I	4
BIOL 332 Anatomy & Physiology II	4

Recommended General Education Courses

ECON 202 Principles of Macroeconomics	3
SOCI 310 Cultural Anthropology	3

Major Requirements

SWRK 180 Introduction to Social Welfare	3
SWRK 290 Diversity Issues in Social Work	3
SWRK 331 Human Behavior in the Social Environment I	3
SWRK 332 Human Behavior in the Social Environment II	3
SWRK 340 Statistical Procedures	3
SWRK 370 Foundations of Social Work Practice	3
SWRK 391 Social Work Practice I	3
SWRK 392 Social Work Practice II	3
SWRK 393 Social Work Practice III	3
SWRK 400 Social Work with Children	3
SWRK 410 Social Work with Vulnerable Adults	3
SWRK 440 Social Work Research Methods	3
SWRK 460 Social Policy	3
SWRK 475 Field Experience/Practicum I	3
SWRK 476 Field Experience/Practicum II	3
SWRK 477 Field Experience/Practicum III	3
SWRK 490 Senior Seminar	3

Sociology Minor

21 credit hours

Minor Requirements

SOCI 150 Principles of Sociology	3
SOCI 363 Social Stratification	3
SOCI 373 Social Theory	3
Students must choose one of the following courses:	3
SOCI 320 Man and Women in Society	3
SOCI 366 Social Change	3
SOCI 380 Race and Ethnicity	3
Students must choose 9 semester hours from the following courses:	
SOCI 310 Cultural Anthropology	3
SOCI 320 Man and Women in Society	3
SOCI 323 Sociology of Families	3
SOCI 326 Sociology of Sexuality	3
SOCI 340 Statistical Procedures	3
SOCI 360 Crime and Deviance	3
SOCI 380 Race and Ethnicity	3
SOCI 390 Research Methods	3
SOCI 410 Juvenile Delinquency	3
SOCI 475 Field Experience	3-6

Social Welfare Minor

18 credit hours

Minor Requirements

SWRK 180 Introduction to Social Welfare	3
SWRK 290 Diversity Issues in Social Work	3
SWRK 331 Human Behavior in the Social Environment I	3
SWRK 332 Human Behavior in the Social Environment II	3
SWRK 460 Social Policy	3
Students must choose 3 semester hours from the following courses:	
SOCI 360 Crime and Deviance	3
SOCI 380 Race and Ethnicity	3
SOCI 410 Juvenile Delinquency	3
SWRK 400 Social Work with Children	3
SWRK 485 Selected Topics	1-3

Visual Arts Department

Majors

- BA in Art
- BA in Art: Interdisciplinary

Minors

- Art
- Art History

Bachelors (BA) in Art

The art major offers a 45-48 semester-hour course of study in which students concentrate in studio and/or commercial applications encompassing a wide variety of media. Graduates pursue careers in education, graphic design, communications, ministry, and the visual arts. Students are required to earn a minimum grade of C- in all courses taken for the major.

Major Requirements

Art Core (18 hours)

ARTS 101 Basic Design I	3
ARTS 102 Basic Design II	3
ARTS 111 Drawing I	3
ARTS 112 Drawing II	3
ARTS 460 Art and Christ	3
ARTS 491 Senior Thesis I	1.5
ARTS 492 Senior Thesis II	1.5

Concentrations

Students must choose one of the following two concentrations:

Graphic Design (30 hours)

Required

ARTS 250 Introduction to Graphic Design	3
ARTS 350 Graphic Design 2: Typography	3
ARTS 360 Illustration	3
ARTS 382 Twentieth-Century Art	3
ARTS 383 History of Visual Communications	3
ARTS 450 Graphic Design 3: Design Applications	3

Electives

Students must choose 12 semester hours from the following courses:

ARTS 201 Beginning Painting	3
ARTS 230 Beginning Photography	3
ARTS 231 Beginning Printmaking	3
ARTS 301 Intermediate Painting	3
ARTS 330 Intermediate Photography	3
ARTS 451 Packaging, Public Graphics, and Signage	3
BUSN 110 Introduction to Business	3
CMCO 250 Digital Multimedia Production	3
MKTG 260 Principles of Marketing	3
MKTG 420 Marketing Communications	3
MKTG 450 Marketing Research and Decision Making	3
WRIT 310 Desktop Publishing and Design	3

Studio Arts (27 hours)

Required

ARTS 216 Art History Survey to 1450	3
ARTS 217 Art History Survey from 1450	3
Students must choose one of the following courses:	
ARTS 355 Selected Topics in Western Art	3
ARTS 365 Selected Topics in Non-Western Art	3
Students must choose one of the following courses:	
ARTS 382 Twentieth-Century Art	3
ARTS 384 Contemporary Art Forms	3

Electives

Students must choose 15 semester hours from the following courses (must include courses from three separate studio disciplines):

ARTS 201 Beginning Painting	3
ARTS 221 Beginning Sculpture	3
ARTS 230 Beginning Photography	3
ARTS 231 Beginning Printmaking	3
ARTS 240 Beginning Mixed Media	3
ARTS 241 Beginning Ceramics	3
ARTS 245/345/455 Selected Studio Media	3
ARTS 250 Introduction to Graphic Design	3
ARTS 285 Selected Topics	1-3
ARTS 295 Special Study	1-3
ARTS 301 Intermediate Painting	3
ARTS 321 Intermediate Sculpture	3
ARTS 330 Intermediate Photography	3
ARTS 331 Intermediate Printmaking	3
ARTS 340 Intermediate Mixed Media	3
ARTS 341 Intermediate Ceramics	3
ARTS 350 Graphic Design 2: Typography	3
ARTS 401 Advanced Painting	3
ARTS 421 Advanced Sculpture	3
ARTS 430 Advanced Photography	3
ARTS 431 Advanced Printmaking	3
ARTS 440 Advanced Mixed Media	3
ARTS 441 Advanced Ceramics	3
ARTS 495 Special Study	1-3
PHIL 270 Philosophy of the Arts	3
THEA 125/325C Theatre Laboratory	1-3
Students must also choose one of the following options:	

1. Submit artworks for juried GFU Art Student Exhibition
2. Present a portfolio for review and petition for an alternative exhibition venue.

Bachelors (BA) in Interdisciplinary Studies: Art

An interdisciplinary studies major may be elected through application and approval of the art faculty. The student must show how the proposed major meets reasonable academic and vocational objectives. An interdisciplinary studies major in Art consists of 48 semester hours, with a minimum of 24 semester hours in art. Creative options include art and communications, art and theatre, and art and business.

Art Minor

21 credit hours

Minor Requirements

ARTS 101 Basic Design I†	3
ARTS 111 Drawing I	3
ARTS 216 Art History Survey to 1450	3
ARTS 217 Art History Survey from 1450	3
Art (ARTS) Studio elective coursework	9

Students must also choose one of the following options:

1. Submit artworks for juried GFU Art Student Exhibition
2. Present a portfolio for review and petition for an alternative exhibition venue

†Minors focusing on 3-D studio courses may petition to substitute ARTS 102 Basic Design II for ARTS 101 Basic Design I.

Art History Minor

21 credit hours

The art history minor is a 21-hour course of study that provides students a broad overview of the history of art. This credential will assist students in preparation for graduate studies, museum and gallery-related careers and education. Students are required to earn a minimum grade of C- in all courses taken for the minor.

Minor Requirements

ARTS 216 Art History Survey to 1450	3
ARTS 217 Art History Survey from 1450	3
Students must choose 15 semester hours from the following:	
ARTS 355 Selected Topics in Western Art	3
ARTS 365 Selected Topics in Non-Western Art	3
ARTS 382 Twentieth Century Art	3
ARTS 383 History of Visual Communications	3
ARTS 384 Contemporary Art Forms	3

Course Descriptions

(Courses are listed alphabetically by prefix. For semesters off campus course prefixes, see the semesters off-campus page.)

Course Prefix	Subject
ACCT	Accounting
ACLA	American Culture and Language
AMSL	American Sign Language
ARTS	Art
BIBL	Biblical Studies
BIOL	Biology
BUSN	Business
CHEM	Chemistry
CHMN	Christian Ministries
CMCO	Cinema and Media Communication
COMM	Communication Arts
CSIS	Computer and Information Science
ECON	Economics
EDUC	Education
ENGC	Engineering, Civil
ENGE	Engineering, Electrical
ENGM	Engineering, Mechanical
ENGR	Engineering, General
ENPR	Entrepreneurship
ESLA	English as a Second Language
FCSC	Family and Consumer Sciences
FINC	Finance
FREN	French
GBSN	Global Business
GEED	General Education
GEOG	Geography
GREK	Greek
GRMN	German
GSCI	General Science
HEBR	Hebrew
HHPA	Human Performance Activity
HHPE	Human Performance Education
HIST	History
HLTH	Health Education
INTL	International Studies
JOUR	Journalism

JPNS	Japanese
LEAD	Leadership Studies
LITR	Literature
MATH	Mathematics
MGMT	Management
MKTG	Marketing
MUSA	Music, Applied Music and Ensembles
MUSI	Music, Theory and Literature
NURS	Nursing
PHIL	Philosophy
PHYS	Physics
PSCI	Political Science
PSYC	Psychology
RELI	Religion
SOCI	Sociology
SPAN	Spanish
SWRK	Social Work
THEA	Theatre
WRIT	Writing

Accounting (ACCT) Courses

Additional courses are listed under Business and Economics.

ACCT 271 Principles of Financial Accounting
3 hours. Accounting is the language of business. This course provides an introductory overview of accounting from a user perspective. Its purpose is to give students a basic understanding of the logic behind the principles of accounting, enabling them to prepare, read, analyze, and interpret financial statements for the purpose of decision making.
Prerequisite: sophomore standing or above.

ACCT 272 Principles of Managerial Accounting
3 hours. This course is a continuation of ACCT 271. It emphasizes the uses of accounting data by management to make both planning and control decisions. Students will continue to analyze financial statements to assess a company's liquidity,
profitability, capital structure, and stock market ratios. Students will also develop operating budgets and use them to evaluate performance. Cost information will be classified by behavior, and allocated under a cost-beneficial system that assists managers in using relevant costs for decision making.
Prerequisite: ACCT 271 Principles of Financial Accounting.

ACCT 275 Field Experience
1-3 hours. An on-the-job experience designed to acquaint the student with the accounting profession.

ACCT 285 Selected Topics
1-3 hours. Occasional special courses chosen to fit the interests and needs of students and faculty.

ACCT 350 Taxation
3 hours. This is an introductory course on fundamental concepts in taxation. The objective of this course is learning to recognize major tax issues inherent in business and financial transactions. The course will emphasize measurement and taxation of business income, along with an introduction to taxation of individuals.
Prerequisite: ACCT 271 Principles of Financial Accounting.

ACCT 370 Accounting Information Systems
3 hours. This course will emphasize the mechanical aspects of accounting and will cover both manual and computerized accounting systems. The course is designed for the accounting major.
Prerequisite: ACCT 271 Principles of Financial Accounting.

ACCT 371 Financial Accounting and Reporting I
3 hours. A comprehensive study of generally accepted accounting principles, including a review of their historical development and a thorough study of the underlying theory supporting them. A detailed study of many specific problems associated with the measurement and reporting of complex business transactions.
Prerequisite: ACCT 271 Principles of Financial Accounting.

ACCT 372 Financial Accounting and Reporting II
3 hours. A comprehensive study of generally accepted accounting principles, including a review of their historical development and a thorough study of the underlying theory supporting them. A detailed study of

many specific problems associated with the measurement and reporting of complex business transactions. *Prerequisite: ACCT 371 Financial Accounting and Reporting I.* ACCT 373 Financial Accounting and Reporting III *3 hours.* A comprehensive study of generally accepted accounting principles, including a review of their historical development and a thorough study of the underlying theory supporting them. A detailed study of many specific problems associated with the measurement and reporting of complex business transactions. *Prerequisite: ACCT 371 Financial Accounting and Reporting I.*

ACCT 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

ACCT 405 Volunteer Tax Assistance
1 hour. This course is being offered in conjunction with the Internal Revenue Service and the AARP to give the student skills and training needed to prepare income tax returns for low-to-moderate income people in the community. We will offer free tax preparation and electronic filing for the community.

ACCT 471 Advanced Accounting
3 hours. Accounting for specific types of entities, such as partnerships and not-for-profit organizations. The accounting problems encountered in business combinations and foreign currency translation will be studied. *Prerequisites: ACCT 272 Principles of Managerial Accounting and ACCT 370 Accounting Information Systems.*

ACCT 472 Auditing
3 hours. An introduction to the standards and procedures observed by Certified Public Accountants in the examination of financial statements. Special areas of study will include evaluation of internal control, ethical considerations, legal environment, the auditor's reports, and evidence-collecting and evaluation. *Prerequisites: ACCT 272 Principles of Managerial Accounting and ACCT 370 Accounting Information Systems.*

ACCT 475 Field Experience
1-6 hours. Supervised experiences in businesses, nonprofit organizations, and public agencies.

ACCT 480 Corporate Taxation
3 hours. This course is an expansion of how tax laws affect individuals, partnerships, corporations, and S corporations. Additional topics in taxation are introduced with emphasis on laws applicable to estates, gifts, trusts, and tax exempt organizations. *Prerequisites: ACCT 350 Taxation.*

ACCT 481 Management Accounting
3 hours. A critical examination of systems for cost accounting and managerial control. Emphasis on development of skills to critique cost and control systems and to understand the dynamic relationship between systems, operations, strategy, and performance evaluation. *Prerequisites: ACCT 272 Principles of Managerial Accounting.*

ACCT 485 Selected Topics
1-3 hours. Occasional special courses chosen to fit the interests and needs of students and faculty.

ACCT 495 Special Study
1-3 hours. Independent study of subjects outside regular offerings.
Prerequisite: by permission only.

American Culture and Language (ACLA) Courses

ACLA 481 Reading and Vocabulary for Academia
3 hours. The goal of this course is facility in the conventions of academic writing in English, including the effective use of complex sentence structure, essay organization, academic vocabulary, and source material. Students develop research skills using library sources and effectively integrate findings into research essays by appropriately summarizing, paraphrasing, quoting, and citing sources.

ACLA 482 Writing and Research for Academia
5 hours. The goal of this course is facility in the conventions of academic writing in English, including the effective use of complex sentence structure, essay organization, academic vocabulary, and source material. Students develop research skills using library sources and effectively integrate findings into research essays by appropriately summarizing, paraphrasing, quoting, and citing sources.

ACLA 483 Speech and Listening for Academia
3 hours. This course builds fluency, grammatical and pronunciation accuracy, academic vocabulary, competence in classroom discourse, and oral presentation skills, as well as listening comprehension and note-taking skills for various styles of academic lectures and discussions.

ACLA 484 Research and Study Skills
4 hours. This course focuses on developing skills related to academic research and study skills appropriate for graduate study in the U.S. As they conduct library research, students will learn how to select research tools; locate, retrieve, analyze, and critically evaluate information; organize and present information according to accepted scholarly standards, including citing sources, summarizing, and paraphrasing; and recognize the ethical ramifications of research. Graduate study skills include taking responsibility for one's learning and time management, preparing for and participating in classes, and developing appropriate, effective learning strategies. This course includes assignments related to the student's field of graduate study.

ACLA 485 Selected Topics
3 hours. Occasional special courses chosen to fit the needs and interests of students.

ACLA 490 United States Culture
3 hours. In this course, students will explore United States cultures and their homeculture in seven dimensions: worldviews (ways of perceiving the world), cognitive processes (ways of thinking), linguistic forms (ways of expressing ideas), behavioral patterns (ways of acting), social structures (ways of interacting), communication patterns (ways of communicating), and motivational resources (ways of deciding). They will apply insights as they observe and participate in American culture—in social, educational, and professional contexts.

American Sign Language (AMSL) Courses

AMSL 101 American Sign Language I
3 hours. An introduction to American Sign Language (ASL), the language of the deaf culture in the United States and Canada. The course introduces ASL signs and basic ASL grammar and syntax, and develops an understanding and appreciation of the adult deaf culture. Receptive and expressive skills in conversational ASL are taught. Practice outside the classroom required.

AMSL 102 American Sign Language II
3 hours. An introduction to American Sign Language (ASL), the language of the deaf culture in the United States and Canada. The course introduces ASL signs and basic ASL grammar and syntax, and develops an understanding and appreciation of the adult deaf culture. Receptive and expressive skills in conversational ASL are taught. Practice outside the classroom required.
Prerequisite: AMSL 101 American Sign Language I.

Art (ARTS) Courses

ARTS 101 Basic Design I
3 hours. An introduction to materials, techniques, and theory related to two-dimensional design. Additional course fee is required.

ARTS 102 Basic Design II
3 hours. This course focuses on three-dimensional design. Hands-on projects are the primary learning mode. Additional course fee is required.

ARTS 111 Drawing I
3 hours. This course is a study of materials, methods, and techniques used for drawing with pencil, ink, charcoal, and other drawing media. Art majors given preference. Additional course fee is required.

ARTS 112 Drawing II
3 hours. This course is a study of materials, methods, and techniques used for drawing with pencil, ink, charcoal, and other drawing media. Art majors given preference. Additional course fee is required.
Prerequisite: ARTS 111 Drawing I.

ARTS 201 Beginning Painting
3 hours. Introduces students to materials, methods, and techniques used in painting with acrylics or oils. Additional course fee is required.
Prerequisite: ARTS 111 Drawing I, or instructor's permission.

ARTS 216 Art History Survey to 1450
3 hours. A survey of the elements and concepts of art theory and practice as reflected in culturally and historically significant painting, sculpture, architecture, and other art
forms, from prehistoric times to 1450. Additional course fee is required.

ARTS 217 Art History Survey from 1450
3 hours. A survey of the elements and concepts of art theory and practice as reflected in culturally and historically significant painting, sculpture, architecture, and other art forms, from 1450 to the present. Additional course fee is required.

ARTS 221 Beginning Sculpture
3 hours. Introduction to the materials, methods, and techniques used in sculpture. Additional course fee is required.

ARTS 230 Beginning Photography
3 hours. Introduction to the materials, methods, and techniques used in photography. Additional course fee is required.

ARTS 231 Beginning Printmaking
3 hours. An introduction to screen printmaking, and relief printmaking (woodcut, linocut, collagraph) techniques and methods. Additional course fee is required.

ARTS 240 Beginning Mixed Media
3 hours. Introduction to the materials, methods, and techniques used for mixed media artwork. Additional course fee is required.

ARTS 241 Beginning Ceramics
3 hours. Introduction to basic hand-building techniques and surface design. Additional course fee is required.

ARTS 245 Selected Studio Media
3 hours. A lecture/studio course that deals with an area of interest and faculty specialty, such as watercolor, kiln-worked glass, jewelry, encaustic painting, and bookmaking. The lower-division class is required of the student in the given topic before they can take a more advanced course. The student under a different topic may repeat this course. Student may need to purchase additional supplies. Additional course fee is required.

ARTS 250 Introduction to Graphic Design
3 hours. Introduction to the materials, methods, and techniques used in graphic design. Additional course fee is required.

ARTS 275 Field Experience
3 hours. Field Experience provides on-site work experience at an approved business or institutional site.

ARTS 285 Selected Topics
1-3 hours. A lecture/studio class that deals with areas of interest and specialty in studio and graphic arts. Student may need to purchase additional supplies. Additional course fee is required.

ARTS 295 Special Study
1-3 hours. Designed to give two emphases for the serious art student: to allow for further individual study in a medium or area in which no further courses are available, and/or to allow for study in an area for which the student may already have some background and in which no course currently is offered.

ARTS 301 Intermediate Painting
3 hours. A further development of the students' knowledge and use of the materials, methods, and techniques used in painting with acrylics or oils. Additional course fee is required.
Prerequisite: ARTS 201 Beginning Painting.

ARTS 321 Intermediate Sculpture
3 hours. A further development of the students' knowledge and use of the materials, methods, and techniques used in sculpture. Additional course fee is required. *Prerequisite: ARTS 221 Beginning Sculpture.*

ARTS 330 Intermediate Photography
3 hours. Provides an opportunity for further development of skills and for the introduction of more advanced techniques. Additional course fee is required. *Prerequisite: ARTS 230 Beginning Photography.*

ARTS 331 Intermediate Printmaking
3 hours. A further development of the students' knowledge and use of printmaking (silkscreen, woodcut, linocut, collagraph) and a further introduction to intalio and etching techniques and methods. Additional course fee is required.
Prerequisite: ARTS 231 Beginning Printmaking.

ARTS 340 Intermediate Mixed Media
3 hours. A further development of the students' knowledge and use of the materials, methods, and techniques used for mixed media artwork. Additional course fee is required.
Prerequisite: ARTS 240 Beginning Mixed Media.

ARTS 341 Intermediate Ceramics
3 hours. A further development of the students' knowledge and skill in throwing, hand building, and firing techniques in ceramics. Additional course fee is required. *Prerequisite: ARTS 241 Beginning Ceramics.*

ARTS 345 Selected Studio Media
3 hours. A lecture/studio course that deals with an area of interest and faculty specialty, such as watercolor, kiln-worked glass, jewelry, encaustic painting, and bookmaking. The lower-division class is required of the student in the given topic before they can take a more advanced course. The student under a different topic may repeat this course. Student may need to purchase additional supplies. Additional course fee is required.

ARTS 350 Graphic Design 2: Typography
3 hours. Provides an opportunity for further development of skills and an in-depth exploration of letterforms, typographic conventions, and production techniques. Additional course fee is required.
Prerequisite: ARTS 250 Introduction to Graphic Design.

ARTS 355 Selected Topics in Western Art
3 hours. An in-depth study of a specific era or group found within Western art, such as studies in the Baroque and Rococo, Renaissance, or Women in Art. Specific topics will be dependent on the instructor's area of specialization. Additional course fee is required.

ARTS 360 Illustration
3 hours. Introduction of traditional illustration and commercial rendering techniques. Students will refine expressive, observational, and technical drawing, painting, and marker skills as they relate to illustration as

a means of visual communication. Additional course fee is required.
Prerequisites: ARTS 111 Drawing I or ARTS 112 Drawing II and ARTS 250 Introduction to Graphic Design.

ARTS 365 Selected Topics in Non-Western Art
3 hours. Art and its relationship to a non-Western culture, e.g., African, Asian, Latin American. Specific topic will be dependent on the instructor's area of specialization. Additional course fee is required.

ARTS 382 Twentieth-Century Art
3 hours. Art and its relationship to Western culture of the 20th century. Additional course fee is required.

ARTS 383 History of Visual Communications
3 hours. Survey of graphic communications throughout history, and the impact of technology on the visual qualities of graphic design, advertising, fashion, media, and industrial design. Beginning with prehistoric petroglyphs and concluding with the World Wide Web, course will examine how culture shapes the practice of graphic design as well as how design shapes its corresponding cultures. Additional course fee is required.
ARTS 384 Contemporary Art Forms
3 hours. An exploration into the forms, movements, and artists found within the current art scene of the 21st century. Special emphasis will be placed on looking at new forms and genres of art such as video, performance, digital, art activism, time-based art, and installation. Additional course fee is required.

ARTS 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures.
(Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

ARTS 401 Advanced Painting
3 hours. Focuses on the individual artistic development of students as they combine techniques and subject matter into a personal style of visual communication. Additional course fee is required.
Prerequisite: ARTS 301 Intermediate Painting.

ARTS 421 Advanced Sculpture
3 hours. Advanced development within the materials, methods, and techniques used in sculpture. Additional course fee is required.
Prerequisite: ARTS 321 Intermediate Sculpture.

ARTS 430 Advanced Photography
3 hours. Focuses on the individual artistic development of students as they combine techniques and subject matter into a personal style of visual communication. Additional course fee is required.
Prerequisite: ARTS 330 Intermediate Photography.

ARTS 431 Advanced Printmaking
3 hours. Focuses on the individual artistic development of students as they combine techniques and subject matter into a personal style of visual communication. Additional course fee is required.
Prerequisite: ARTS 331 Intermediate Printmaking.

ARTS 440 Advanced Mixed Media
3 hours. Focuses on the individual artistic development of students as they combine techniques and subject matter into a personal style of visual communication. Additional course fee is required.
Prerequisite: ARTS 340 Intermediate Mixed Media.

ARTS 441 Advanced Ceramics
3 hours. Focuses on the individual artistic development of students as they combine techniques and subject matter into a personal style of visual communication. Additional course fee is required.
Prerequisite: ARTS 341 Intermediate Ceramics.

ARTS 445 Selected Studio Media
3 hours. A lecture/studio course that deals with an area of interest and faculty specialty, such as watercolor, kiln-worked glass, jewelry, encaustic painting, and bookmaking. The lower-division class is required of the student in the given topic before they can take a more advanced course. The student under a different topic may repeat this course. Student may need to purchase additional supplies. Additional course fee is required.

ARTS 450 Graphic Design 3: Design Applications
3 hours. Advanced studies in the exploration of concepts for solving visual communications problems with emphasis on the use of design-specific software packages on pieces for students' professional portfolios. Additional course fee is required.
Prerequisite: ARTS 350 Graphic Design 2: Typography.

ARTS 451 Packaging, Public Graphics, Signage
3 hours. Design, use, production, and evaluation of product packaging, public graphics, and signage, including exploration of related material and environmental issues. Course will concentrate on computer-assisted production techniques, mock-up presentation, and portfolio development. Additional course fee is required.
Prerequisite: ARTS 450 Graphic Design 3: Design Applications, or by permission.

ARTS 460 Art and Christ
3 hours. A study of the relationship between art and Christianity in the contemporary world. Designed primarily for studio art majors. Additional course fee is required. *Prerequisite: either ARTS 382 Twentieth Century Art or ARTS 384 Contemporary Art Forms.*

ARTS 475 Field Experience
3 hours. Field Experience provides on-site work experience at an approved business or institutional site.

ARTS 485 Selected Topics
1-3 hours. A lecture/studio class that deals with areas of interest in art, such as watercolors, calligraphy, or special topics in art history. Student may need to purchase additional supplies. Additional course fee is required.

ARTS 491 Senior Thesis I
1.5 hours. All students graduating with a major in art will be required to exhibit their work in the Lindgren Gallery or other acceptable alternative location. This course includes the completion of a body of artwork for exhibition, writing a statement of artistic intent, and installing artwork in an exhibition space.

Additional course fee is required.
Prerequisite: art major with senior status, or by permission.

ARTS 492 Senior Thesis II
1.5 hours. All students graduating with a major in art will be required to exhibit their work in the Lindgren Gallery or other acceptable alternative location. This course includes the completion of a body of artwork for exhibition, writing a statement of artistic intent, and installing artwork in an exhibition space.
Additional course fee is required.
Prerequisite: art major with senior status, or by permission.

ARTS 495 Special Study
1-3 hours. Designed to give two emphases for the serious art student: to allow for further individual study in a medium or area in which no further courses are available, and/or to allow for study in an area for which the student may already have some background and in which no course currently is offered.

Biblical Studies (BIBL) Courses

BIBL 100 Bible Survey
4 hours. This course provides an overview of the history, literature, themes, major persons, and key events in the Bible. It provides a biblical foundation for the educational experience of the undergraduate students at George Fox University and is required of all first-year students, including transfers. It may be taken either semester of the student's first year and is a prerequisite for Bible enrichment electives that follow. Alternatively, students may opt to take the two-semester, 6-credit sequence: BIBL 101 and BIBL 102, and this option is strongly recommended for majors and minors in biblical studies, Christian ministries, religion, or philosophy.

BIBL 101 Literature of the Old Testament
3 hours. Using selected books and portions, the Old Testament will be studied with attention given to historic contexts, major religious themes, and literary forms of the Bible.

BIBL 102 Literature of the New Testament
3 hours. Using selected books and portions, the New Testament will be studied with attention given to historic contexts, major religious themes, and literary forms of the Bible.

BIBL 103 Introduction to Biblical Knowledge
3 hours. A course required of students who need cultural preparation for BIBL 100
Bible Survey or BIBL 101 & 102 Literature of the Old & New Testament. Basic concepts of inductive Bible reading are taught and used, with the result that students learn fundamental Bible knowledge, including biblical content, geography, history, and theology. Instruction is delivered in English and Mandarin Chinese. Intended for non-native-English-speaking students in their first semester outside the English Language Institute (ELI) and for non-native-English-speaking students who directly enter the regular GFU program. Prerequisite: Successful completion of the ELI or instructor's permission.

BIBL 240 Wisdom Literature
3 hours. The wisdom literature of the Old Testament is investigated historically, literarily, and theologically. The origin and development of the biblical wisdom traditions in the books of Proverbs, Job, and

Ecclesiastes are considered in the context of the broader, international wisdom of the ancient Near East and the intertestamental literature. Taking BIBL 100 Bible Survey or BIBL 101 Literature of the Old Testament first is recommended.

BIBL 250 The Psalms
3 hours. An exploration of the Psalms with special attention to their forms, themes, and original cultural settings as well as how the Psalms have been preserved and applied in the community of faith. Students will also consider approaches to interpreting and learning from the Psalms today. Taking BIBL 100 Bible Survey or BIBL 101 Literature of the Old Testament first is recommended.

BIBL 260 Life of Christ
3 hours. The Synoptic Gospels - Matthew, Mark, and Luke - form the foundation for this inquiry into the life and teaching of Jesus Christ. Taking BIBL 100 Bible Survey or BIBL
102 Literature of the New Testament first is recommended.

BIBL 275 Field Experience
1-3 hours. Supervised experience in the discipline including internships and practica required for professional programs. This introductory experience must have an on-site supervisor and/or a departmental instructor overseeing, designing, and evaluating the content of the course.
Prerequisite: instructor's permission.

BIBL 285 Selected Topics
2-3 hours. Occasional special courses chosen to fit the interests and needs of students and faculty.

BIBL 290 Biblical Interpretation
3 hours. This course is part of the Biblical Studies curriculum and is planned to help the student understand and apply sound principles of Biblical interpretation. We will study the history of interpretation, general hermeneutical principles, specific hermeneutical lenses, and how to apply them to different kinds of Biblical literature.
Prerequisite: BIBL 100 Bible Survey, BIBL 101 Literature of the Old Testament, or BIBL 102 Literature of the New Testament, or by permission.

BIBL 310 Old Testament History
3 hours. The history of ancient Israel is studied employing the text of the Old Testament narratives in Genesis through Esther, the evidence of archaeology, and other ancient Near Eastern texts. Theological messages and developments will be explored. *Prerequisite: BIBL 290 Biblical Interpretation.*

BIBL 330 The Prophetic Writings
4 hours. This course studies the origin and historical development of ancient Israelite prophecy and its culmination in the canonical books of the prophets. The historical and social setting of the prophets will be considered, along with the spiritual themes that dominate and characterize them.
Prerequisite: BIBL 100 Bible Survey or BIBL 101 Literature of the Old Testament.

BIBL 350 Writings of John
3 hours. This course explores what it means to believe in Jesus Christ, the Son of God, as depicted in the Johannine Gospel and Epistles. Special attention will be given to John's Christology, sociological setting, and message as they relate to the lives of modern readers. Taking BIBL 100 Bible Survey or BIBL 102

Literature of the New Testament first is recommended.

BIBL 360 Women and the Bible
3 hours. This course will examine biblical texts often ignored. Paying attention to women characters, feminine imagery, and household codes, this course will examine the historical, theological, literary, and practical issues concerning gender in the Christian tradition.

BIBL 385 Selected Bible Topics
3 hours. The study of a book or portion of the Bible or a major biblical theme with the purpose of gaining deeper understanding of the biblical topic and of growing in the skills of studying and interpreting the Bible. Topics will vary according to the professor's expertise and research interests as well as the perceived needs of students' educational experiences. May be repeated for different topics.
Prerequisites: BIBL 100 Bible Survey or BIBL 101 Literature of the Old Testament and

BIBL *102 Literature of the New Testament or by permission.*

BIBL 390 Biblical Basis for Peacemaking
3 hours. Focusing centrally on Jesus' teachings about peacemaking, this course deals with the biblical treatment of peacemaking, including the prophetic and apocalyptic visions of the kingdom, and the interpretations of these teachings by the early church. Attention also will be given to what it means to work for peace in today's world, as
co-laborers with Christ.
Prerequisite: BIBL 100 Bible Survey or BIBL 102 Literature of the New Testament.

BIBL 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

BIBL 411 Acts and the Pauline Epistles I
3 hours. An extensive study of the mission and teachings of the New Testament church, as shown in the Acts and the Epistles attributed to Paul. Special attention will be given
to ways early Christians dealt with struggles between Jewish and Gentile Christianity, and applications will be made for the church today. The fall semester studies Acts 1-15, Galatians, and Romans.
Prerequisite: BIBL 290 Biblical Interpretation.

BIBL 412 Acts and the Pauline Epistles II
3 hours. An extensive study of the mission and teachings of the New Testament church, as shown in the Acts and the Epistles attributed to Paul. Special attention will be given
to ways early Christians dealt with struggles between Jewish and Gentile Christianity, and applications will be made for the church today. The spring semester studies Acts
15-28 plus the other Epistles of Paul.
Prerequisite: BIBL 290 Biblical Interpretation.

BIBL 475 Field Experience
1-3 hours. Supervised experience in the discipline including internships and practica required for professional programs. This advanced experience must have an on-site supervisor and/or a departmental instructor overseeing, designing, and evaluating the content of the course.
Prerequisite: instructor's permission.

BIBL 480 General Epistles
3 hours. As a study of the non-Pauline letters of the New Testament - Hebrews, James, I and II Peter, and Jude - this course explores the character of Jewish Christianity and its implications for the broader church.
Prerequisite: BIBL 100 Bible Survey or BIBL 102 Literature of the New Testament.

BIBL 485 Selected Topics
2-3 hours. Occasional special courses chosen to fit the interests and needs of students and faculty.

BIBL 490 Biblical Theology
3 hours. This course is a senior level capstone study for Bible majors and minors. Having gained reasonable command of biblical content, students study the connecting theological themes that make the Bible a unified revelation of God. History of biblical theology, critical issues, and questions of contemporary theology are addressed.
Prerequisite: 818L 290 8iblicalInterpretation and at least two upper-division 818L courses.

BIBL 495 Special Study
1-3 hours. Individual research. Open to qualified students upon application.

Biology (BIOL) Courses

BIOL 100 Foundations of Biology
3 hours. A course to fulfill the general education requirement. Deals with the organization of living things, anatomy and physiology of cells and organisms, reproduction and heredity, and the role of energy in the ecosystem. Bioethical considerations are discussed. Two lectures and one two-hour laboratory per week. Additional course fee is required.

BIOL 211 General Biology I
4 hours. An introduction to life science for those majoring in biology and bioscience-related fields. Topics include cellular biology, genetics, systematics, development, ecology, and anatomy and physiology of plants and animals. Three lectures and one two-hour laboratory per week. Additional course fee is required.

BIOL 212 General Biology II
4 hours. An introduction to life science for those majoring in biology and bioscience-related fields. Topics include cellular biology, genetics, systematics, development, ecology, and anatomy and physiology of plants and animals. Three lectures and one two-hour laboratory per week. Additional course fee is required.
Prerequisite: BIOL 211 General Biology I.

BIOL 220 Fundamentals of Cellular and Organismal Biology
4 hours. This course is a supplementary course to BIOL 331, 332 that provides necessary foundational training in cellular biology, genetics, plant/animal diversity, and ecology needed for certain upper-division

biology courses.

BIOL 275 Field Experience
1-6 hours may be earned. Includes internships and practica required for professional programs. The experience must have an on-site supervisor and/or a departmental instructor overseeing, designing, and evaluating the content of the course. *Prerequisite: permission of the instructor and chairperson of the department*.

BIOL 285 Selected Topics
1-4 hours. Offered when special needs arise or when sufficient enrollment permits. Course content includes specific interests of faculty or visiting professors, or special training required by graduate or professional schools.
Prerequisites: BIOL 211 General Biology I and BIOL 212 General Biology II or BIOL 331 Human Anatomy and Physiology I and BIOL 332 Human Anatomy and Physiology II and instructor's permission.

BIOL 300 Evolution
2 hours. A study of mechanisms involved in natural selection and assumptions required. Topics include history of the theory, geochronology, molecular biology, developmental biology, paleontology, comparative physiology, biochemistry, and biogeography. The interface of evolution and Christianity are examined. Two lectures per week.
Prerequisites: BIOL 211 General Biology I and BIOL 212 General Biology II.

BIOL 310 Developmental Biology
4 hours. Theories and study of differentiation as they apply to growth and development of animals, with some emphasis on the mechanism involved. Includes historical topics, fertilization, embryonic organization, cell induction, histogenesis, organogenesis, and developmental morphogenesis of echinoderms, frogs, chicks, and pigs. Three lectures and one three-hour laboratory per week. Additional course fee is required.
Prerequisites: BIOL 211 General Biology I and BIOL 212 General Biology II or BIOL 331 Human Anatomy and Physiology I and BIOL 332 Human Anatomy and Physiology II.

BIOL 320 Pathophysiology
3 hours. A study of the basic principles, processes, and physiological changes of alterations in body systems. Three lectures per week.
Prerequisites: BIOL 333 Advanced Physiology or BIOL 331 Human Anatomy and Physiology I and BIOL 332 Human Anatomy and Physiology II.

BIOL 322 Comparative Vertebrate Anatomy
4 hours. The comparative study of the structure and functional morphology of organisms in the phylum Chordata. Laboratory will emphasize dissection of representative vertebrate animals. Three one-hour lectures and one three-hour laboratory per week. Additional course fee is required.
Prerequisites: BIOL 211 General Biology I and BIOL 212 General Biology II or BIOL 331 Human Anatomy and Physiology I and BIOL 332 Human Anatomy and Physiology II.

BIOL 331 Human Anatomy & Physiology I
4 hours. Structure and function of the human body. Fall semester topics include basic chemistry, body organization, integument, skeleton, muscles, and the nervous system, including special senses. The course meets general education requirements and is designed for nonscience majors. Three lectures and one

laboratory per week. Additional course fee is required.

BIOL 332 Human Anatomy & Physiology II
4 hours. Structure and function of the human body. Spring semester topics include cardiovascular, reproductive, endocrine, respiratory, urinary, and digestive systems. The course meets general education requirements and is designed for nonscience majors. Three lectures and one laboratory per week. Additional course fee is required. *Prerequisites: BIOL 331 Human Anatomy and Physiology I, or permission from instructor.*

BIOL 333 Advanced Physiology
4 hours. Investigation of physiological principles in animals, with 4 hours. A majors-level course is intended to meet the physiology requirement of graduate/professional programs in health-care fields. Investigation of physiological principles in humans/mammals, with emphasis on mechanisms of integration and homeostasis at cellular, organ, and system levels. Topics include muscular, neural, vascular, excretory, and endocrine interactions. Three lectures and one three-hour laboratory per week. Additional course fee is required. *Prerequisites: BIOL 211 General Biology I and BIOL 212 General Biology II or BIOL 331 Human Anatomy and Physiology I and BIOL 332 Human Anatomy and Physiology II.*

BIOL 340 Plant Physiology
4 hours. A study of plant function from the molecular to the organismic level. Photosynthesis, respiration, water relations, growth and development, mineral nutrition, and practical applications will be covered. Three lectures and one three-hour laboratory period per week. Additional course fee is required. *Prerequisites: BIOL 211 General Biology I and BIOL 212 General Biology II.*

BIOL 350 Genetics
4 hours. A general genetics course covering Mendelian genetics, population genetics, and an introduction to molecular biology. This course fulfills the requirement for biology majors, and is appropriate for those with an interest in current topics in genetics, including inheritable diseases, cloning, and other recent scientific breakthroughs. Three lectures and one three-hour laboratory per week. Additional course fee is required. *Prerequisites: BIOL 211 General Biology I and BIOL 212 General Biology II or BIOL 331 Human Anatomy and Physiology I and BIOL 332 Human Anatomy and Physiology II.*

BIOL 360 Ecology
4 hours. An analysis of population, community, and ecosystem dynamics. Laboratory will emphasize field measurements, computer modeling, and behavior. Three lectures and one three-hour laboratory per week, and one required field trip to the Malheur Field Station. Additional course fee required. *Prerequisites: BIOL 211 General Biology I and BIOL 212 General Biology II.*

BIOL 367 Essentials of Microbiology
4 hours. A course in the structure, metabolism, classification and health aspects of microorganisms. Special emphasis will be given to human-microbe interactions and clinical aspects of infection. Methods of microbiological investigation are emphasized and include current techniques and experiences within the field of Microbiology. Course designed for students not majoring in biology. *Prerequisites: BIOL 331 Human Anatomy and Physiology I; BIOL 332 Human Anatomy and Physiology II; CHEM 151 General, Organic, and Biological Chemistry I; and CHEM 152 General, Organic, and Biological Chemistry II; or permission of the instructor.*

BIOL 370 Microbiology
4 hours. A course for biology majors in the structure, metabolism, classification and health aspects of microorganisms. Special emphasis will be given to microbial diversity, the molecular physiology and genetics of prokaryotes, and the human immune response to infection. Methods of microbiological investigation are emphasized and include current techniques and experiences within the field of Microbiology.
Prerequisites: BIOL 211 General Biology I and BIOL 212 General Biology II or instructor's permission.

BIOL 380 Ornithology
4 hours. A study of avian biology including phylogeny, evolution, anatomy, physiology, behavior, and ecology. Laboratory will emphasize identification, bird banding, and basic anatomy. Two lectures and one three-hour laboratory per week, and one required field trip to the Malheur Field Station. Additional course fee is required.
Prerequisites: BIOL 211 General Biology I and BIOL 212 General Biology II.

BIOL 390 Systematic Botany
4 hours. Collection, identification, classification, and morphology of vascular plants, with emphasis on the angiosperms. Three lectures and one three-hour laboratory per week, and a required field trip. Additional course fee is required.
Prerequisites: BIOL 211 General Biology I and BIOL 212 General Biology II.

BIOL 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

BIOL 410 Molecular Biology
4 hours. An introduction to the modern field of molecular biology. We will examine the structure, organization, and transfer of genetic information at the molecular level and its requirement for life processes. Viral, prokaryotic, and eukaryotic systems will be examined. Major themes include transcriptional regulation, post-transcriptional events (RNA processing), and regulation of translation. The laboratory is designed to include current techniques and experiences within the field of molecular biology. Additional course fee is required.
Prerequisites: BIOL 350 Genetics and CHEM 331 Organic Chemistry I.

BIOL 420 Cell Biology
4 hours. This course includes the study of cell physiology, energetics, neurobiology, muscle biology, and cell signaling. Other topics that will be discussed are cancer and immunology at the cellular level. Laboratory will focus on current cell culturing and analysis techniques. Three lectures and one three-hour laboratory per week. Additional course fee is required.
Prerequisites: BIOL 211 General Biology I and BIOL 212 General Biology II or BIOL 331 Human Anatomy and Physiology I and BIOL 332 Human Anatomy and Physiology II, and CHEM 331 Organic Chemistry I. Recommended: CHEM 341 Biochemistry I.

BIOL 430 Histology
4 hours. A course in the microstructure and ultrastructure of vertebrate tissues and cells. Laboratory techniques will include microtechnique, histochemistry, immunohistochemistry, and transmission electron microscopy. Two lectures and two three-hour laboratories per week. Additional course fee is required.
Prerequisites: BIOL 211 General Biology I and BIOL 212 General Biology II.

BIOL 450 Advanced Human Anatomy
4 hours. A majors-level course is intended to meet the anatomy requirement of graduate/professional programs in health-care fields. A course presenting a systemic approach to the study of the human body. Lecture presentations begin with an introduction of anatomical terminology, tissue classification, and developmental origins to systems. Body structure will be studied by organ systems and will involve some histology. Laboratory work will follow a regional gross anatomy of the human body through cadaver dissection, human skeletal collections and preserved specimens. Additional course fee is required.
Prerequisites: BIOL 211 General Biology I and BIOL 212 General Biology II, or BIOL 331 Human Anatomy and Physiology I and BIOL 332 Human Anatomy and Physiology II, or instructor's permission. Recommended: BIOL 333 Advanced Physiology.

BIOL 460 Invertebrate Zoology
4 hours. Comparative phylogeny, morphology, ecology, and life histories of several invertebrate groups and protozoa. Three lectures and one three-hour laboratory per week. Some weekend field trips required. Additional course fee is required.
Prerequisites: BIOL 211 General Biology I and BIOL 212 General Biology II.

BIOL 465 Biological Research
1-4 hours. Specific instructional programs, laboratory or field research, or independent study as planned under an advisor. A total of not more than 4 hours may be applied toward the major.
Prerequisites: upper-division biology majors and by permission.

BIOL 475 Field Experience
1-6 hours may be earned. Includes internships and practica required for professional programs. The experience must have an on-site supervisor and/or a departmental instructor overseeing, designing, and evaluating the content of the course. *Prerequisite: permission of the instructor and chairperson of the department.*

BIOL 485 Selected Topics
1-4 hours. Offered when special needs arise or when sufficient enrollment permits. Course content includes specific interests of faculty or visiting professors, or special training required by graduate or professional schools.
Prerequisites: BIOL 211 General Biology I and BIOL 212 General Biology II or BIOL 331 Human Anatomy and Physiology I and BIOL 332 Human Anatomy and Physiology II and instructor's permission.

BIOL 490 Biological Exploration
2 hours. Discussion- and experience-based course covering scientific analysis, communication, and research.
Prerequisite: biology majors with junior status or by permission.

BIOL 496 Senior Thesis
1 hour. An independent study course for completion of a senior thesis. Required for all thesis-track majors in their senior year.

Business (BUSN) Courses

Additional courses are listed under Accounting and Economics.

BUSN 110 Introduction to Business
3 hours. This introductory survey will examine the major functional areas of business and afford the student an opportunity to consider this major as a path to a career. Emphasis is given to contemporary business concepts, in particular, and examination of business as a field for stewardship.

BUSN 240 Statistics for Business and Economics
3 hours. Statistical procedures with applications in management and economics. Emphasis on the development of a basic knowledge of the statistical tools available for analysis of problems and decision making.
Prerequisite: high school algebra or equivalent.

BUSN 275 Field Experience
1-6 hours. Supervised experiences in businesses, nonprofit organizations, and public agencies.

BUSN 285 Selected Topics
1-3 hours. Occasional special courses chosen to fit the interests and needs of students and faculty.

BUSN 290 Business Ethics
3 hours. This course is designed to prepare students to meet the ethical challenges facing employees in modern business and nonprofit organizations. The course will address moral issues at every organizational level - personal, interpersonal, group, and system wide. Topics will include identifying personal mission and values; developing character; faith in the workplace; ethical perspectives, moral reasoning, and decision-making formats; ethical organizational communication and influence; ethical group behavior and leadership; and the creation of ethical organizational climates.

BUSN 360 Business Law
3 hours. Covers the legal aspects of common business transactions. Includes the law of contracts, agency, negotiable instruments, and other phases of private law.

BUSN 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

BUSN 475 Field Experience
1-6 hours. Supervised experiences in businesses, nonprofit organizations, and public agencies.

BUSN 485 Selected Topics
1-3 hours. Occasional special courses chosen to fit the interests and needs of students and faculty.

BUSN 486 Strategic Management
3 hours. The study of administrative policy and strategy in organizations. Emphasis is placed on the integration and inter-relationships of functional business areas (accounting, economics, finance, marketing, and management) for the purpose of developing an organizational-wide perspective. Students learn a model of strategy formulation and implementation and, through analyzing cases, apply this model to a variety of institutional settings.
Prerequisites: MGMT 260 Principles of Management, MKTG 260 Principles of Marketing, FINC 260 Business Finance, ACCT 272 Principles of Managerial Accounting II, and senior standing.

BUSN 491 Senior Capstone - Strategy and Planning
2 hours. Students will establish a foundation of the key principles of strategic thinking and management as they relate to the world of business. The course is highly integrative in nature, incorporating many of the integral components of marketing, accounting, finance, economics, and management. In this course student teams will actually develop a business model, including a financial, marketing, and economic plan.
Prerequisite: senior business or accounting major.

BUSN 492 Senior Capstone - Strategy and Implementation
1 hours. Students will operate the business they developed in BUSN 491. The integrative nature of the class will require them to use learning from their prior business courses within the context of operating their businesses. Focus will be on thinking strategically, managing change within the organizational culture, and developing communication and leadership skills.
Prerequisite: BUSN 491 Senior Capstone - Strategy and Planning.

BUSN 495 Special Study
1-3 hours. Independent study of subjects outside regular offerings of particular interest to business and economics majors. Regular reading reports and conferences are scheduled.
Prerequisite: upper-division business administration majors and by permission.

Chemistry (CHEM) Courses

CHEM 100 Chemistry of Life
3 hours. This course will cover concepts of organic and biochemistry at an elementary level. Emphasis will be placed on medical and biological applications of chemical principles. Topics will include acids and bases, alcohols, carbohydrates, proteins, lipids, and metabolism. This course meets general education requirements and is designed for non-science majors. Two lectures and one laboratory period per week. Additional course fee is required.

CHEM 110 Chemistry and Our Environment
3 hours. This course will cover introductory concepts of chemistry. Special attention is given to topics of current interest, such as environmental chemistry, polymer chemistry, and household chemistry. This course meets general education requirements and is designed for non-science majors. It is recommended for students who need an introduction to chemistry prior to taking CHEM 211 General Chemistry. Two lectures and one laboratory per week. Additional course fee is required.

CHEM 151 General, Organic, and Biological Chemistry I
4 hours. This course covers introductory and intermediate principles of chemistry. Special emphasis is placed on those aspects of general and organic chemistry that are pertinent to biochemistry. This course provides a background for students with interests in prenursing, nutrition, and related allied health areas. (This course does not meet the requirements for science majors.) Three lectures and one two-hour laboratory per week. Additional course fee is required.
Prerequisite: A math SAT score of at least 440, a math ACT score of at least 19, or successful completion of MATH 180 College Algebra (or equivalent).

CHEM 152 General, Organic, and Biological Chemistry II
4 hours. This course covers introductory and intermediate principles of chemistry. Special emphasis is placed on those aspects of general and organic chemistry that are pertinent to biochemistry. This course provides a background for students with interests in prenursing, nutrition, and related allied health areas. (This course does not meet the requirements for science majors.) Three lectures and one two-hour laboratory per week. Additional course fee is required.
Prerequisite: CHEM 151 General, Organic, and Biological Chemistry I.

CHEM 211 General Chemistry I
4 hours. This course covers fundamental chemical principles, reactions, and mode theories. Special emphasis is given to the role of chemistry in everyday life. Three lectures and one laboratory period per week. Additional course fee is required. *Prerequisite: high school chemistry, CHEM 110 Chemistry and Our Environment, or math SAT score.*

CHEM 212 General Chemistry II
4 hours. This course covers fundamental chemical principles, reactions, and mode theories. Special emphasis is given to the role of chemistry in everyday life. Three lectures and one laboratory period per week. Additional course fee is required. *Prerequisite: CHEM 211 General Chemistry I.*

CHEM 275 Field Experience
1-3 hours. Supervised experience with an off-campus industry or agency using applied chemistry.
Prerequisite: instructor's permission.

CHEM 285 Selected Topics
1-4 hours. Scheduled as a regular class with topics chosen to meet the special needs and interests of students, faculty, or visiting professors.
Prerequisite: upper-division status.

CHEM 310 Analytical Chemistry
4 hours. An introduction to the principles and techniques of quantitative chemical analysis. Subject matter includes volumetric and complexometric analysis; neutralization, precipitation, and oxidation-reduction titrations; solubility; statistical methods of data analysis; UV/Vis and atomic absorption spectroscopy; fluorescence spectroscopy; and chromatographic methods. Three lectures and one three-hour laboratory per week. Additional course fee is required.
Prerequisites: CHEM 211 General Chemistry I and CHEM 212 General Chemistry II.

CHEM 320 Advanced Inorganic Chemistry
4 hours. A survey of topics in inorganic chemistry, including atomic structure, chemical bonding, periodic

trends of structure, physical properties and reactivities of the elements, group theory as applied to molecular structure, and nonmetal and transitionmetal chemistry. The laboratory portion will be an introduction to classical and modern techniques for synthesizing inorganic compounds of representative and transition metal elements and the extensive use of spectroscopy and other physical measurements to characterize compounds. The syntheses and characterization of inorganic materials is also included. Three lectures and one three-hour laboratory per week. Additional course fee is required.
Prerequisites: CHEM 211 General Chemistry I and CHEM 212 General Chemistry II.

CHEM 331 Organic Chemistry I
4 hours. A study of principles, structure, bonding, reactions, and energy as related to carbon chemistry. The laboratory stresses materials, equipment, and skills in synthesis, purification, and identification of representative groups of organic compounds. Three lectures and one three-hour laboratory per week. Additional course fee is required. *Prerequisites: CHEM 211 General Chemistry I and CHEM 212 General Chemistry II.*

CHEM 332 Organic Chemistry II
4 hours. A study of principles, structure, bonding, reactions, and energy as related to carbon chemistry. The laboratory stresses materials, equipment, and skills in synthesis, purification, and identification of representative groups of organic compounds. Three lectures and one three-hour laboratory per week. Additional course fee is required. *Prerequisites: CHEM 331 Organic Chemistry I.*

CHEM 341 Biochemistry I
4 hours. A systematic and theoretical study of the biochemical activities of living cells. Topics to be covered will include: the structure, properties, and molecular interactions of biomolecules, metabolic pathways, bioenergetics, and metabolism of biomolecules, and RNA, DNA, and protein synthesis. Three lectures and one three-hour laboratory per week. Additional course fee is required.
Prerequisites: CHEM 331 Organic Chemistry I and CHEM 332 Organic Chemistry II.

CHEM 342 Biochemistry II
4 hours. A systematic and theoretical study of the biochemical activities of living cells. Topics to be covered will include: the structure, properties, and molecular interactions of biomolecules, metabolic pathways, bioenergetics, and metabolism of biomolecules, and RNA, DNA, and protein synthesis. Three lectures and one three-hour laboratory per week. Additional course fee is required.
Prerequisites: CHEM 341 Biochemistry I.

CHEM 380 Advanced Organic Chemistry
4 hours. An advanced study of organic reactions and structures including, reaction mechanisms, linear free energy relationships, isotope effects, pericyclic reactions, spectroscopy, and molecular modeling. The laboratory will include the synthesis, isolation, and identification of organic compounds. Spectroscopy will be emphasized for the analysis of compounds. Three lectures and one four-hour laboratory per week. Additional course fee is required.
Prerequisites: CHEM 331 Organic Chemistry I and CHEM 332 Organic Chemistry II.

CHEM 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and

interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

CHEM 401 Physical Chemistry I
4 hours. An introduction to modern theoretical chemistry emphasizing classical and statistical thermodynamics, quantum mechanics, molecular structure, spectroscopy, and kinetics. Three lectures and one three-hour laboratory per week. Additional course fee
is required.
Prerequisites: CHEM 211 General Chemistry I and CHEM 212 General Chemistry II, MATH 301 Calculus III, and either PHYS 202 General Physics II or PHYS 212 General Physics with Calculus II.

CHEM 402 Physical Chemistry II
4 hours. An introduction to modern theoretical chemistry emphasizing classical and statistical thermodynamics, quantum mechanics, molecular structure, spectroscopy, and kinetics. Three lectures and one three-hour laboratory per week. Additional course fee
is required.
Prerequisites: CHEM 401 Physical Chemistry I and either PHYS 202 General Physics II or PHYS 212 General Physics with Calculus II.

CHEM 430 Advanced Instrumental Analysis
3 hours. Principles and techniques of modern instrumental physiochemical and analytical measurements. Subject matter includes laboratory electronics; electrochemical methods; Fourier transform infrared absorbance spectroscopy; nuclear magnetic resonance; and mass spectrometry. Particular attention is given to the design and function of the instruments used in these techniques. Two lectures and one three-hour laboratory per week. Additional course fee is required.
Prerequisite: CHEM 310 Analytical Chemistry.

CHEM 465 Chemical Research
1-4 hours per semester (not to exceed a total of 6 hours). Experimental and/or theoretical research in a topic of the student's choosing, supervised by the chemistry faculty.
Prerequisite: upper-division chemistry majors and by permission of individual faculty member.

CHEM 475 Field Experience
1-3 hours. Supervised experience with an off-campus industry or agency using applied chemistry.
Prerequisite: instructor's permission.

CHEM 485 Selected Topics
1-4 hours. Scheduled as a regular class with topics chosen to meet the special needs and interests of students, faculty, or visiting professors.
Prerequisite: upper-division status.

Christian Ministries (CHMN) Courses

CHMN 120 Incarnational Youth Ministry: Young Life
1 hour. A study of the theological and historical background for relational ministry with young people. Students will gain practical ministry skills that will be useful in ministering relationally with middle school

and high school students. Students will also learn to communicate the gospel and their faith in a contextualized manner for an adolescent culture as well as a post-modern culture.

CHMN 130 Christian Discipling
4 hours. A study of biblical principles of evangelism, nurturing, and teaching. This study encompasses the Christian educational responsibilities of the local church and parachurch agencies.

CHMN 230 The Christian and the Outdoors
3 hours. An exploration of the biblical foundations for a variety of outdoor activities available to individuals, families, church groups, and Christian camps. Of significant importance is a consideration of the potential that outdoor experiences have for teaching and learning. Additional course fee is required.

CHMN 235 Walkabout
1 hour. A campus leadership training program that links outdoor education, experiential learning, and team building. It is a guided, intentional use of the backcountry to assist developing students into campus leaders who are intentional about their roles as spiritual, community, and academic models. Pass/No Pass.
Prerequisite: current member of the residence life staff or the ASC Central Committee.

CHMN 275 Field Experience
1-5 hours. Supervised internship in areas of Christian ministry, with emphasis on application of methods learned.
Prerequisite: upper-division students and by application.

CHMN 285 Selected Topics
2-3 hours. Occasional special courses chosen to fit the interests and needs of students and faculty.

CHMN 320 Relational Bible Teaching
2 hours. An analysis of the concept of Bible teaching in a small-group setting. Classroom practice in using the various methods as they relate to home Bible studies, camp settings, or the Sunday school.

CHMN 330 Foundations of Youth Ministry
4 hours. A study of motivation, guidance, and method in reference to youth and youth ministries, aimed at developing leadership skills.

CHMN 360 Perspectives in Christian Education
3 hours. A study of the historical background and philosophical development in Christian education, with an examination of the influence of these antecedents upon theory and practice. Contemporary trends in current and emerging ministries will be assessed against such perspectives.

CHMN 370 Camp Programming and Counseling
3 hours. A camping overview: its historical development and philosophy. Types of camps, program activities, teaching-learning models, leadership recruitment, and training - with special emphasis on methods of camp counseling -are covered.Overnight campout is required. Additional course fee is required. (Identical to HHPE 370.)

CHMN 381 Counseling
3 hours. A study of theory and technique of person-centered counseling. The course is designed to teach

basic theoretical postulates and to focus on effective intervention skills for those anticipating future work in Christian ministries, teaching, or mental health settings. Recommended as a prerequisite for field experience work (PSYC 475). (Identical to PSYC 381.)
Prerequisite: PSYC 150 General Psychology, sophomore status or above. Recommended: PSYC 330 Personality Theories.

CHMN 390 Theological Foundations of Christian Ministry
3 hours. A study of the relationships of theology to Christian ministry. This course explores the ways in which particular theologies affect the practice of ministry in the church.

CHMN 391 Shared Praxis I: Introduction to Educational Ministry
4 hours. An exploration of an individual's call to ministry and a study of present praxis in Christian educational ministry, with emphasis on storytelling and community building. This is the first of four semesters. Additional course fee is required. *Requires department approval.*
Prerequisite: sophomore standing or above.

CHMN 392 Shared Praxis II: Christian Theology Related to Ministry
4 hours. A study of the faith life of the Christian community, expressed through Scripture, traditions, theology, and church history, as it relates to Christian educational ministry. This is the second of four semesters. Additional course fee is required.
Prerequisite: CHMN 391 Shared Praxis I: Introduction to Educational Ministry.

CHMN 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

CHMN 420 Speaking as Ministry
3 hours. A practical course providing methods and introductory techniques for preparation and delivery of Christian speaking as ministry. A variety of message construction types will be studied, and students will have opportunity to speak and receive student and instructor evaluation. This course will cover sermon preparation and delivery, devotional and inspirational speaking, extemporaneous sharing, and broader aspects of communicating Christian truth.

CHMN 435 Walkabout
1 hour. A campus leadership training program that links outdoor education, experiential learning, and team building. It is a guided, intentional use of the backcountry to assist developing students into campus leaders who are intentional about their roles as spiritual, community, and academic models. Pass/No Pass.
Prerequisite: current member of the residence life staff or the ASC Central Committee.

CHMN 440 Camp Administration
2 hours. Designed to develop a basic understanding of programming, business, and leadership at an administrative level. A weekend camping trip is required. Additional course fee is required. (Identical to HHPE 440.)
Prerequisite: CHMN 370 Camp Programming and Counseling or instructor's permission.

CHMN 475 Field Experience
1-5 hours. Supervised internship in areas of Christian ministry, with emphasis on application of methods learned.
Prerequisite: upper-division students and by application.

CHMN 485 Selected Topics
2-3 hours. Occasional special courses chosen to fit the interests and needs of students and faculty.

CHMN 491 Shared Praxis III: Methods and Skills in Ministry
4 hours. A study of ministry methods and skills that will enable students to appropriate the Christian story and vision to their own ministry contexts. This is the third of four semesters. Additional course fee is required.
Prerequisite: CHMN 392 Shared Praxis II: Christian Theology Related to Ministry.

CHMN 492 Shared Praxis IV: Supervised Field Experience
4 hours. Active involvement in an area of Christian ministry through supervised experience, and reflection on ministry experiences through class support and discussion. This is the fourth of four semesters.
Prerequisite: CHMN 491 Shared Praxis III: Methods and Skills in Ministry.

CHMN 495 Special Study
1-3 hours. Individual research. Open to qualified students upon application.

Cinema and Media Communication (CMCO) Courses

CMCO 160 Introduction to Film Studies
3 hours. The critical analysis of the moving image, including television programming and film. Employs textual, contextual, and ethical methods for illuminating the relationship of these media artifacts to modern culture, both secular and religious.

CMCO 220 International Film Studies
3 hours. Film is a truly international medium, stretching across borders, decades, and cultures. By viewing and analyzing films from other countries, we can learn much about the art and culture of the countries that produced them. Students will analyze international films in terms of the cultural, political, ideological, and economic forces that shaped them.

CMCO 230 Introduction to Video Production
3 hours. An introduction to the language and the technical, creative, and aesthetic elements of the video production process. Course includes basic lighting, sound, camera operation, composition, and design of visual elements, producing, and directing through both classroom and supervised laboratory experiences.

CMCO 233 Contemporary Christian Songwriting and Producing
3 hours. Working with professionals in the contemporary Christian music field, students will learn basic techniques of songwriting including lyrics and song structure. Students will write their own songs, which they will then produce and record.
Prerequisite: CMCO 243 Introduction to Audio or instructor's permission.

CMCO 243 Introduction to Audio
3 hours. Concentrating on recording, editing, and mixing multitrack audio on a digital platform. The course will look at special recording techniques for (a) human voices in speaking, singing, and dramatic performance; (b) musical instruments; (c) dramatic sound effects. Students will complete projects in editing and mixing of multitrack sound programs.

CMCO 250 Digital Multimedia Production
3 hours. The Web has revolutionized the way we find and utilize information. Students in this class will have the opportunity to originate graphics, audio, text elements, and simple animations elements and build them into interactive Web pages.

CMCO 260 Scriptwriting for Media
3 hours. An introduction to the styles, techniques, content, and forms of television writing. Both dramatic (sitcom and dramatic features) and nondramatic (news and informational) forms of writing are covered. The writing of several short scripts is required in the course.
Prerequisite: WRIT 110 College Writing.

CMCO 270 Broadcast News I
3 hours. This class covers the basic principles of broadcast journalism: broadcast news writing, broadcast videography, and Internet-distributed video news production. Students participate in a student-focused television news show by creating news and feature videos for broadcast (cable, online); they will create a demo tape/DVD from those packages. (Identical to JOUR 270)
Prerequisite: CMCO 230 Introduction to Video Production or instructor's permission.

CMCO 275 Field Experience
2-10 hours. An internship experience designed to give students an opportunity to practice video and film techniques and principles in an off-campus, professional setting. Students choose from a variety of options - cable, broadcast, corporate, medical, or commercial production facilities - based on the student's goals and interests. Up to 3 hours may apply to the communication media major.
Prerequisite: instructor's permission.

CMCO 285 Selected Topics
1-3 hours. An introductory seminar offered on an occasional basis addressing a current topic in the field that is of special interest to students and current faculty.

CMCO 310 Intermediate Directing
3 hours. Working with classmates as crew, students take turns directing scenes from Hollywood movies in this hands-on directing workshop. Beyond storyboarding and shot planning, this class focuses on working with actors, working with crew, and other skills required for balancing the technical and the artistic aspects of directing.
Prerequisite: CMCO 230 Introduction to Video Production or instructor's permission.

CMCO 320 Dramatic Scriptwriting
3 hours. An introduction to the art of writing for film. Dramatic structure is emphasized and plot scenarios, dialogue, and characterization are among several topics examined and exercised. Students create scripts for original features, short films, or plays. The writing experience is complemented through an examination of the business aspects of writing, including spec-scripts, agents, and the Hollywood system.

Prerequisite: CMCO 260 Scriptwriting for Media or instructor's permission.

CMCO 333 Camera and Lighting
3 hours. This course explores the various camera and lighting techniques used in film and digital video production. Students will focus on applying lighting techniques and camera movement to create specific visual effects. Students will apply the ideas discussed in the text and lectures to a series of in-class explorations, in addition to scenes filmed outside of class.
Prerequisite: CMCO 230 Introduction to Video Production or instructor's permission.

CMCO 343 Sound Design
3 hours. This class explores the use of digital sound technology to record, edit, and mix audio for film and television. Students will use their audio skills to record sound both in the field and in the recording studio.
Prerequisite: CMCO 243 Introduction to Audio or instructor's permission.

CMCO 344 Studio Sound Recording
3 hours. Students will learn to record music and vocal tracks in a digital multitrack studio environment. Students will produce music, advertising, and other audio projects in this hands-on studio course.
Prerequisite: CMCO 243 Introduction to Audio or instructor's permission.

CMCO 350 Editing Video
3 hours. Theory and practice in editing the moving image. Analysis of Hollywood and avant-garde styles of editing is followed by practice exercises illustrating each concept. *Prerequisite: CMCO 230 Introduction to Video Production or instructor's permission.*

CMCO 355 Event Video Production
3 hours. This course concentrates on live multicamera production of sporting, theatrical, and entertainment events. The course concentrates on producing and directing components, but also features setting up multicamera remote systems for video broadcast. May be repeated for a maximum of 6 hours total.
Prerequisite: CMCO 230 Introduction to Video Production or instructor's permission.

CMCO 360 Animation I
3 hours. An introduction to the fundamentals of animation production, from traditional cel animation to 2-D computer animation. In this hands-on workshop, students will produce short animation projects.

CMCO 363 Motion Graphics and Special Effects
3 hours. Students explore different means of producing special effects using digital computer imaging, blue-screens, compositing, and old-fashioned movie magic. Students will also learn how to create animated text sequences and video graphics.

CMCO 370 Broadcast News II
3 hours. This class takes students out of the classroom into the field to learn Electronic News Gathering (ENG). As part of the class, students produce a news program to be aired on cable access or campus TV network.
Prerequisite: CMCO 270 Broadcast News I or instructor's permission.

CMCO 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the

intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

CMCO 430 Producing and Directing Video
3 hours. An advanced course in video directing and producing. Students explore the preproduction, production, and postproduction of original short feature videos for the Fox Film Festival.
Prerequisite: CMCO 350 Editing Video.

CMCO 460 Advanced Animation
3 hours. Students continue to develop their skills in 2-D or 3-D animation, including techniques for creating characters in the digital domain, transformation, and movement. *Prerequisite: CMCO 360 Animation I or instructor's permission.*

CMCO 470 Journalism II
3 hours. Students hone journalistic skills in areas such as interviewing techniques, cultivating sources, investigative reporting, and editing and layout. (Identical to JOUR 470.)
Prerequisite: WRIT 230 Introduction to Journalism or instructor's permission.

CMCO 475 Field Experience
2-10 hours. An internship experience designed to give students an opportunity to practice video and film techniques and principles in an off-campus, professional setting. Students choose from a variety of options - cable, broadcast, corporate, medical, or commercial production facilities - based on the student's goals and interests. Up to 3 hours may apply to the communication media major.
Prerequisite: instructor's permission.

CMCO 481 Advanced Production Workshop I
3 hours. In this intensive hands-on production course, students will draw on all their filmmaking skills to produce 10- to 30-minute shorts - narrative, documentary, or animated - for their portfolios and film festivals. This semester focuses on preproduction and production, including script breakdown, casting, and actual filming.
Prerequisites: one of the following: CMCO 310 Intermediate Directing, CMCO 320 Dramatic Scriptwriting, CMCO 333 Camera &Lighting, CMCO 343 Sound Design, CMCO 350 Editing Video, CMCO 430 Producing &Directing Video, or instructor's permission. Admission to the class is a competitive process based on the student proposal and script.

CMCO 482 Advanced Production Workshop II
3 hours. This course continues the project started in Advanced Production Workshop I into postproduction, including editing, sound design, color correction, and DVD authoring.
Prerequisite: CMCO 481 or instructor's permission.

CMCO 485 Selected Topics
1-3 hours. An advanced seminar offered on an occasional basis addressing a current topic in the field that is of special interest to students and current faculty.

CMCO 490 Senior Portfolio
1 hour. This class helps prepare students for entry into the professional realm by developing networking and marketing strategies, and by preparing a professional reel of their best work, which will be critiqued by members of the local media industry.
Prerequisite: senior status.

CMCO 495 Special Study
1-3 hours. Individual study in an area of special interest to the student. Offered to exceptional students at the discretion of a faculty member.

Communication Arts (COMM) Courses

COMM 100 Introduction to Communication
3 hours. An introduction to the study of human communication. Application of communication principles to interpersonal, group, and public contexts. Particular emphasis on the practice of public speaking. Students will prepare and deliver several oral presentations.

COMM 200 Persuasive Communication
3 hours. A presentation of key principles of persuasion as they are reflected in typical organizational communication contexts. Focus on developing a planning sequence that will function as a practical guide for designing, executing, and evaluating communication events. Students will be expected to develop a "real world" communication event, e.g., publicity campaign, speech, newsletter. (Identical to JOUR 200)
Prerequisite: COMM 100 Introduction to Communication or equivalent.

COMM 210 Interpersonal Communication
3 hours. Theoretical and reflective study and guided experience in dyadic and small-group communication, with attention given to interpersonal communication, listening behavior, nonverbal communication, and conflict resolution.
Prerequisite: COMM 100 Introduction to Communication or equivalent.

COMM 220 Intercultural Communication
3 hours. Communication as it affects and is affected by language and culture. Contextualized use of communication within speech communities. Intercultural effectiveness. Cultural communication theory. Competent intercultural experiences in co-cultures (ethnic, gender, intergenerational, deaf, and so on) and global cultural groups.

COMM 230 Mass Media and Popular Culture
3 hours. Survey of the historical development of newspapers, magazines, broadcast media, and cinema. Analysis of the role(s) of mass media in shaping and altering opinion and values in contemporary culture.

COMM 270 Introduction to Organizational Communication
3 hours. An examination of organizations from a communication vantage point. Combines study of theoretical perspectives with skill development. Students will build organizational communication competencies through understanding the nature of communication in the organizational context and by practicing effective communication skills. Possible topics include communication networks and climates, superior-subordinate relationships, computer-mediated communication, organizational identification, communication audits, group and team communication, interviewing, meetings, and presentations.

COMM 275 Field Experience
1-10 hours. Experience in supervised field situations, generally off campus, involving extensive communication activity. Admission to course and amount of credit determined by the faculty supervisor. Pass/No Pass.

COMM 285 Selected Topics
3 hours. A variety of topics may be offered that reflect the interests of faculty, visiting professors, and students.

COMM 300 Communication Theory and Research
3 hours. A study of the major sources of communication theory (e.g., meaning theory, humanistic psychology, symbolic interactionism, relational theory, information processing) together with specific contemporary exemplifications of each approach. Special focus is on the nature and progress of scientific inquiry in communication theory.
Prerequisite: 6 hours of communication arts or media communication courses, including

COMM *100 Introduction to Communication.*

COMM 305 Professional Communication Activities
1-3 hours. Offered each term. Structured to give students experience in "real world" communication events, generally on campus. May be repeated for a maximum of 6 hours total. Pass/No Pass.

COMM 310 Conflict Resolution
3 hours. A study of communication principles found useful in managing conflict productively. Focus is given to conflict occurring in institutional and organizational settings between individuals and groups. Attention also is given to conflict in social, national, and international settings. (Identical to PSCI 310.)

COMM 315 Forensics
1-3 hours. This course prepares students to create competitive speeches and debates in regional intercollegiate tournaments. May be repeated for a maximum of 6 hours total.

COMM 320 Introduction to Public Relations
3 hours. A course designed to introduce and develop a clear concept of public relations as a communication profession. Topics to be covered include the function of public relations in both public and private enterprises; the process of planning and implementing a public relations communication campaign; techniques for communicating with various publics; and the laws and ethics governing the practice of public relations. (Identical to JOUR 320)
Prerequisite: one course in business or communication arts.

COMM 324 Argumentation and Critical Thinking
3 hours. A course in practical reason. Includes a survey of theories of argumentation, analysis of public arguments, and several speeches, including a debate.
Prerequisite: COMM 100 Introduction to Communication or instructor's permission.

COMM 340 General and Cultural Linguistics
3 hours. A study of the nature of verbal symbols as they function in communication. The course will include

phonetic transcription, semantics, modern grammatical theories, history of the English language, and modern English dialects.

COMM 343 Second Language Acquisition
3 hours. This course familiarizes students with linguistic, psychological, cognitive, and socio-cultural aspects of second (or additional) language acquisition and related language acquisition theories. Students reflect on their own language learning and acquisition experiences in light of these theories and consider implications for the teaching and learning of additional languages. Offered every other year.

COMM 350 Introduction to TESOL (Teaching English to Speakers of Other Languages)
3 hours. An introduction to the theory and practice of teaching English (or any language) to non-native speakers. Topics include principles of language teaching, communicative and interactive approaches, teaching methods and techniques for improving different language skills, lesson planning, materials selection and adaptation, testing, cultural issues, teaching English as Christian witness, and working with English-as-a-second-language students in a mainstream class. Students relate theory to practice in a school- or community-based practicum.

COMM 360 Nonverbal Communication
3 hours. A study of the nonverbal dimensions of interpersonal communication. Includes a consideration of physical behavior, facial expression, eye behavior, personal appearance, personal space, clothing, touch, voice, and use of objects as means of communication and in relation to verbal communication. Involves participation in nonverbal simulations and exercises.
Prerequisite: one communication arts course.

COMM 380 Leadership Communication
3 hours. An introduction to the study and practice of leadership from a communication perspective. Particular focus on the relationship between communicating and leading. Examination of leadership concepts and theories in organizational, group, and public contexts. Students will analyze their personal leadership styles and develop leadership communication skills through team projects and classroom exercises.
Prerequisite: sophomore standing or above.

COMM 390 Small Group Communication
3 hours. A course that examines and applies theories of small-group structures, climate, roles, leadership, motivation, and conflict management.
Prerequisite: Comm 100 Introduction to Communication.

COMM 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

COMM 400 Critical Approaches to Communication
3 hours. Methods of rhetorical criticism as applied to public communication of the past and present, including but not limited to speeches, broadcasts, films, and campaigns. Analysis of current trends in

rhetorical criticism.
Prerequisite: COMM 300 Communication Theory and Research or instructor's permission.

COMM 410 Gender Communication Across Cultures
3 hours. A course designed to introduce students to the nature and function of gender differences in communication on a cross-cultural basis. Examines biological, cultural, linguistic, and power theories that attempt to explain these differences. Focus given to verbal (spoken and written) language as well as nonverbal communication codes. Counts toward globalization requirement.

COMM 420 Intercultural Communication
3 hours. Communication as it affects and is affected by language and culture. Contextualized use of communication within speech communities. Intercultural effectiveness. Cultural communication theory. Competent intercultural experiences in co-cultures (ethnic, gender, intergenerational, deaf, and so on) and global cultural groups.

COMM 465 TESOL Field Experience
1-3 hours. Supervised teaching experience in a school or community program for learners of English as a second language.
Prerequisite: COMM 350 Introduction to TESOL.

COMM 475 Field Experience
1-10 hours. Experience in supervised field situations, generally off campus, involving extensive communication activity. Admission to course and amount of credit determined by the faculty supervisor. Pass/No Pass.

COMM 480 Senior Capstone: Ethical and Spiritual Dimensions of Communication
3 hours. Designed to integrate skills and concepts from communication course work with ethical and spiritual principles through readings, written assignments, and assessment instruments. Students will complete portfolios that will include work samples and department exit exams along with a statement of what it means to be a Christian communicator. A service component may be included as part of the course. (Identical to JOUR 480)

COMM 485 Selected Topics
3 hours. A variety of topics may be offered that reflect the interests of faculty, visiting professors, and students.

COMM 495 Special Study
1-3 hours. Individualized study related to the student's needs and interests. Open to exceptional students at the discretion of a faculty member.

Computer and Information Science (CSIS) Courses

CSIS 130 Web-Based Programming
3 hours. An introduction to computer programming using HTML and JavaScript. The emphasis of the course is placed on fundamental concepts of computer programming through the creation of interactive Web pages. The course is designed for students who want to learn more about the World Wide Web and

its applications.

CSIS 201 Introduction to Computer Science I
3 hours. A foundational course for the study of computer and information science. The course covers an overview of programming methodology and gives the student an ability to write computer programs using standard style and structure. Programming projects are completed in one or more high-level languages.
Prerequisite: high school algebra or equivalent.

CSIS 202 Introduction to Computer Science II
3 hours. A foundational course for the study of computer and information science. The course covers an overview of programming methodology and gives the student an ability to write computer programs using standard style and structure. Programming projects are completed in one or more high-level languages.
Prerequisites: CSIS 201 Introduction to Computer Science I or ENGR 152 Engineering Principles II.

CSIS 220 Digital Logic Design
4 hours. Introduction to digital systems and binary codes, Boolean algebra and digital logic devices, combinational logic circuits and design methods, ROM and RAM memory elements, sequential logic circuits, and design methods. Laboratory experience includes TTL logic circuits, and CAD tools. Three lectures and one laboratory per week.
(Identical to ENGE 220.)
Prerequisite: ENGR 152 Engineering Principles II or CSIS 201 Introduction to Computer Science I or equivalent.

CSIS 275 Field Experience
1-3 hours. Supervised experience with an off-campus industry, business, or institution, using computer science or data processing.
Prerequisite: upper-division computer information science majors.

CSIS 285 Selected Topics
1-10 hours. A scheduled class with topics chosen to meet the special needs and interests of students, faculty, or visiting professors.
Prerequisite: upper-division computer information science majors.

CSIS 300 Numerical Methods
3 hours. A study of numerical solutions of mathematical problems, including nonlinear equations, systems of linear equations, polynomial approximations, root finding, integration, and differential equations. Computer programs are written to solve these problems. (Identical to MATH 300.)
Prerequisites: MATH 202 Calculus II and either CSIS 201 Introduction to Computer Science I or ENGR 152 Engineering Principles II.

CSIS 310 Data Structures and File Processing
3 hours. An introduction to the concepts of information organization, methods of representing information both internally and externally. The course begins with basic structures (stacks, queues, linked lists, and trees) and moves through more complex data structures into the processing of files (sequential, relative, indexed sequential, and others). Programming projects are completed in one or more high-level languages.
Prerequisites: CSIS 201 Introduction to Computer Science I and CSIS 202 Introduction to Computer Science II.

CSIS 314 Client-Server Systems
3 hours. This course provides an introduction to constructing complete information systems based on the client-server model. On the client side, we introduce graphical user-interfaces, their design and implementation, as well as commonly used tools such as database access clients, and report generators. On the server side, we introduce database management systems and the use of server-side programming tools that provide connectivity for clients and access to database systems. Along the way, students are introduced to the basics of distributed computing and computer networks.
Prerequisite: CSIS 202 Introduction to Computer Science II.

CSIS 321 Software Engineering
3 hours. An introduction to the strategies used in producing quality software. The life cycle of software development is presented and utilized. Larger projects are undertaken by teams of students in the initial phases.
Prerequisite: CSIS 202 Introduction to Computer Science II.

CSIS 330 Computer Graphics
3 hours. An introduction to the concepts of computer graphics, particularly those used with microcomputers. Basic programming and mathematical tools used in producing graphics are explored and applied in several projects.
Prerequisites: CSIS 310 Data Structures and File Processing and MATH 190 Precalculus Mathematics.

CSIS 340 Database Systems
3 hours. A study of the organization of database systems for information storage, retrieval, and security. Examples of hierarchic, network, and relational-based systems are presented.
Prerequisite: CSIS 310 Data Structures and File Processing.

CSIS 350 Data Communications and Networks
3 hours. An introduction to the field of communications among computers and computer systems, with an emphasis placed on LANS (Local Area Network Systems) and the OSI model. Students will experience the installation of one or more network systems.
Prerequisite: CSIS 202 Introduction to Computer Science II.

CSIS 360 Computer Architecture and Assembly Language
3 hours. An introduction to digital computer hardware architecture and organization. Topics include digital logic, processor design, instruction sets, and system architecture. Programs written in assembly language will be used to gain hands-on experience with the underlying system architecture.
Prerequisite: CSIS 310 Data Structures and File Processing.

CSIS 370 Object-Oriented Programming
3 hours. This course covers the fundamental concepts of object-oriented programming languages, including data abstraction and typing, class inheritance and generic types, prototypes and delegation, concurrency control and distribution, object-oriented databases, and implementation. Object-oriented solutions will be developed in one or more high-level languages.
Prerequisite: CSIS 310 Data Structures and File Processing.

CSIS 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

CSIS 420 Structures of Programming Languages
3 hours. A study of the basic design of computer programming languages, with the greater emphasis placed on semantics (over syntax). A comparative analysis is made among several of the common languages.
Prerequisite: CSIS 310 Data Structures and File Processing.

CSIS 430 Analysis of Algorithms
3 hours. An introduction to the design and analysis of algorithms. The course covers the fundamentals of analyzing algorithms for correctness and time and space bounds. Topics include advanced sorting and searching methods, graph algorithms, geometric algorithms, matrix manipulations, string and pattern matching, set algorithms, and polynomial computations.
Prerequisite: CSIS 310 Data Structures and File Processing.

CSIS 434 Parallel Computing
3 hours. A theoretical and practical survey of parallel processing, including a discussion of parallel architectures, parallel programming languages, and parallel algorithms. Students will program one or more parallel computers in a higher-level parallel language.
Prerequisite: CSIS 310 Data Structures and File Processing.

CSIS 440 Artificial Intelligence (AI)
3 hours. This course introduces the student to the basic concepts and techniques of artificial intelligence, knowledge representation, problem solving, and AI search techniques. AI solutions will be developed in an appropriate AI language.
Prerequisite: CSIS 310 Data Structures and File Processing.

CSIS 450 Network Administration
3 hours. This course introduces the student to system administration of a LAN. Topics covered include adding and removing users; monitoring and controlling processes; adding, removing, and managing groups; mounting and unmounting filesystems; monitoring and troubleshooting a TCP/IP network; managing and controlling network and system security; and administration of network file systems.
Prerequisite: CSIS 350 Data Communications and Networks.

CSIS 460 Operating Systems
3 hours. A study of the organization and architecture of computer systems. The major principles of operating systems are presented, along with case studies involving actual operating systems.
Prerequisite: CSIS 310 Data Structures and File Processing.

CSIS 471 Senior System Development I
1 hour. In the senior system development sequence, students apply their knowledge and software engineering skills gained through course work to a substantial computer/information science project. In the first semester, projects are defined and necessary background research along with feasibility studies are

completed. Students must also consider the ethical, moral, and social impact of their systems. Collaboration with other departments of the university is encouraged.
Prerequisite: at most, three semesters from graduation.

CSIS 472 Senior System Development II
3 hours. The projects that were initiated in the first semester are fully developed and implemented. Use of analysis, design, implementation, and testing techniques are applied throughout the project. The system development sequence culminates in the oral presentations and formal written reports of the projects.
Prerequisite: CSIS 471 Senior System Development I.

CSIS 475 Field Experience
1-3 hours. Supervised experience with an off-campus industry, business, or institution, using computer science or data processing.
Prerequisite: upper-division computer information science majors.

CSIS 480 Principles of Compiler Design
3 hours. This course introduces the student to the basics of building a compiler using a multiphase translation process. It covers lexical analysis, parsing, and translation to abstract syntax using modern parser generator technology. It discusses binding of identifiers and symbol table organization, and a variety of intermediate representations that are suitable for backend analysis. Other topics include type checking, attribute grammar representations, and printing from abstract syntax.
Prerequisite: CSIS 310 Data Structures and File Processing. (CSIS 420 Structures of Programming Languages preferred.)

CSIS 485 Selected Topics
1-10 hours. A scheduled class with topics chosen to meet the special needs and interests of students, faculty, or visiting professors.
Prerequisite: upper-division computer information science majors.

CSIS 490 Applied Software Development
1-3 hours. Special software development projects designed and completed by the student in an area that applies computers. This is an independent-study course and is supervised by staff in both the computer area as well as in the selected area of study. *Prerequisite: upper-division computer information science majors and by permission.*

CSIS 495 Special Study
1-3 hours. Individual study in areas of special interest.
Prerequisite: upper-division computer information science majors and by permission.

Economics (ECON) Courses

Additional courses are listed under Accounting and Business.

ECON 201 Principles of Microeconomics
3 hours. An introduction to the micro aspects of the social science concerned with the allocation of resources. Consideration is given to the fundamental principles governing production, distribution, consumption, and exchange of wealth. The course studies the behavior of microeconomic units such as individuals, households, firms, and industries. ECON 201 and ECON 202 are complementary courses;

however, either course may be taken first.

ECON 202 Principles of Macroeconomics
3 hours. An introduction to the macro aspects of the social science concerned with the allocation of resources. Consideration is given to the fundamental principles of the economy as a whole, dealing with economic data, behavior, and theory at the aggregate level of the economy. The course studies topics such as government spending, taxation, and monetary policies, as well as events and issues in the global economy. ECON 202 and ECON 201 are complementary courses; however, either course may be taken first.

ECON 275 Field Experience
3-6 hours. Supervised experiences in business, financial and research firms, and government agencies. *Prerequisite: upper-division students and by permission*.

ECON 285 Selected Topics
2-3 hours. Occasional special courses chosen to fit the interests and needs of students and faculty.

ECON 301 Intermediate Microeconomics
3 hours. This course focuses on the following topics: basic theory of consumer behavior; production and costs; partial equilibrium analysis of pricing in competitive and monopolistic markets; general equilibrium; welfare; and externalities. The approach involves advanced algebra and rigorous application of concepts and methods to the analysis of markets from a decision making perspective. While required for economics majors this course is also valuable for student majoring in finance and management. *Prerequisites: ECON 201 Principles of Microeconomics and MATH 190 Precalculus Mathematics or higher*.

ECON 302 Intermediate Macroeconomics
3 hours. The course studies the economy as a whole by examining the national income account, monetary policy and its aggregates such as money supply, price level, and interest rates, and fiscal policy and its aggregates such as real income, consumption, and investment. It covers topics presented in ECON 202 in a more advanced manner. The course will analyze the economy in the long run when prices are flexible, in the very long run with a special emphasis on capital accumulation, and in the short run when prices are sticky. It also discusses the microeconomics behind macroeconomics by analyzing the aggregate consumption function in more detail.
Prerequisites: ECON 202 Principles of Macroeconomics and MATH 190 Precalculus Mathematics or higher.

ECON 340 Public Economics
3 hours. An overview of the economic role and impact of government, including topics in public finance, fiscal policy, monetary policy, and the banking system, and the economics of regulation.
Prerequisites: ECON 201 Principles of Microeconomics and ECON 202 Principles of Macroeconomics.

ECON 370 Global Political Economy
3 hours. An integrated view of the world economy, with particular attention to such topics as economic growth, debt crises, the distribution of wealth and income, the relationships between economic and political systems, the economics of peace and war, and environmental issues. (Identical to SOCI 370.)

Prerequisite: ECON 201 Principles of Microeconomics or ECON 202 Principles of Macroeconomics.

ECON 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

ECON 410 Introduction to Applied Econometrics
3 hours. This course deals with the application of statistical techniques to the analysis of economic data. Economists, financial analysts and others rely on econometric methods to estimate relationships and forecast employment, income and other trends. This course emphasizes hands-on application of econometric techniques to a variety of publicly available data. Considerable attention will be paid to the nature and sources of economic data and the application of econometric methods to common questions of value to managers and public decision-makers.
Prerequisites: BUSN 240 Statistics for Business and Economics, MATH 240 Statistical Procedures, PSYC 340 Statistical Procedures, or SOCI 340 Statistical Procedures.

ECON 461 International Trade
3 hours. An overview of international trade theory and its applications with respect to the direction of trade flows, determination of prices and volumes in international trade, the impact of tariffs and non-tariff barriers, and the role of bilateral and multilateral trade negotiations. Particular emphasis is given to the broader social impact of trade policy and patterns. (Identical to INTL 461 and SOCI 461.)
Prerequisites: ECON 201 Principles of Microeconomics.

ECON 462 International Finance
3 hours. An overview of international monetary economics including the balance of payments, foreign exchange rate, the globalization of financial markets and its implications, international macroeconomic interdependence and capital flows. Particular attention is given to multilateral financial institutions and reform of the global financial architecture. (Identical to INTL 462 and SOCI 462.)
Prerequisites: ECON 202 Principles of Macroeconomics.

ECON 475 Field Experience
3-6 hours. Supervised experiences in business, financial and research firms, and government agencies.
Prerequisite: upper-division students and by permission.

ECON 485 Selected Topics
2-3 hours. Occasional special courses chosen to fit the interests and needs of students and faculty.

ECON 490 Economics Senior Seminar
3 hours. An integrative seminar focusing on current issues and developments in the discipline of economics, including discussion of ethical issues and the integration of faith and economics. A research paper is a significant component of the course requirements.

ECON 495 Special Study
2-3 hours. Subject matter and credit arranged for the needs of the individual student.
Prerequisite: upper-division students and by permission.

Education (EDUC) Courses

EDUC 240 Perspectives in Education
2 hours. An overview of history and social issues in education and an exploration of teaching as a career. Introduction to the teacher education program at George Fox University. Includes 30 clock hours of field experience. Required for elementary teaching majors and music education majors.
Prerequisite: sophomore or junior status.

EDUC 250 Teaching as a Profession
2 hours. This is a one-semester introductory course on the teaching profession for those planning to enroll in an MAT program or considering teaching as a profession. Students will expand their understandings of the field of education and the role of teachers through class topics and experiences. They will also participate in a 30-hour classroom field experience. The George Fox University MAT program application process and requirements will be discussed. (This course is not part of the undergraduate elementary education major.)
Prerequisite: junior or senior status.

EDUC 275 Field Experience
1-2 hours. An elective field placement individually designed with approval of the instructor. Does not substitute for required field assignments; 40 hours fieldwork per credit is required.

EDUC 285 Selected Topics
1-3 hours. A seminar dealing with various topics as announced that represent current faculty interests and competencies.

EDUC 313 Elementary Mathematics Methods
2 hours. Examine and openly challenge knowledge, beliefs, and assumptions about the learning and teaching process. Engage in activities designed to enhance conceptual knowledge of selected topics. Explore what it means to teach mathematics in a standards-based system (i.e., using standards to plan instruction, using scoring guides to assess student work, critically examining curricula).
Prerequisites: MATH 211 &212 Foundations of Elementary Mathematics I &II (8 semester hours or equivalent).

EDUC 321 Early Childhood Education
3 hours. Early childhood distinctives regarding growth, development, and learning, with attention to implications for classroom management and organization, parent involvement, and program operation.
Corequisites: EDUC 342 Inclusion, EDUC 370 Curriculum and Instruction, EDUC 373
Fine Arts Methods, and EDUC 401 Language Arts and Children's Literature.
Prerequisite: admission to elementary education major.

EDUC 322 Early Childhood Methods
3 hours. This methods course focuses on the formulation and implementation of developmentally appropriate curriculum, instruction, materials, and assessment for young children, ages 3-8 years. Student facilitators create and implement lesson plans with young children in an integrated curriculum in the

content areas of art, health, language arts, math, music, and social studies.
Prerequisite: EDUC 321 Early Childhood Education and admission to Teacher Education Program.

EDUC 334 Health and Physical Education Methods
3 hours. This course examines and offers opportunities to apply health and physical education methods.
Prerequisite: sophomore status and admission to Teacher Education Program.

EDUC 341 Learning Theory
2 hours. A survey of learning theories and possible applications in the elementary classroom are explored.
Corequisite or prerequisite: PSYC 310 Lifespan Human Development or PSYC 311
Child Development. Prerequisite: admission to Teacher Education Program.

EDUC 342 Inclusion
2 hours. A survey of current knowledge about the diverse abilities of learners in the regular classroom, with an emphasis on methods for including students and assisting their learning processes. Attention given to needs of bicultural students with disabilities. EDUC 351 Middle-Level Education
3 hours. Middle-level distinctives regarding growth, development, and learning, with attention to implications for classroom management and organization.
Prerequisite: permission required.

EDUC 352 Middle-Level Methods
3 hours. Developmentally appropriate methods and materials for facilitating instruction and integration of subject matter fields for middle-level students in both departmentalized and self-contained classroom organizational patterns. Issues of parent involvement and teacher collaboration.
Prerequisite: permission required.

EDUC 370 Curriculum and Instruction
3 hours. Generic methods of teaching, planning curriculum, and both formal and informal assessment of pupil learning as used in teaching. Needs of students from generational poverty are examined.
Prerequisite: admission to Teacher Education Program.

EDUC 373 Fine Arts Methods
2 hours. Using the basic principles and elements of music and art, students will explore making connections between subjects in the elementary curriculum.
Prerequisite: admission to Teacher Education Program.

EDUC 375 Student Teaching I and Classroom Management
2 hours. A laboratory experience consisting of general and specific tasks, managing and instructing pupils and assisting teaching in the classroom. Patterns of classroom management and organized community building will be discussed including responding to needs of the bicultural child. An additional one hour is required for students intending to add the middle-level authorization and is in addition to the two-hour requirement. Please see advisor.

EDUC 376 Student Teaching I for Middle-Level Authorization
1 hour. A laboratory experience consisting of general and specific tasks, managing and instructing pupils and assisting teaching in the classroom.
Prerequisites: EDUC 351 Middle-Level Education, EDUC 352 Middle-Level Methods,

and EDUC 375 Student Teaching I and Classroom Management.

EDUC 380 Social Studies Methods
2 hours. Research-based methods for teaching social studies. Issues of cultural proficiency addressed.

EDUC 383 Science Methods
2 hours. Students will study, experience, and practice research-based science pedagogy appropriate to grades K-8 in a self-contained school setting. Activities include writing and research on science education, demonstration of science teaching practice, and supervised teaching experience. Students will develop, critique, and implement science curriculum.

EDUC 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

EDUC 401 Language Arts and Children's Literature
4 hours. Survey of children's literature genre and uses. Methods and materials of language arts teaching in the areas of listening and speaking, and of spelling and handwriting instruction.

EDUC 402 Literacy Methods
4 hours. Methods and materials for language arts teaching in the areas of reading and writing, with an emphasis on the use of children's literature.

EDUC 430 History and Foundations of Literacy Learning
2 hours. Thoughtful classroom practice depends on sound theory. This course examines some current competing theories, looks at the implications of various literacy theories as they impact classroom decision making, and, through reading and discussion, helps develop a personal understanding of literacy processes. The linguistic framework of reading and its place in the language arts will also be explored.

EDUC 431 Analysis of Reading and Writing Assessments
2 hours. Classroom teachers become acquainted with a wide variety of methods for assessing student progress in reading and writing. Administration and scoring of these tests will be explored. Information about how testing results can facilitate teaching and learning is the goal.

EDUC 432 Advanced Strategies in Literacy Instruction: Assessment and Remediation
2 hours. This course focuses on current methods and materials for reading/literacy instruction. The strategies used by proficient readers will be explored and teaching methods will be modeled and implemented. Methods of assessment and strategies for remediation will also be explored.

EDUC 433 Advanced Studies in Children's and Adolescent Literature
2 hours. This course focuses on a critical examination of children's literature as literature, considers curriculum development based on children's literature, and on a further development of a broad understanding of literacy learning issues.

EDUC 434 Issues and Application of Literacy Instruction
2 hours. This course focuses on the issues related to public and school-based concerns about literacy learning. The discussion of issues will lead to research-based applications that can be translated into the classroom practice at the elementary, middle, or high school level.

EDUC 436 Reading and Writing in the Content Areas
2 hours. This course focuses on the reading and writing needs of the student at the middle level and in the high school. The teaching of critical reading and writing
strategies will be included as well as assessment tools. This course is required for those pursuing the middle level and high school authorizations of the Reading Endorsement, but is appropriate for teachers of all levels.

EDUC 437 Emergent Literacy
2 hours. This course explores theoretical principles and practices based on current research. Emphasis is on strategies for coming to print, print conventions, and reading aloud. Shared, guided, and independent reading and writing is also explored. These strategies are based on theoretical assumption from the psychology of language and cognition development and linguistics.

EDUC 438 Organization of Reading Programs
3 hours. The content of this course includes: the organization of reading programs within the context of state and federal regulation and within the structure of the school-wide program; the types of testing used to diagnose and monitor student progress; the methods that can be used to involve parents, paraprofessionals, and volunteers; and the methods available to assess program effectiveness. Observations in a variety of school settings will be organized.

EDUC 439 Early Childhood and Elementary Reading Practicum
2 hours. The reading practicum will provide a context in which to apply methods, assessment techniques, and teaching strategies in a school setting. It will also provide opportunity for an observation of a reading program in application. The practicum setting must include assessment, teaching, and evaluation of students at both authorization levels. Pass/No Pass.
Prerequisites: EDUC 430 History and Foundations of Literacy Learning, EDUC 431 Analysis of Reading and Writing Assessments, EDUC 432 Advanced Strategies in Literacy Instruction, EDUC 438 Organization of Reading Programs, or by permission.

EDUC 470 Applied English Linguistics: Oral and Literary
3 hours. Examines the fundamental elements, processes, and patterns of oral and written language for the teacher of English to speakers of other languages. Topics include phonetics, phonology, sociolinguistics, pragmatics, morphology, orthography and writing conventions, syntax, semantics, and discourse analysis. English is the primary focus of the course, with reference to other languages commonly spoken by students in Oregon classrooms.

EDUC 471 Second Language Acquisition and Development
2 hours. Examines various factors, concepts, and theories about first and second language acquisition processes and their interrelationships. The course also focuses on the application of this knowledge in ESOL classes for maximizing ESOL students' language development and academic achievement.
Prerequisite or concurrent enrollment: EDUC 470 Applied English Linguistics: Oral and Literary.

EDUC 472 Intercultural Communication in the ESOL/Bilingual Context
2 hours. Examines the diverse and dynamic role of culture in the ESOL student's language development and academic achievement. The course also emphasizes the application of this knowledge for instruction and the involvement of community and its resources for maximizing ESOL students' academic achievement.

EDUC 473 Planning and Managing the ESOL/Bilingual Curriculum
3 hours. Examines strategies for planning, managing, and teaching English as a second language and discipline-focused content to ESOL students. Emphasis is placed on curriculum, teaching, and learning approaches that accommodate a diverse population within the classroom. This course also focuses on strategies for collaborating with educators and community members in order to provide comprehensive, challenging educational opportunities for ESOL students.

EDUC 474 Assessing ESOL/Bilingual Student Learning and Language Proficiency
3 hours. Examines principles, issues, and approaches useful for assessing the English competencies of ESOL students. Emphases are placed on developing appropriate assessment tools for the ESOL classroom and on properly interpreting tests that are used for program placement.

EDUC 475 Student Teaching II
12 hours. A full-time laboratory experience in which principles and methods of teaching are applied under supervision of a classroom teacher and college supervisor. Pass/No Pass.

EDUC 478 ESOL/Bilingual Practicum - Early Childhood/Elementary
2 hours. A supervised practicum in an approved early childhood and elementary school demonstrating knowledge and strategies developed in the ESOL/bilingual courses. Candidates set goals for professional growth in the English-language teaching field. Course is offered on a Pass/No Pass basis only.
Prerequisites: successful completion of all required ESOL/bilingual courses (or their equivalent) and approval of the faculty advisor.

EDUC 485 Selected Topics
1-3 hours. A seminar dealing with various topics as announced that represent current faculty interests and competencies.

EDUC 490 Senior Seminar
3 hours. Seminar discussion of current trends and issues in education, as well as job transition and related issues.

EDUC 495 Special Study
1-3 hours. Directed independent study open to upper-division students only. May not be used to substitute for required courses.
Prerequisite: instructor's permission.

Engineering, Civil (ENGC) Courses

ENGC 275 Field Experience
1-3 hours. Supervised experience in the discipline including internships and practica required for

professional programs. This introductory experience must have an on-site supervisor and/or a departmental instructor overseeing, designing, and evaluating the content of the course.
Prerequisite: instructor's permission.

ENGC 285 Selected Topics
2-4 hours. Occasional special courses chosen to fit the interests and needs of engineering students and faculty. Additional course fee is required.

ENGC 310 Environmental Engineering
3 hours. Fundamental principles of environmental engineering. Topics include life support system, carbon-oxygen cycle, cycling of nitrogen, sulfur, and phosphorus, and the hydrologic cycle. Calculation of pollution potential and treatment system parameters. Concepts of water and wastewater treatment, solid and hazard waste management, and air pollution abatement. Additional course fee is required.
Prerequisites: CHEM 211 General Chemistry and MATH 201 Calculus I.

ENGC 320 Engineering Surveying
2 hours. Basic principles of land surveying and surveying equipment. Concepts include calculating position on spherical and plane surfaces. Principles of vertical and horizontal measurements in engineering and construction projects. One lecture and one three-hour laboratory per week. Additional course fee is required.
Prerequisite: MATH 190 Precalculus Mathematics

ENGC 330 Structural Analysis and Design
3 hours. Analysis and design of statically determinate and indeterminate structures; beams, trusses, frames, arches, and cables. Methods include classical, energy, matrix, and computer solutions. Additional course fee is required.
Prerequisites: ENGM 320 Mechanics of Materials.

ENGC 340 Geotechnical Engineering
4 hours. Basic physical and mechanical properties of soils, including specific gravity, grain size distribution, plasticity, permeability, consolidation, and shear strength. Use of these properties to calculate stresses in a soil mass, lateral earth pressures, bearing capacity, and slope stability. Application of fundamental soil mechanics principles to slope stability, foundations, and retaining structures. Three lectures and one two-hour laboratory per week. Additional course fee is required.
Prerequisites: ENGM 320 Mechanics of Materials.

ENGC 350 Water Resources Engineering
4 hours. Fundamental concepts of hydrology and its application in engineering applications. Topics include the hydrologic cycle, weather and hydrology, precipitation, evaporation, stream flow hydrographs, hydrologic and hydraulic stream routing, hydrologic measurements, and application of hydrologic models. Three lectures and one two-hour laboratory per week. Additional course fee is required.
Prerequisites: CHEM 211 General Chemistry and ENGM 330 Fluid Mechanics.

ENGC 370 Transportation Engineering
2 hours. Introduction to planning, design, and operation of transportation systems. Concepts of human factors and vehicle characteristics in design. Topics include traffic stream variables and their measurement techniques, basic traffic flow models, highway and street intersection capacity and level of service, traffic

control concepts, and transportation systems management. Application of statistical analysis on transportation problems. Additional course fee is required.
Prerequisites: ENGM 210 Statics and Dynamics and ENGC 320 Engineering Surveying.

ENGC 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

ENGC *430 Reinforced Concrete Design*
3 hours. Fundamental principles of reinforced concrete design in accordance with the ACI Building Code. Topics include concrete materials, beams in bending, shear, and torsion, development, anchorage and splicing, serviceability, columns, slabs, frames, and footings. Additional course fee is required. *Prerequisites: ENGC 330 Structural Analysis and Design.*

ENGC 450 Construction Management and Professional Practice
3 hours. Principles and practice of construction engineering and project management. Development of cost estimates and project schedules. Basic construction methods and fundamental construction terminology. Overview of civil engineering professional practice including career paths, ethics and professionalism, project planning, dispute resolution, and effective decision making. Two lectures and one two-hour laboratory per week. Additional course fee is required.
Prerequisites: Senior standing or consent of instructor.

ENGC 460 Design of Steel Structures
3 hours. Basic principles of structural steel design and analysis. Topics include axial members, beams, bolted and welded connections, composite beams, and structural systems. Emphasis will be on the LRFD Method and AISC Code. Additional course fee is required.
Prerequisites: ENGC 330 Structural Analysis and Design.

ENGC 475 Field Experience
1-3 hours. Supervised experience in the discipline including internships and practica required for professional programs. This advanced experience must have an on-site supervisor and/or a departmental instructor overseeing, designing, and evaluating the content of the course.
Prerequisite: instructor's permission.

ENGC 485 Selected Topics
2-4 hours. Occasional special courses chosen to fit the interests and needs of engineering students and faculty. Additional course fee is required.

Engineering, Electrical (ENGE) Courses

ENGE 220 Digital Logic Design
4 hours. Introduction to digital systems and binary codes; Boolean algebra and digital logic devices; combinational logic circuits and design methods; ROM and RAM memory elements; sequential logic

circuits and design methods. Laboratory experience includes TTL logic circuits and CAD tools. Three lectures and one laboratory per week. Additional course fee is required.(Identical to CSIS 220.)
Prerequisite: ENGR 152 Engineering Principles II or CSIS 201 Introduction to Computer Science I.

ENGE 250 Electrical Circuit Analysis
4 hours. Basic concepts of DC and AC electrical circuits. Voltage-current relationships for circuit elements; Kirchhoff's laws; Thevenin and Norton theorems. Basic transient and sinusoidal steady-state analysis; phasor analysis; frequency response, resonance, and measurement concepts. Applications of the transistor and operational amplifier. Analysis and design aided by PSpice simulation software. Three lectures and one laboratory per week. Additional course fee is required.
Corequisite: MATH 310 Differential Equations with Linear Algebra. Prerequisite: ENGR 152 Engineering Principles II and PHYS 212 General Physics with Calculus II.

ENGE 275 Field Experience
1-3 hours. Supervised experience in the discipline including internships and practica required for professional programs. This introductory experience must have an on-site supervisor and/or a departmental instructor overseeing, designing, and evaluating the content of the course.
Prerequisite: instructor's permission.

ENGE 285 Selected Topics
1-3 hours. An introductory seminar offered on an occasional basis addressing a current topic in the field that is of special interest to students and current faculty.

ENGE 300 C Programming with Applications
3 hours. Introduction to the C programming language as a means to perform low-level access and control of hardware with a high-level language. Custom software applications, portability issues, application of pointers, and introduction to data structures. Applications to engineering problems, including data acquisition and control systems. Additional course fee is required.
Prerequisites: ENGE 220 Digital Logic Design.

ENGE 311 Electronic Devices and Circuits
4 hours. Introduction to the terminal characteristics of active semiconductor devices. Operation and small-signal models of diodes, junction and field-effect transistors, and operational amplifiers. Basic single-stage and multistage amplifiers: gain, biasing, and frequency response. Switching characteristics of transistors in saturation and cutoff. Three lectures and one three-hour laboratory per week. Additional course fee is required.
Prerequisites: ENGE 220 Digital Logic Design and ENGE 250 Electrical Circuit Analysis.

ENGE 312 Applications of Electronic Devices
4 hours. Analog and digital applications of electronic devices: amplifiers, oscillators, filters, modulators, logic circuits, and memory elements. Feedback, stability, and noise considerations. Emphasis on practical design problems and the formulation of design objectives. Three lectures and one three-hour laboratory per week. Additional course fee is required.
Prerequisite: ENGE 311 Electronic Devices and Circuits and ENGE 330 Electrical Signals and Networks.

ENGE 330 Electrical Signals and Networks
4 hours. Fundamental concepts of continuous-time and discrete-time signals and systems. Linear time-invariant systems, the convolution integral, and impulse response. Fourier series and frequency domain analysis. Fourier, Laplace, and z-transform techniques. Principles of feedback, sampling, and modulation. Theoretical and practical aspects of electrical networks. Loop and nodal analysis of multi-port networks. Admittance, impedance, and transmission parameters, matrix solutions. Additional course fee is required.
Prerequisite: ENGE 250 Electrical Circuit Analysis.

ENGE 350 Electrical Network Analysis
3 hours.Theoretical and practical aspects of electrical networks. Loop and nodal analysis of multi-port networks. Admittance, impedance, and transmission parameters; matrix solutions. Butterworth, Chebyshev, and other useful network response functions; network theorems. Synthesis of passive and active networks. Additional course fee is required.
Prerequisite: ENGE 250 Electrical Circuit Analysis.

ENGE 360 Electromagnetic Fields and Waves
3 hours. Theoretical study of static and dynamic electric and magnetic fields. Gauss' law and the static electric field; boundary value problems in electrostatics. Effects of dielectric and magnetic media properties. Magnetostatics; Faraday's law and applications. Maxwell's equations for time-varying fields; wave propagation; Poynting's theorem. Numerical methods and computer simulation tools in electromagnetics are introduced. Additional course fee is required.
Prerequisites: ENGE 250 Electrical Circuit Analysis.

ENGE 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

ENGE 410 Digital System Design
3 hours. Practical aspects of digital design with Hardware Description Languages including the design, construction, and testing of significant digital subsystems. Explorations of advanced digital design concepts such as timing-driven synthesis, integration of intellectual property and design for reuse. Extensive use is made of computer-aided engineering (CAE) tools and Field-Programmable-Gate-Array (FPGA) technology in course assignments. Two lectures and one two-hour laboratory per week. Additional course fee is required.
Prerequisite: ENGE 420 Microprocessors.

ENGE 420 Microprocessors
4 hours. Principles of hardware and software microcomputer interfacing. Microprocessor characteristics, memory peripheral devices, microcomputer structures, and I/O interface device control. Assembly language programming. Design projects involve the construction and programming of a microprocessor-based system. Three lectures and one three-hour laboratory per week. Additional course fee is required.
Prerequisite: ENGE 300 C Programming with Applications and ENGE 311 Electronic Devices and Circuits.

ENGE 430 Communication Systems
3 hours. Introduction to analog and digital communications theory and applications. Topics include encoding, modulation and multiplexing techniques, spectral analysis, transmission line effects, noise analysis and filtering, multiple-channel and fiber optic communications, telecommunication systems, and data communications applications. Additional course fee is required.
Prerequisite: ENGE 330 Electrical Signals and Networks.

ENGE 440 Electric Machines and Power Systems
3 hours. Introduction to electric machines and electric power utility systems. AC and DC rotating machines; single- and three-phase motors and generators; transformers and solid-state devices, power transmission lines, load flow analysis, system faults, and system modeling and design. Includes lab assignments to enhance course theory and to give hands-on experience.
Prerequisites: ENGE 330 Electrical Signals and Networks and ENGE 360 Electromagnetic Fields and Waves.

ENGE 460 Microwave Engineering and Applications
3 hours. Study of microwave circuits, devices, and techniques as applied to cellular communications and other modern systems. Propagation and reflection on ideal and lossy transmission media. Smith chart and S-parameter tools. Strip lines, microstrip and coplanar lines, and cross talk. Analysis and design of microstrip circuits. Introduction to antenna fundamentals. Includes computer and laboratory exercises. Two lectures and one three-hour laboratory per week. Additional course fee is required.
Prerequisites: ENGE 312 Applications of Electronic Devices and ENGE 360 Electromagnetic Fields and Waves.

ENGE 475 Field Experience
1-3 hours. Supervised experience in the discipline including internships and practica required for professional programs. This advanced experience must have an on-site supervisor and/or a departmental instructor overseeing, designing, and evaluating the content of the course.
Prerequisite: instructor's permission.

ENGE 480 Digital Signal Processing
3 hours. Sampling as a modulation process, aliasing, the sampling theorem, the Z-transform and discrete-time system analysis, direct and computer-aided design of recursive and nonrecursive digital filters, the Discrete Fourier Transform (DFT) and Fast Fourier Transform (FFT), digital filtering using the FFT, analog-to-digital and digital-to-analog conversion, effects of quantization and finite-word-length arithmetic. Additional course fee is required.
Prerequisite: ENGE 220 Digital Logic Design and ENGE 330 Electrical Signals and Networks.

ENGE 485 Selected Topics
1-3 hours. An advanced seminar offered on an occasional basis addressing a current topic in the field that is of special interest to students and current faculty.

Engineering, Mechanical (ENGM) Courses

ENGM 210 Statics and Dynamics
4 hours. A two-part course beginning with rigid bodies in equilibrium. A quantitative description of forces, moments, and couples acting upon engineering structures at rest is developed. The free-body diagram is

used extensively to understand the equilibrium of a whole physical system through isolation of each component particle, or body. The second part of the course considers the mathematical description of rigid bodies in motion under the action of forces, moments, and couples. Students learn how to describe the geometry of motion (kinematics) and then move into two- and three-dimensional kinetic analysis. Additional course fee is required.
Prerequisites: ENGR 152 Engineering Principles II, MATH 202 Calculus II and PHYS 211 General Physics with Calculus I.

ENGM 275 Field Experience
1-3 hours. Supervised experience in the discipline including internships and practica required for professional programs. This introductory experience must have an on-site supervisor and/or a departmental instructor overseeing, designing, and evaluating the content of the course.
Prerequisite: instructor's permission.

ENGM 285 Selected Topics
2-4 hours. Occasional special courses chosen to fit the interests and needs of engineering students and faculty. Additional course fee is required.

ENGM 300 Computational Methods
2 hours. Solution to problems in mechanical engineering using numerical techniques. Development of numerical models beginning with physical model analysis, description of appropriate governing equations, selection of critical parameters, choice of solution methodology, and application of numerical solution procedure. Applications selected from a wide variety of topics in mechanical engineering. Solution techniques to include finite difference and finite element methods. Additional course fee is required.
Prerequisites: ENGR 152 Engineering Principles II, MATH 310 Differential Equations with Linear Algebra, and ENGM 320 Mechanics of Materials.

ENGM 311 Engineering Thermodynamics
3 hours. Classical treatment of thermodynamics emphasizing the first and second laws and their application to closed and open (control volume) systems undergoing steady, unsteady, and cyclic processes. Introduction to vapor power systems. Tabular and graphical thermodynamic property data are used in analytical work. Additional course fee is required.
Prerequisite: ENGR 152 Engineering Principles II and PHYS 212 General Physics with Calculus II.

ENGM 312 Applications of Engineering Thermodynamics
3 hours. Advanced topics in the first and second laws of thermodynamics, availability, and irreversibility. Vapor and gas power cycles, mixtures of gases and vapors, introduction to combustion theory, nonreacting and chemically reacting flows. Applications to spark and compression ignition engines, gas and vapor turbines, refrigeration systems, heat exchangers, and psychrometrics. Two lectures and one three-hour laboratory per week. Additional course fee is required.
Prerequisite: ENGM 311 Engineering Thermodynamics.

ENGM 320 Mechanics of Materials
3 hours. Behavior of deformable body systems under combinations of external loading is presented. Analysis of stress, deformation, strain, failure fatigue, and creep are included. Mathematical, graphical, and energy methods are utilized. Three lectures and one two-hour laboratory per week. Additional course fee is

required.
Prerequisites: ENGM 210 Statics and Dynamics and ENGR 250 Principles of Materials Science.

ENGM 330 Fluid Mechanics
3 hours. Presentation and development of fundamental concepts of fluids as continua, including velocity and stress fields, and viscosity. Fluid statics, hydrostatic analysis of submerged bodies, and manometry methods. Development of the governing equations of mass, momentum, and energy conservation for fluid motion using both integral and differential techniques. Incompressible inviscid flow, dimensional analysis and similitude, and flow in pipes and ducts. Boundary-layer concepts. Additional course fee is required.
Prerequisites: ENGM 311 Engineering Thermodynamics and MATH 310 Differential Equations with Linear Algebra.

ENGM 350 Machine Dynamics and Vibrations
3 hours. Kinematic and dynamic analysis of basic mechanisms with an introduction to kinematic synthesis. Fundamentals of vibration theory and their application to lumped parameter systems. Both single- and multi-degree of freedom systems having steady-state and transient responses are considered. Concepts of machine dynamics and design are supplemented with mathematical, graphical, and computer techniques and analysis. Applications using dynamic analysis software are included. Additional course fee is required.
Prerequisites: ENGM 210 Statics and Dynamics and MATH 310 Differential Equations with Linear Algebra.

ENGM 380 Heat Transfer
4 hours. Fundamental aspects of steady-state and transient heat transfer by conduction, convection, and radiative transport modes. Analytical and semi-empirical methods of forced and natural convection systems. Conjugate analysis of multi-mode problems using numerical methods is presented. Heat exchanger design, boiling, and condensation are also included. Three lectures and one three-hour laboratory per week. Additional course fee is required.
Corequisite: ENGM 300 Computational Methods. Prerequisite: ENGM 330 Fluid Mechanics.

ENGM 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

ENGM 400 Mechanical Engineering Design
3 hours. Fundamental principles for the synthesis, analysis, and design of mechanical elements and systems. The use of statics, dynamics, mechanics of materials, and failure theories to evaluate mechanical systems under static and dynamic loading. Application of design techniques to specific mechanical components such as gears, springs, shafts, bearings, and fasteners, with an emphasis on design for manufacturability. Computer modeling tools including finite element analysis are utilized. Additional course fee is required.
Prerequisites: ENGM 320 Mechanics of Materials and ENGM 350 Machine Dynamics and Vibrations. Corequisite: ENGM 300 Computational Methods.

ENGM 410 Materials and Processes in Manufacturing
3 hours. Mechanical and metallurgical fundamentals of cutting operations, metal forming by deformation, material fabrication, and nontraditional processing. Manufacturing systems, concepts in production, green design, and design for manufacturability (DFM). Special emphasis on silicon crystal growth methods and silicon wafer fabrication processes. Additional course fee is required.
Prerequisite: ENGM 400 Mechanical Engineering Design.

ENGM 430 Acoustics and Noise Control
3 hours. Theory and practice in the analysis and measurement of sound and vibration as applied to noise control. Basic concepts of vibration and acoustic theory are developed, and a variety of sound and vibration measuring equipment is used in laboratory experiments. Practical aspects of noise control as applied to products, machinery, buildings, vehicles, and other systems. Topics include sound propagation; sound in small and large enclosures, and design of enclosures, ducts, and mufflers; isolation and damping.
Prerequisites: ENGM 330 Fluid Mechanics and ENGM 350 Machine Dynamics and Vibrations.

ENGM 450 Vehicle Systems Dynamics
3 hours. Several different vehicle systems (automotive, truck, railway freight vehicles, and passenger transport systems) are described analytically from road/track to passenger/load. Topics include tire/wheel construction and modeling, contact mechanics, suspension design, power transmission, steering mechanisms, braking, vibratory causes/effects, and safety requirements. Vehicle system modeling with ADAMS (ADAMS/Car and ADAMS/Rail) computational dynamic analysis software is introduced.
Prerequisite: ENGM 400 Mechanical Engineering Design.

ENGM 470 Energy Systems Engineering
3 hours. Fundamental principles of energy engineering with applications to both fossil fuel combustion and alternative energy systems. The first half of the course is dedicated to a quantitative understanding of fossil fuel combustion and its applications. Stoichiometry, flame temperature, chemical kinetics and applications of both premixed and diffusion flames, as well as sources of emissions and emission control strategies are presented. The second half of the course is focused on alternative and renewable energy systems, from a technical, economic, and environmental perspective. Students will study the basic theory of fuel cells, wind turbines, photovoltaic devices, biomass and nuclear energy generation and determine component and system efficiencies. Additionally, students will become familiar with the relationship between ethical issues and the quality of our environment, and the complex interplay between engineering systems and society. This course builds on previous studies in thermodynamics, fluid mechanics and heat transfer. Additional course fee is required.
Prerequisites: ENGM 312 Applications of Engineering Thermodynamics and ENGM 380 Heat Transfer.

ENGM 475 Field Experience
1-3 hours. Supervised experience in the discipline including internships and practica required for professional programs. This advanced experience must have an on-site supervisor and/or a departmental instructor overseeing, designing, and evaluating the content of the course.
Prerequisite: instructor's permission.

ENGM 480 Control Systems Engineering
3 hours. This course covers various aspects of control system engineering including dynamic system modeling, control system stability and performance analysis. Special attention is given to compensator

design by PID and lead-lag algorithms. Principles of closed loop mechanical, electrical, hydraulic, pneumatic, and thermodynamic systems are considered. Laboratory experiments include both MATLAB simulations and PLC programming with applications. Two lectures and one laboratory per week. Additional course fee is required.
Prerequisite: MATH 310 Differential Equations with Linear Algebra.

ENGM 485 Selected Topics
2-4 hours. Occasional special courses chosen to fit the interests and needs of engineering students and faculty. Additional course fee is required.

Engineering, General (ENGR) Courses

ENGR 151 Engineering Principles I
3 hours. Introduction to the concepts and methods of engineering problem solving and design. Topics include the following: analysis and design methodologies, structured computer programming, basic principles of engineering graphics, the visualization and modeling of real-world systems, and an introduction to the history and ethics of the engineering profession. Computer-aided-design (CAD) tools, solid modeling and simulation software, and mathematics software applications are presented. Students work on numerous team design projects, communicating their results through oral and written reports. Meets twice weekly in a lecture/lab environment. Additional course fee is required.
Prerequisite: MATH 190 Precalculus Mathematics or equivalent.

ENGR 152 Engineering Principles II
3 hours. Introduction to the concepts and methods of engineering problem solving and design. Topics include the following: analysis and design methodologies, structured computer programming, basic principles of engineering graphics, the visualization and modeling of real-world systems, and an introduction to the history and ethics of the engineering profession. Computer-aided-design (CAD) tools, solid modeling and simulation software, and mathematics software applications are presented. Students work on numerous team design projects, communicating their results through oral and written reports. Meets twice weekly in a lecture/lab environment. Additional course fee is required.
Prerequisite: ENGR 151 Engineering Principles I.

ENGR 250 Principles of Materials Science
3 hours. The science underlying the behavior of engineering materials, including the relation between atomic structure and mechanical, electrical, and magnetic properties in metals, ceramics, polymers, composite materials, and semiconductors. Phase diagrams, heat treatment, and corrosion mechanisms are also presented. Laboratory exercises are included to enhance course theory and to provide hands-on experience with materials measurement apparatus and analysis techniques. Two lectures and one laboratory per week. Additional course fee is required.
Prerequisites: CHEM 211 General Chemistry I, ENGR 152 Engineering Principles II, and PHYS 212 General Physics with Calculus II.

ENGR 275 Engineering Internship Experience
1-4 hours. Supervised experience with an off-campus industry, business, or institution where the student is working in some engineering-related discipline. Admission and credit hours determined by instructor.

ENGR 285 Selected Topics
2-4 hours. Occasional special courses chosen to fit the interests and needs of engineering students and faculty. Additional course fee is required.

ENGR 351 Servant Engineering I
1 hour. In the servant engineering sequence, students apply their knowledge and design skills gained through course work to a variety of service engineering projects. Students will work in conjunction with industry partners to develop significant engineering solutions solely for the purpose of serving others. Some of these projects might be minor and require a semester or less to complete. Some projects might be quite extensive and take multiple years and multiple subprojects to complete. Every project will be an opportunity to use the gifts that God has given us to serve others. Additional course fee is required.
Prerequisite: ENGR 152 Engineering Principles II.

ENGR 352 Servant Engineering II
1 hour. In the servant engineering sequence, students apply their knowledge and design skills gained through course work to a variety of service engineering projects. Students will work in conjunction with industry partners to develop significant engineering solutions solely for the purpose of serving others. Some of these projects might be minor and require a semester or less to complete. Some projects might be quite extensive and take multiple years and multiple subprojects to complete. Every project will be an opportunity to use the gifts that God has given us to serve others. Additional course fee is required.
Prerequisite: ENGR 351 Servant Engineering I.

ENGR 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

ENGR 451 Servant Engineering III
1 hour. In the servant engineering sequence, students apply their knowledge and design skills gained through course work to a variety of service engineering projects. Students will work in conjunction with industry partners to develop significant engineering solutions solely for the purpose of serving others. Some of these projects might be minor and require a semester or less to complete. Some projects might be quite extensive and take multiple years and multiple subprojects to complete. Every project will be an opportunity to use the gifts that God has given us to serve others. Additional course fee is required.
Prerequisite: ENGR 352 Servant Engineering II.

ENGR 452 Servant Engineering IV
1 hour. In the servant engineering sequence, students apply their knowledge and design skills gained through course work to a variety of service engineering projects. Students will work in conjunction with industry partners to develop significant engineering solutions solely for the purpose of serving others. Some of these projects might be minor and require a semester or less to complete. Some projects might be quite extensive and take multiple years and multiple subprojects to complete. Every project will be an opportunity to use the gifts that God has given us to serve others. Additional course fee is required.
Prerequisite: ENGR 451 Servant Engineering III.

ENGR 475 Engineering Internship Experience
1-4 hours. Supervised experience with an off-campus industry, business, or institution where the student is working in some engineering-related discipline. Admission and credit hours determined by instructor.

ENGR 481 Senior Design I
1 hour. In the senior design sequence, students apply their knowledge and design skills gained through course work to an industry-based project. In the first semester, interdisciplinary teams are formed to begin projects in conjunction with participating industrial sponsors. Necessary background research and feasibility studies are completed. Students must also consider the ethical, moral, environmental, and social impact of their designs. Collaboration with other departments of the university is encouraged. Additional course fee is required.
Prerequisite: senior status in the engineering major.

ENGR 482 Senior Design II
3 hours. The projects that were initiated in the first semester are further developed through simulation, prototyping, and testing. Use of analytic, computer, experimental, and design techniques is applied throughout the project. The design sequence culminates in the construction of the projects, oral presentations, and formal written reports. Additional course fee is required.
Prerequisite: ENGR 481 Senior Design I.

ENGR 485 Selected Topics
2-4 hours. Occasional special courses chosen to fit the interests and needs of engineering students and faculty. Additional course fee is required.

ENGR 490 Senior Seminar
1 hour. A capstone course for the engineering major. Discussion of current trends and issues in the engineering profession. Features invited speakers from the industrial sector. Additional course fee is required.
Prerequisite: senior status in the engineering major or by permission.

Entrepreneurship (ENPR) Courses

ENPR 275 Field Experience
1-6 hours. Supervised experiences in businesses, nonprofit organizations, and public agencies.

ENPR 285 Selected Topics
1-3 hours. Occasional special courses chosen to fit the interests and needs of students and faculty.

ENPR 300 Entrepreneurship I: New Venture Feasibility
3 hours. This course focuses on developing ideas for new businesses. Case studies and group exercises are utilized to help students determine which ideas might result in feasible businesses. Students select a business idea and then write a feasibility plan, a first step in developing a detailed business plan. This plan will determine if the idea has profit potential.
Prerequisites: ACCT 271 Principles of Financial Accounting, ACCT 272 Principles of Managerial Accounting, FINC 260 Business Finance, and MGMT 260 Principles of Management.

ENPR 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

ENPR 400 Entrepreneurship II: Business Plan Development
3 hours. This course is designed to immerse the student in the dynamics of planning, establishing, and growing a new business. The course focuses on the development of a business plan that identifies a market need, evaluates the financial viability of the venture, and organizes the resources to launch the business. This course is taught in a seminar format using both the analysis of cases and the evaluation of business plans. *Prerequisites: ENPR 300 Entrepreneurship I and MKTG 260 Principles of Marketing*.

ENPR 410 Entrepreneurship III: Funding New Ventures
3 hours. This course focuses on the potential funding sources for the business plans written in Entrepreneurship II. Attention is given to both equity and debt financing. Funding sources studied include venture capital funds, bank financing, SBA loans/grants/guarantee, angel investors, community development funds, and others. The course explores appropriate legal forms of business to accompany chosen financing strategies including limited liability companies, limited liability partnerships, corporations (C and Subchapter S), limited and general partnerships, sole proprietorships, holding companies, and others. Attention is given to developing the deal structure and investor exit strategy as well as limitations imposed on raising capital by the Securities and Exchange Commission.
Prerequisite: ENPR 400 Entrepreneurship II.

ENPR 475 Field Experience
1-6 hours. Supervised experiences in businesses, nonprofit organizations, and public agencies.

ENPR 485 Selected Topics
1-3 hours. Occasional special courses chosen to fit the interests and needs of students and faculty.

ENPR 495 Special Study
1-3 hours. Independent study of subjects outside regular offerings of particular interest to business and economics majors. Regular reading reports and conferences are scheduled.
Prerequisite: upper-division majors and by permission.

English as a Second Language (ESLA) Courses

ESLA 005 Conversation Tutorial
1 hour. Each student is paired with an American student for conversation, orientation to life in a new culture, and optional academic tutoring. Pass/No Pass.

Level A (Beginning/Low Intermediate)
ESLA 050 Reading
4 hours. A course designed to teach basic reading skills and vocabulary.

ESLA 060 Writing and Grammar
4 hours. An introduction to the fundamental structure and vocabulary of the English language, focusing on the development of writing skills.

ESLA 070 ESL Freshman Experience
2 hours. An introduction to life at George Fox University. Through various group activities, beginning/low intermediate-level students learn about life on campus, Christianity and chapel, study skills, and use of library resources. Students explore aspects of American culture and Oregon geography and history in food labs, field trips, and group projects. This course provides many opportunities for students to use English in communication and to practice language skills consistent with their level. Pass/No Pass.

ESLA 080 Speaking and Listening
4 hours. A course designed to introduce and develop basic academic speaking and listening skills, with emphasis on conversation, discussion, and short speeches. Vocabulary, pronunciation, grammar, and cultural issues are addressed within the context of a variety of discussion topics. Listening laboratory is required.

ESLA 090 English by Video
2 hours. Offered spring semester. A practical course in which students develop English skills through reading, writing, speaking, and listening based on various types of videos.

Level B (Intermediate)

ESLA 150 Academic Reading
4 hours. This course concentrates on improving students' reading fluency through extensive reading of fiction and nonfiction books and systematic development of vocabulary, reading speed, and study skills. Reading lab and vocabulary lab are required.

ESLA 160 Writing and Grammar
4 hours. In this course, students develop fluency and clarity in expressive and narrative writing and in academic writing assignments, including a research paper. Students develop composing, revising, and editing skills in a workshop atmosphere. Grammar and usage, punctuation, spelling, and format are addressed during the editing process. A major goal is to improve keyboarding and word-processing skills.

ESLA 170 ESLA Freshman Experience
2 hours. An introduction to life at George Fox University. Through various group activities, intermediate-level students learn about life on campus, Christianity and chapel, study skills, and use of library resources. Students explore aspects of American culture and Oregon geography and history in food labs, field trips, and group projects. This course provides many opportunities for students to use English in communication and to practice skills consistent with their level. Pass/No Pass.

ESLA 180 Speech, Listening, and Note-taking
4 hours. This course provides training and practice in academic speaking and listening. Students give various types of formal speeches and learn strategies for taking accurate and comprehensive notes from academic lectures.

ESLA 190 Introduction to Christianity
2 hours. Through video, readings, and class discussion, students are introduced to the life of Christ and the foundations of Christianity. This course also provides a context for practice of English listening, reading, speaking, and writing skills.

Level C (Advanced)

ESLA 240 Adjunct Listening
3 hours. This course cultivates skills of listening and note-taking in academic lectures, including identifying main ideas and distinguishing supporting information, understanding relationships among ideas, and taking notes that reflect this understanding. Assignments are based on lectures from the general education course in which students are concurrently enrolled. Video lab and group tutorial are required.

ESLA 250 Adjunct Reading
3 hours. An intensive course to improve academic reading skills, including vocabulary, reading speed, reading strategies, and test taking. Assignments are based on class texts from the general education course in which students are concurrently enrolled. Reading lab and vocabulary lab are required.

ESLA 260 Academic Writing
5 hours. This course provides instruction and practice in the types of writing commonly found in college courses, including the research paper, essays and essay exams, and reaction papers. Process, organization, and mechanics are emphasized. Principles of advanced English grammar and usage are applied in writing assignments.

ESLA 280 Speech
3 hours. A practical course to help students improve their academic speaking skills, with emphasis on formal speeches, group presentations, small-group interaction, and pronunciation.

Level D (High-Advanced)

ESLA 281 Reading and Vocabulary for Academia
3 hours. In this course, students develop their ability to read a variety of academic texts in the liberal arts and professions, including textbooks, journal articles, and various literary genres. They increase their vocabulary, ability to comprehend complex syntax, reading rate, and comprehension.

ESLA 282 Writing and Research for Academia
5 hours. The goal of this course is facility in the conventions of academic writing in English, including the effective use of complex sentence structure, essay organization, academic vocabulary, and source material. Students develop research skills using library sources and effectively integrate findings into research essays by appropriately summarizing, paraphrasing, quoting, and citing sources.

ESLA 283 Speech and Listening for Academia
3 hours. This course builds fluency, grammatical and pronunciation accuracy, academic vocabulary, competence in classroom discourse, and oral presentation skills, as well as listening comprehension and note-taking skills for various styles of academic lectures and discussions.

Transition
ESLA 285 Selected Topics
3 hours. Occasional special courses chosen to fit the needs and interests of students interested in teaching English as a second language.

ESLA 295 Writing Tutorial
1 hour. Students in their first semester after completing the ELI and new students who score between 500 and 550 on the paper-based TOEFL, between 173 and 213 on the computer-based TOEFL, or between 61 and 79 on the Internet-based TOEFL meet individually with a faculty member to improve their ability to write in English and to develop more effective study strategies. Pass/No Pass.

ESLA 485 Selected Topics
3 hours. Occasional special courses chosen to fit the needs and interests of students interested in teaching English as a second language.

Family and Consumer Sciences (FCSC) Courses

FCSC 120 Apparel Construction
3 hours. Application of basic construction and fitting techniques to produce high-quality garments, properly fitted, and aesthetically pleasing. The principles of fabric selection, the use and alteration of commercial patterns, and the use of the sewing machine, serger, and other sewing equipment are emphasized. Laboratory class. Open to all students. Additional course fee is required.

FCSC 211 Foods I
3 hours each semester. This food science course examines the physical properties of food. Fall semester emphasizes the biological and chemical factors affecting plant and protein foods. Laboratory experience encourages food product experimentation and the development of culinary skills. Additional course fee is required.

FCSC 212 Foods II
3 hours each semester. This food science course examines the physical properties of food. Spring semester focuses on the properties of grain (baked goods) and dairy products. Laboratory experience encourages food product experimentation and the development of culinary skills. Additional course fee is required.
Prerequisite: FCSC 211 Foods I.

FCSC 220 Fashion and Society
2 hours. A survey of the nature, symbolism, and process of fashion. Course will emphasize the cultural, sociological, psychological, economic, and aesthetic influences of fashion.

FCSC 230 Textiles Science
3 hours. Survey of the sources and properties of natural and manmade fibers, yarn and fabric construction, and finishes. Emphasis on fabric selection, use, and care; labeling legislation and economics; and the consumer's role in influencing textile and clothing legislation. Laboratory experience included.

FCSC 275 Field Experience
1-4 hours. The student will engage in a career-related experience within their area of concentration.

Prerequisite: instructor's permission.

FCSC 285 Selected Topics
1-4 hours. Topics reflecting the special interest of students and faculty. Additional course fee may be required.

FCSC 290 Meal Management
2 hours. The planning, purchase, preparation, and service of foods. Emphasis on time, energy, and money management, along with the nutritional needs of individuals and families. Laboratory included.
Prerequisites: FCSC 211 Foods I and FCSC 212 Foods II, or instructor's permission.

FCSC 300 Nutrition
3 hours. A study of nutrients present in food and their relation to the nutritive needs of the human body. Emphasis on the young adult, along with discussion of contemporary nutrition-related topics of national and global concern. Computer-assisted dietary analysis included. (Identical to HLTH 300.)

FCSC 310 Food, Culture, and Society
3 hours. A study of the food habits characteristic of our world's great civilizations. Emphasis on the investigation of global foodways through historical, social, and religious perspectives. Weekly laboratory provides opportunity to prepare foods from cultures studied. Additional course fee is required.

FCSC 311 Child Development
3 hours. A study of physical, intellectual, personality, social, and moral development from the prenatal period through late childhood. (Identical to PSYC 311.) *Prerequisite: PSYC 150 General Psychology.*

FCSC 320 Fashion Merchandising
3 hours. An introduction to the merchandising and retailing principles within the fashion industry. Managing merchandise inventory through planning, procurement, and promotion. Emphasis on buying, forecasting, inventory control, and visual merchandising. The analysis of the marketing channel and the product/service mix will also be covered.

FCSC 323 Sociology of Families
3 hours. A study of marriage and the family from a sociological perspective, including historical, cross-cultural, and economic backgrounds. A Christian faith perspective will emphasize the worth of people, the importance of the family as a place of nurture, and the gift of marriage. (Identical to SOCI 323 and HLTH 323.)

FCSC 330 Residential Architecture
2 hours. A study of housing trends, building systems, and historical housing. Emphasis on the psychological, social, and economic needs of various family types. Site selection, planning, and construction of housing emphasized. Includes a section on historical housing. Additional course fee is required.

FCSC 344 Quantity Food Production and Management
3 hours. Quantity food production principles for the successful organization and management of an effective, operative food service. Surveys administrative responsibilities, menu planning, preparing food to specific standards, cost controls, and nutritional value. Includes a laboratory experience focusing on quality control, finances, and computer assistance.

Prerequisite: FCSC 211 Foods I.

FCSC 350 Resource Management
2 hours. A study of resource allocation (time, money, energy) and its relationship to attainment of desired values, goals, and standards. Emphasis is placed on the application of management principles individually and within the family.

FCSC 351 Interior Design I
3 hours. Application of the elements and principles of design in planning and selecting materials and furnishings for the living environment. Emphasis on space planning, green design, and universal design by creating functional and aesthetically pleasing residential designs. Includes a section on historical furniture. Additional course fee is required.

FCSC 352 Interior Design II
2 hours. Emphasis on the business knowledge and professional skills needed for a career in interior design, both private and professional. Emphasis on working with clients and development of a portfolio project.
Prerequisite: FCSC 351 Interior Design I or instructor's permission.

FCSC 353 Interior CAD
3 hours. An introduction to computer-aided-design applications using drafting techniques for interior design. Emphasis placed on space-planning principles.
Prerequisite: FCSC 351 Interior Design I or instructor's permission.

FCSC 354 Kitchen and Bath Planning
3 hours. A study of residential kitchen and bath design with focus on appliances, fixtures, construction methods, cabinets, surface materials, and graphics. Students will produce detailed hand drafted floor plans in accordance with NKBA guidelines. Course will include an introduction to perspective drawing in relation to kitchen and bath spaces.
Prerequisite: FCSC 351 Interior Design I.

FCSC 360 Consumer Buying
3 hours. Examination of the consumer as an active agent in the marketplace. Course defines contemporary consumption patterns and uses the decision-making process to familiarize the consumer with appropriate resource allocation to attain desired goals.

FCSC 370 Pattern Drafting and Apparel Design
3 hours. A study of the flat-pattern method of garment design. Each student will use advanced fitting principles to produce a basic fit garment and a personal sloper. The sloper will be used in the production of an original design using flat-pattern techniques. Included in the process is construction of the original design in half-scale and full-scale. Additional course fee is required.
Prerequisite: FCSC 120 Apparel Construction.

FCSC 378 Apparel CAD
3 hours. Emphasis on clothing design by use of draping techniques. Course includes introductory unit focusing on computer-aided-design processes. Each student will complete an original design in half-scale using draping techniques. Additional course fee is required.
Prerequisite: FCSC 120 Apparel Construction.

FCSC 380 Evolution of World Dress
3 hours. Important events in history, combined with values, technology, and conflict, have influenced dress from 3000 B.C. to the early 1900s. The origins of dress are analyzed from the ancient world to the Middle Ages, to the periods identified as Renaissance, Baroque, and Rococo, and terminating with clothing styles from the early
20th century.

FCSC 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

FCSC 430 Nutrition and the Life Cycle
3 hours. Survey of human nutrition science and contemporary issues affecting stages of the life cycle, from conception to the aging adult. Emphasis on the role diet plays in the development and treatment of chronic disease.
Prerequisite: FCSC 300 Nutrition or HLTH 300 Nutrition, or instructor's permission.

FCSC 460 Apparel Market Analysis
3 hours. Students will examine the role that the textile and apparel industry plays within a global context. Exploring the influence of the interconnective global structures for facilitating and managing textile and apparel trade.

FCSC 475 Field Experience
1-4 hours. The student will engage in a career-related experience within his or her area of concentration.
Prerequisite: instructor's permission.

FCSC 485 Special Topics
1-4 hours. Topics reflecting the special interest of students and faculty. Additional course fee may be required.

FCSC 490 Senior Seminar
3 hours. Emphasis placed on careers in family and consumer sciences, including graduate school exploration and market readiness skills. The student will design, plan, and present a senior capstone project.
Prerequisite: senior status.

Finance (FINC) Courses

FINC 260 Business Finance
3 hours. An introduction to the finance function of a business entity. Specific topics to be studied include capital budgeting, cost of capital determination, sources of financing, leverage and its effect on the profits and risk of business, and managing the asset mix and capital structure of a business.
Prerequisites: ACCT 271 Principles of Financial Accounting, BUSN 240 Statistics for

Business and Economics, and ECON 202 Principles of Macroeconomics.

FINC 275 Field Experience
1-6 hours. Supervised experiences in businesses, nonprofit organizations, and public agencies.

FINC 285 Selected Topics
1-3 hours. Occasional special courses chosen to fit the interests and needs of students and faculty.

FINC 300 Intermediate Financial Management
3 hours. This course is a second-level financial management course that provides more depth in the study of the analysis of financial statements, working capital management, and obtaining credit. Students will determine the cost of capital of a firm and apply its use in capital budgeting and asset valuation.
Prerequisite: FINC 260 Business Finance.

FINC 340 Financial Markets and Institutions
3 hours. An exploration of financial markets and institutions. The course will examine the role of depository institutions, insurance companies, investment banks, and other financial intermediaries in the global economy. Topics include recent developments in financial markets and in the regulatory environment of these markets and institutions. *Prerequisites: ECON 201 Principles of Microeconomics and ECON 202 Principles of Macroeconomics.*

FINC 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

FINC 450 Investments
3 hours. An introduction to the securities markets and other investment strategies. The course will introduce and discuss various investment vehicles and the valuation of such vehicles. Topics will also include many of the techniques of investment planning, including: modern portfolio theory, asset allocation, and risk and return evaluation.
Prerequisite: FINC 260 Business Finance.

FINC 460 Financial Analysis and Strategy
3 hours. This course will emphasize financial forecasting, modeling, and simulation to determine the impact of management decisions on profitability, financial position, and cash flows of the firm. It will also focus on the analysis of risk and return, risk management, and capital structure.
Prerequisite: FINC 300 Intermediate Financial Management.

FINC 475 Field Experience
1-6 hours. Supervised experiences in businesses, nonprofit organizations, and public agencies.

FINC 485 Selected Topics
1-3 hours. Occasional special courses chosen to fit the interests and needs of students and faculty.

FINC 490 Seminar in Finance
3 hours. This seminar will focus on current issues and developments in the field of finance.
Prerequisites: FINC 300 Intermediate Financial Management and senior standing.

FINC 495 Special Study
1-3 hours. Independent study of subjects outside regular offerings of particular interest to business and economics majors. Regular reading reports and conferences are scheduled.
Prerequisite: upper-division majors and by permission.

French (FREN) Courses

Note: Placement testing is generally required of all students prior to registration for their first French course at George Fox University. Placement tests are typically administered during orientation or by appointment with the instructor.

FREN 101 Introductory French I
4 hours. An integrated introductory study of the French language designed to develop basic speaking, listening, reading, and writing skills. Students will also be introduced to the cultures of the francophone world. Our three 65-minute class sessions per week include lab time.

FREN 102 Introductory French II
4 hours. An integrated introductory study of the French language designed to develop basic speaking, listening, reading, and writing skills. Students will also be introduced to the cultures of the francophone world. At the end of FREN 102, students should have novice high proficiency as defined by the American Council of the Teaching of Foreign Languages (ACTFL). Our three 65-minute class sessions per week include lab time.
Prerequisite: FREN 101 Introductory French I or placement by exam.

FREN 201 Intermediate French I
4 hours. A systematic approach to the study of French with extensive practice in speaking and writing. Three class sessions and one laboratory per week.
Prerequisite: FREN 102 Introductory French II or placement by exam.

FREN 202 Intermediate French II
4 hours. A systematic approach to the study of French with extensive practice in speaking and writing. At the end of FREN 202, students should have intermediate mid proficiency as defined by ACTFL. Three class sessions and one laboratory per week. *Prerequisite:*
FREN 201 Intermediate French I or placement by exam.

FREN 275 Field Experience
1-10 hours. Supervised experience in a situation demanding extensive use of French. Admission and credit hours determined by instructor.

FREN 285 Selected Topics
2-4 hours. Occasional special courses chosen to fit the needs and interests of students and faculty.

FREN 295 Special Study
1-4 hours. Individual study under the guidance of a faculty member, as determined by student needs and faculty availability.
Prerequisite: instructor's permission.

FREN 301 Intermediate/Advanced French I
4 hours. A thorough review of French to develop an intermediate proficiency in the language. Activities include reading authentic texts, writing short essays, and developing conversational skills. A thorough review of French to develop an intermediate high proficiency, as defined by ACTFL. Three class sessions and one laboratory per week.
Prerequisite: FREN 202 Intermediate French II or placement by exam.

FREN 302 Intermediate/Advanced French II
4 hours. A thorough review of French to develop an intermediate proficiency in the language. Activities include reading authentic texts, writing short essays, and developing conversational skills. A thorough review of French to develop an intermediate high proficiency, as defined by ACTFL. Three class sessions and one laboratory per week.
Prerequisite: FREN 301 Intermediate/Advanced French I or placement by exam.

FREN 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

FREN 475 Field Experience
1-10 hours. Supervised experience in a situation demanding extensive use of French. Admission and credit hours determined by instructor.

FREN 485 Selected Topics
2-4 hours. Occasional special courses chosen to fit the needs and interests of students and faculty.

FREN 490 Study Abroad
12-16 hours. A one-semester overseas experience. Students take university courses while living abroad in a French-speaking country. All programs of study subject to the approval of the French faculty and the director of overseas study.
Prerequisite: application, completion of FREN 302 Intermediate/Advance French II, and junior status or above.

FREN 495 Special Study
1-4 hours. Individual study under the guidance of a faculty member, as determined by student needs and faculty availability.
Prerequisite: instructor's permission.

Global Business (GBSN) Courses

GBSN 275 Field Experience
1-6 hours. Supervised experiences in businesses, nonprofit organizations, and public agencies.

GBSN 285 Selected Topics
1-3 hours. Occasional special courses chosen to fit the interests and needs of students and faculty.

GBSN 300 Global Business
3 hours. The importance of thinking globally and understanding the legal, technological, political and economic differences that affect business practice are explored through readings and projects. The focus is on the global changes that are impacting national sovereignty, regionalization, and the balance of economic and political power.
Prerequisites: ECON 202 Principles of Macroeconomics and MGMT 260 Principles of Management.

GBSN 340 Comparative Economic Systems
3 hours. A survey of the major economic systems, including the underlying ideological foundations and institutional arrangements. The major theoretical aspects of various types of systems are covered in terms of political economy and their central organizational features. Special attention is given to changes and developments in the former Soviet Union and Eastern Europe. The European Union is covered in depth along with the major Asian economies of China and Japan. Offered at the International Business Institute.

GBSN 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

GBSN 460 International Trade and Finance
3 hours. A survey of the analytical and institutional aspects of international trade and finance. The historical and contextual elements are the foundation for the examination of current theoretical and empirical approaches to international economic and financial relations. Major areas of emphasis include international finance, international trade, and regional economic integration. Special attention is also given to the issues of globalization and the problems of economic development. Offered at the International Business Institute.

GBSN 475 Field Experience
1-6 hours. Supervised experiences in businesses, nonprofit organizations, and public agencies.

GBSN 480 Global Business Strategy
3 hours. AThis course is intended to integrate the field experiences and presentations
by guest faculty and practitioners in the area of international business management with the reading and academic work including the recent developments and literature in this field. Students will be expected to prepare analytical reports on the various firms and institutions visited on the field seminar. Major topics covered in this course include: the role of the multinational firm in the global economy; international and global business strategy; cultural adaptation and organizational behavior in the global firm. The discussion of ethical values and issues in global management will also be included in this course as well as in the other

courses. Offered at the International Business Institute.

GBSN 485 Selected Topics
1-3 hours. Occasional special courses chosen to fit the interests and needs of students and faculty.

GBSN 495 Special Study
1-3 hours. Independent study of subjects outside regular offerings of particular interest to business and economics majors. Regular reading reports and conferences are scheduled.
Prerequisite: upper-division majors and by permission.

General Education (GEED) Courses

The following list includes both required general education courses and interdisciplinary elective courses that serve particular purposes.

GEED 100 Effective College Learner
1 hour. A course related to the Academic Success Program through which personal confidence is enhanced by instruction in study skills, methods, and tools used by successful college students. It may be taken during the spring semester by students not in the Academic Success Program.

GEED 130 First Year Seminar
1 hour. Members of the entire entering freshman class select a small seminar-style topical course for the first five weeks of their first semester, meeting weekly with an advisor and a returning student peer advisor. Selected topics and issues introduce students comfortably to the academic and social life of the university community. Required of all first-time freshmen. Pass/Fail.

GEED 170 Freshman Honors Seminar
1 hour. Members of the entering freshman class who are invited to apply for honors at admission, and whose applications are accepted, take this seminar in the middle five weeks of fall semester. Students are introduced to the interdisciplinary pursuit of knowledge at the university level, examining a current public issue from a wide variety of disciplinary perspectives, using creative class activities and assignments. Students who earn an excellent rating are eligible to continue in the University Scholars program.
Prerequisite: admission as an incoming freshman to the University Scholars program.

GEED 214 Claim Your Career Calling
1 hour. Offered online fall and spring. This course will cover learning about oneself: life mission, work skills, values, interests, and personality. Educational and occupational opportunities will be examined in light of this self-assessment, which will lead to selecting a major. Use of career assessment tools, career computer system, standard career references, major research, and introduction to work-related experiences will be the sources of information in these tasks. The meaning of work and career decision making will be addressed from the biblical perspective.
Prerequisite: freshman or sophomore status.

GEED 216 Become Workplace Familiar
1 hour. Offered online fall and spring. This course will focus on additional exploration of occupations through information interviews, internships, company tours, job shadowing, and professional organizations. Exposure to the workplace and readiness for graduate school admission are the primary objectives. The

course will also address the need to bring clarity and definition to the career decision. The meaning of work and career decision making will be explored from the biblical perspective.
Prerequisite: sophomore or junior status.

GEED 218 Find Suitable Employment
1 hour. Offered online fall and spring. This course will focus on honing skills needed to find employment - contemporary resumÃ© writing, interviewing, strategizing a job search, networking, and completing a portfolio. Making employer contacts, transitioning successfully into the professional work force with an understanding of the market, and learning to solve future career problems will be emphasized. The meaning of work and career decision making will be discussed from the biblical perspective.
Prerequisite: junior or senior status.

GEED 271 Honors Colloquium I
1 hour. Investigation of a variety of issues and subjects from a broad interdisciplinary perspective, through readings, discussions, creative activities, excursions, and written projects. Typically team-taught by faculty from different disciplines, over the course of a year the student uses the methods and frames of reference of nearly every discipline in the liberal arts curriculum to learn about several engaging topics. Class activities are designed to prepare students to do interdisciplinary University Scholars projects during their junior year.
Prerequisite: admission to the University Scholars program and at least sophomore status.

GEED 272 Honors Colloquium II
1 hour. Investigation of a variety of issues and subjects from a broad interdisciplinary perspective, through readings, discussions, creative activities, excursions, and written projects. Typically team-taught by faculty from different disciplines, over the course of a year the student uses the methods and frames of reference of nearly every discipline in the liberal arts curriculum to learn about several engaging topics. Class activities are designed to prepare students to do interdisciplinary University Scholars projects during their junior year.
Prerequisite: GEED 271 Honors Colloquium I, admission to the University Scholars program, and at least sophomore status.

GEED 275 Field Experience
1-3 hours. Supervised experience in the discipline including internships and practica required for professional programs. This introductory experience must have an on-site supervisor and/or a departmental instructor overseeing, designing, and evaluating the content of the course.
Prerequisite: instructor's permission.

GEED 285 Selected Topics
1-3 hours. A variety of topics may be offered to meet the special needs and interests of students, faculty, or visiting professors.

GEED 355 Cross-Cultural Experience - Domestic
3 hours. This course offers a variety of cross-cultural study tours designed to enhance the intercultural awareness of our campus community and to gain appreciation for various cultural perspectives different from the students' own. Each individual course includes in-depth study from a variety of perspectives, such as the fine arts, religion, language, natural or behavioral science, or history. The course includes class meetings followed by travel to various locations throughout the U.S. Students interact with the local

culture through informal and formal contacts. (Offered May Term through the Juniors Abroad program. Students must meet the Juniors Abroad eligibility requirements.) Additional course fee is required.

GEED 365 Cross-Cultural Experience - International
3 Hours. This course offers a variety of cross-cultural study tours designed to enhance the intercultural and international awareness of our campus community and to gain appreciation for various cultural perspectives different from the students' own. Each individual course includes in-depth study from a variety of perspectives, such as the fine arts, religion, language, natural or behavioral science, or history. The course includes class meetings followed by travel to various locations throughout the world. Students interact with the local culture through informal and formal contacts. (Offered May Term through the Juniors Abroad program. Students must meet the Juniors Abroad eligibility requirements.) Additional course fee is required.

GEED 371 University Scholars Projects I
1 hour. In conjunction with an upper-division course of the student's choosing, the student proposes a significant interdisciplinary research project. Once approved by the professor of the home course and the USP director, the student completes the project under the supervision of a senior peer mentor, publicly presents the project results, and submits the project to the undergraduate academic journal.
Prerequisites: GEED 271 Honors Colloquium I, GEED 272 Honors Colloquium II, and permission of the USP director.

GEED 372 University Scholars Projects II
1 hour. In conjunction with an upper-division course of the student's choosing, the student proposes a significant interdisciplinary research project. Once approved by the professor of the home course and the USP director, the student completes the project under the supervision of a senior peer mentor, publicly presents the project results, and submits the project to the undergraduate academic journal.
Prerequisites: GEED 371 University Scholars Projects I, and permission of the USP director.

GEED 375 Cultural Field Experience
1-12 hours. Supervised experience in a cultural setting that contributes to the educational goals of the student. Pass/No Pass.
Prerequisites: permission of advisor and the academic dean.

GEED 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

GEED 455 Student-Designed Service Activity
1-2 hours. Completion of a student-designed academically rich interdisciplinary service activity equivalent in scope, effort, and impact to a Public Interest Applied Research project (see GEED 465).
Prerequisites: GEED 371 University Scholars Projects I and GEED 372 University Scholars Projects II.

GEED 465 Public Interest Applied Research
1-2 hours. Completion of a Public Interest Applied Research project under the supervision of the USP

director or another faculty member. PIAR projects are connected to real-world problems, are interdisciplinary, normally require two semesters for completion, are typically done in groups of two or more, and are performed in cooperation with at least one organization or group in the off-campus community.
Prerequisites: GEED 371 University Scholars Projects I and GEED 372 University Scholars Projects II and permission of the USP director.

GEED 471 Undergraduate Academic Journal I
1 hour. Service on the editorial committee, or as a senior editor, of the *Undergraduate Academic Journal*.
Prerequisites: GEED 371 University Scholars Projects I, GEED 372 University Scholars Projects II, and permission of the USP director.

GEED 472 Undergraduate Academic Journal II
1 hour. Service on the editorial committee, or as a senior editor, of the *Undergraduate Academic Journal*.
Prerequisites: GEED 471 Undergraduate Undergraduate Academic Journal I and permission of the USP director.

GEED 475 Field Experience
1-3 hours. Supervised experience in the discipline including internships and practica required for professional programs. This advanced experience must have an on-site supervisor and/or a departmental instructor overseeing, designing, and evaluating the content of the course.
Prerequisite: instructor's permission.

GEED 485 Selected Topics
1-3 hours. A variety of topics may be offered to meet the special needs and interests of students, faculty, or visiting professors.

GEED 490 Liberal Arts and Critical Issues
3 hours. An advanced liberal arts course integrating the varied strands of general education in a rich capstone integrative common experience. Students will be challenged to develop coherence in a Christian worldview, deepen their understanding of how we know truth about the world around us and our moral duty in it, practice taking an interdisciplinary approach to basic problems of human existence, and develop as potential Christ-like leaders in public issues. Specific topics to be explored vary from semester to semester.

Geography (GEOG) Courses

GEOG 200 Cultural Geography and Global Relationships
3 hours. A study of the world's cultural regions developed through the themes of location, human environmental relationships, movement, and regions, with emphasis on the interrelatedness of culture, physical, economic, historical, and political geography in creating the dynamic cultural landscapes existing today. (Identical to INTL 200.)

Greek (GREK) Courses

GREK 201 Hellenistic Greek I
4 hours. A beginning course in the Greek of the New Testament, including vocabulary, grammar, declensions, conjugations, and special constructions. The First Epistle of John and various other selections from the New Testament are read.

GREK 202 Hellenistic Greek II
4 hours. A beginning course in the Greek of the New Testament, including vocabulary, grammar, declensions, conjugations, and special constructions. The First Epistle of John and various other selections from the New Testament are read. The second semester may be applied as biblical studies major credit.
Prerequisite: GREK 201 Hellenistic Greek I.

GREK 301 Hellenistic Greek III
4 hours. The continuation of the course in the Greek of the New Testament, including vocabulary, grammar, and special constructions. Emphasis is placed on readings from biblical texts and exegesis of those texts.
Prerequisite: GREK 202 Hellenistic Greek II.

GREK 302 Hellenistic Greek IV
4 hours. The continuation of the course in the Greek of the New Testament, including vocabulary, grammar, and special constructions. Emphasis is placed on readings from biblical texts and exegesis of those texts.
Prerequisite: GREK 301 Hellenistic Greek III.

German (GRMN) Courses

GRMN 101 Introductory German I
4 hours. Offered on sufficient demand. A study of the structures of the German language, with practice in listening, speaking, reading, and writing. The cultures of Germany and German-speaking countries are presented as integral aspects of learning the language. Language lab listening and interaction are required.

GRMN 102 Introductory German II
4 hours. Offered on sufficient demand. A study of the structures of the German language, with practice in listening, speaking, reading, and writing. The cultures of Germany and German-speaking countries are presented as integral aspects of learning the language. Language lab listening and interaction are required.
Prerequisite: GRMN 101 Introductory German I.

GRMN 201 Intermediate German I
4 hours. Offered on sufficient demand. A thorough review of German language structures, with extensive practice in reading and speaking. Students read short stories and articles and present oral and written reports. Language lab listening and interaction are required.
Prerequisite: GRMN 102 Introductory German II or two years of high school German or by placement exam.

GRMN 202 Intermediate German II
4 hours. Offered on sufficient demand. A thorough review of German language structures, with extensive practice in reading and speaking. Students read short stories and articles and present oral and written reports. Language lab listening and interaction are required.
Prerequisite: GRMN 201 Intermediate German I or two years of high school German or by placement exam.

General Science (GSCI) Courses

GSCI 120 Environmental Science
3 hours. This course will introduce the conceptual, interdisciplinary framework of environmental science by examining its physical, biological, and social components. Topics to be considered will include an inventory of the earth's resources, ecological principles, and the responses of systems to anthropogenic stress; population growth; biodiversity and conservation; and environmental sustainability. Two lectures and one laboratory per week.

GSCI 130 Fundamentals of Geology
3 hours. A systematic study of planet earth. The nature and origin of common minerals, rocks, and geologic structures. Topics will include geology of the earth's crust, plate tectonics, the geology of Oregon, ground water contamination, and geologic hazards such as volcanoes, earthquakes, erosion, landslides, and flooding. This course meets general education requirements and requires no previous knowledge of geology. Two lectures, one two-hour laboratory per week, and two day-long field trips.

GSCI 285 Selected Topics
3 hours. A variety of topics may be offered to meet the special needs and interests of students, faculty, or visiting professors.

GSCI 485 Selected Topics
3 hours. A variety of topics may be offered to meet the special needs and interests of students, faculty, or visiting professors.

Hebrew (HEBR) Courses

HEBR 201 Introduction to Biblical Hebrew I
4 hours. The language of ancient Israel as preserved in the Hebrew Bible is encountered inductively through the study of the text of Esther. Students will master basic vocabulary, grammar, and syntax of narrative Hebrew prose.

HEBR 202 Introduction to Biblical Hebrew II
4 hours. The language of ancient Israel as preserved in the Hebrew Bible is encountered inductively through the study of the text of Esther. Students will master basic vocabulary, grammar, and syntax of narrative Hebrew prose. The second semester may be applied as biblical studies major credit.
Prerequisite: HEBR 201 Introduction to Biblical Hebrew I

HEBR 295 Special Study
1-4 hours. Individual study under the guidance of a faculty member, as determined by student needs and faculty availability.

Prerequisite: instructor's permission.

HEBR 495 Special Study
1-4 hours. Individual study under the guidance of a faculty member, as determined by student needs and faculty availability.
Prerequisite: instructor's permission.

Health and Human Performance Activities (HHPA) Courses

HHPA 101 Basic Rock Climbing
1 hour. The purpose of this course is to provide basic instruction in rock-climbing techniques. The course will cover belaying, knots, top-roped climbing, rappelling, and basic anchor setup. Students will be exposed to both indoor and outdoor rock climbing. Additional course fee is required.

HHPA 103 Backpacking
1 hour. Students will learn the skills and knowledge necessary to prepare for and enjoy a safe wilderness camping experience. Specific skills include planning and packing for a trip, choosing appropriate equipment and clothing, preparing nutritious foods while in the outdoors, managing risk and appropriately responding in emergencies, reading maps, route finding, using a compass, and using the wilderness responsibly and courteously. Additional course fee is required.

HHPA 104 Bicycle Fitness
1 hour. Each student will have the opportunity for a general education of the use of the bicycle as a tool for recreation, fitness, and a general knowledge of the essential aspects of maintenance and repair.

HHPA 106 Badminton
1 hour. This course is designed to give students knowledge and competency in the areas of skill, rules, etiquette, and strategy in badminton.

HHPA 107 Dance Performance
1 hour. This beginning to intermediate Dance Performance class is designed primarily to introduce students to various forms of dance performance, which may include jazz, ballet, hip-hop, theme, etc. Students will view class performances of each group, and participate in individual, group and final class performances. Emphasis will be placed on student-created choreography, identifying correct body alignment, improving posture, balance, rhythm, coordination, timing, flexibility, strength, endurance, and performance.

HHPA 108 Canoeing
1 hour. This course is designed to introduce students to the sport of canoeing and will include instruction designed to assist camping minor students in acquiring the skill and knowledge necessary to conduct teaching sessions in a camp setting. Additional course fee is required.

HHPA 109 Ballroom Dance
1 hour. Instruction in basic to intermediate steps and etiquette in ballroom dance including 6 count and 8 count swing, fox-trot, waltz, and tango.

HHPA 112 Fitness Walking
1 hour. Designed to provide students with an introductory experience, which has the potential to develop

into a lifelong health/wellness activity. The student will become familiar with the contributions this regular activity can make toward development of improved fitness and a healthier lifestyle. A regular weekly walking routine and understanding of primary physiological and anatomical principles are significant by-products of the course.

HHPA 113 Pickleball
1 hour. This course is designed to give students knowledge and competency in the areas of skill, rules, etiquette, and strategy in the game of pickleball.

HHPA 114 Golf/Racquet Games
1 hour. This course is designed to develop the fundamental skills involved in the game of golf and racquet sports and to understand the rules and etiquette of each so as to prepare students to enjoy these games as lifelong activities.

HHPA 116 Golf
1 hour. Students will learn the basics of the game of golf including proper swing techniques, proper putting strategies, and the appropriate ways to conduct one's self on the golf course. Attention will be given to helping students learn to analyze themselves and to become lifelong students of the game. Additional course fee is required.

HHPA 119 Racquetball
1 hour. This course is designed to give students knowledge and competency in the areas of skill, rules, etiquette, and strategy in racquetball.

HHPA 120 Lifelong Fitness
2 hours. Students in this course will learn to think critically about their personal health and wellness in the context of Christian commitment. They will learn scientific principles of aerobic conditioning and weight training. Popular lifetime fitness activities will be introduced. Special emphasis will be placed on developing and maintaining lifestyle habits that optimize well-being. *(May not be repeated for credit.)*

HHPA 122 Survival Techniques
1 hour. At the end of the course the student will be able to justify the need for emergency preparedness; elaborate on the philosophical, psychological, and physiological aspects of survival; demonstrate the basic skills necessary to keeping alive in emergencies; and demonstrate ability to improvise in wilderness survival situations. Additional course fee is required.

HHPA 125 Adapted Activities
1 hour. This course is designed for those students who are unable to take regular physical education classes due to the presence of disabilities or illness. Programs are individualized to meet the abilities and needs of those involved. Those who must follow a physician's prescribed program of exercise will be assisted in that program.

HHPA 126 Skiing/Snowboarding
1 hour. This course is designed to improve your skiing or snowboarding. You will learn new skills, improve your fitness, enjoy new challenges on the mountain, and gain a renewed appreciation of God's gifts and creation. Specific objectives depend on your level of expertise and will be explained by your professional ski/snowboard instructor. Additional course fee is required.

HHPA 127 Soccer/Floor Hockey
1 hour. This course will use lectures, practice sessions, and tournament play to acquaint students with the fundamental techniques and strategies of floor hockey and soccer. Floor hockey will be played during the first seven weeks of the semester, soccer during the last seven weeks.

HHPA 129 Tennis
1 hour. Instruction in skills, techniques, rules, and strategies in double and singles. Students will recognize the value of tennis as a potential lifetime recreational activity. HHPA 130 Aquatics
1 hour. This course is intended to introduce the basics of swimming and is appropriate for all ranges of swimming aptitude. This course will teach the five basic swimming strokes along with other aquatic activities and will prepare students who intend to
pursue certification as a lifeguard and/or obtain the Water Safety Instructor's certification. Additional course fee is required.

HHPA 133 Volleyball
1 hour. The student will be instructed in the fundamental techniques, strategies, drills, and understanding of the game of volleyball.

HHPA 134 Wallyball
1 hour. This course will use lectures, practice sessions, video analysis, and tournament play to acquaint students with the fundamental techniques and strategies of wallyball. HHPA 136 Weight Training
1 hour. This course is designed to teach the physiological principles and training techniques involved in effective strength training and to apply those principles in a 13-week strength-conditioning program.

HHPA 137 Aerobic-Step Exercise
1 hour. This course is designed primarily to introduce students to the basic principles and techniques of step exercise, to improve cardiovascular endurance, muscular strength and endurance, flexibility, agility, and motor skill performance. Emphasis will be placed upon identifying correct body alignment and postural deviations, proper use of step. jump rope and dynaband/strength equipment, and proper warm-up and cool-down stretches. Additional course fee is required.

HHPA 138 Aerobic-Cross Training
1 hour. This course is designed primarily to introduce students to the basic principles and techniques of cross-training exercise and to improve cardiovascular endurance, muscular strength and endurance, flexibility, agility, and motor skill performance. Emphasis will be placed upon identifying correct body alignment and postural deviations, proper use of step, cardio, and strength equipment, and proper warm-up and cool-down stretches. Additional course fee is required.

HHPA 139 Advanced Racquetball
1 hour. This class is designed to take students past the beginning level (e.g. HHPA 119/319 Racquetball) in basic skills and help them learn to play at a more skillful and competitive level.

HHPA 140 Self-Defense
1 hour. Twan-Chi means fellowship and is designed to teach students how to rationally respond to any situation in life with confidence, control, and protection. Various techniques of self-defense, as well as how to fall, roll, basic strikes, kicks, pressure points, and submission holds will be taught. Students will learn

technique to control fear, anxiety, and their own body when involved in person-to-person contact.

HHPA 145 Intercollegiate Athletics
1 hour. 2 credits toward the physical education general education requirement may be earned in athletics, but no more than 1 hour in any one sport may be counted toward the requirement.

HHPA 301 Basic Rock Climbing
1 hour. The purpose of this course is to provide basic instruction in rock-climbing techniques. The course will cover belaying, knots, top-roped climbing, rappelling, and basic anchor setup. Students will be exposed to both indoor and outdoor rock climbing. Additional course fee is required.

HHPA 303 Backpacking
1 hour. Students will learn the skills and knowledge necessary to prepare for and enjoy a safe wilderness camping experience. Specific skills include planning and packing for a trip, choosing appropriate equipment and clothing, preparing nutritious foods while in the outdoors, managing risk and appropriately responding in emergencies, reading maps, route finding, using a compass, and using the wilderness responsibly and courteously. Additional course fee is required.

HHPA 304 Bicycle Fitness
1 hour. Each student will have the opportunity for a general education of the use of the bicycle as a tool for recreation, fitness, and a general knowledge of the essential aspects of maintenance and repair.

HHPA 306 Badminton
1 hour. This course is designed to give students knowledge and competency in the areas of skill, rules, etiquette, and strategy in badminton.

HHPA 307 Dance Performance
1 hour. This beginning to intermediate Dance Performance class is designed primarily to introduce students to various forms of dance performance, which may include jazz, ballet, hip-hop, theme, etc. Students will view class performances of each group, and participate in individual, group and final class performances. Emphasis will be placed on student-created choreography, identifying correct body alignment, improving posture, balance, rhythm, coordination, timing, flexibility, strength, endurance, and performance.

HHPA 308 Canoeing
1 hour. This course is designed to introduce students to the sport of canoeing and will include instruction designed to assist camping minor students in acquiring the skill and knowledge necessary to conduct teaching sessions in a camp setting. Additional course fee is required.

HHPA 309 Ballroom Dance
1 hour. Instruction in basic to intermediate steps and etiquette in ballroom dance including 6 count and 8 count swing, fox-trot, waltz, and tango.

HHPA 312 Fitness Walking
1 hour. Designed to provide students with an introductory experience, which has the potential to develop into a lifelong health/wellness activity. The student will become familiar with the contributions this regular activity can make toward development of improved fitness and a healthier lifestyle. A regular weekly walking routine and understanding of primary physiological and anatomical principles are significant by-

products of the course.

HHPA 313 Pickleball
1 hour. This course is designed to give students knowledge and competency in the areas of skill, rules, etiquette, and strategy in the game of pickleball.

HHPA 314 Golf/Racquet Games
1 hour. This course is designed to develop the fundamental skills involved in the game of golf and racquet sports and to understand the rules and etiquette of each so as to prepare students to enjoy these games as lifelong activities.

HHPA 316 Golf
1 hour. Students will learn the basics of the game of golf including proper swing techniques, proper putting strategies, and the appropriate ways to conduct one's self on the golf course. Attention will be given to helping students learn to analyze themselves and to become lifelong students of the game. Additional course fee is required.

HHPA 319 Racquetball
1 hour. This course is designed to give students knowledge and competency in the areas of skill, rules, etiquette, and strategy in racquetball.

HHPA 322 Survival Techniques
1 hour. At the end of the course the student will be able to justify the need for emergency preparedness; elaborate on the philosophical, psychological, and physiological aspects of survival; demonstrate the basic skills necessary to keeping alive in emergencies; and demonstrate ability to improvise in wilderness survival situations. Additional course fee is required.

HHPA 325 Adapted Activities
1 hour. This course is designed for those students who are unable to take regular physical education classes due to the presence of disabilities or illness. Programs are individualized to meet the abilities and needs of those involved. Those who must follow a physician's prescribed program of exercise will be assisted in that program.

HHPA 326 Skiing/Snowboarding
1 hour. This course is designed to improve your skiing or snowboarding. You will learn new skills, improve your fitness, enjoy new challenges on the mountain, and gain a renewed appreciation of God's gifts and creation. Specific objectives depend on your level of expertise and will be explained by your professional ski/snowboard instructor. Additional course fee is required.

HHPA 327 Soccer/Floor Hockey
1 hour. This course will use lectures, practice sessions, and tournament play to acquaint students with the fundamental techniques and strategies of floor hockey and soccer. Floor hockey will be played during the first seven weeks of the semester, soccer during the last seven weeks.

HHPA 329 Tennis
1 hour. Instruction in skills, techniques, rules, and strategies in double and singles. Students will recognize the value of tennis as a potential lifetime recreational activity.

HHPA 330 Aquatics
1 hour. This course is intended to introduce the basics of swimming and is appropriate for all ranges of swimming aptitude. This course will teach the five basic swimming strokes along with other aquatic activities and will prepare students who intend to pursue certification as a lifeguard and/or obtain the Water Safety Instructor's certification. Additional course fee is required.

HHPA 333 Volleyball
1 hour. The student will be instructed in the fundamental techniques, strategies, drills, and understanding of the game of volleyball.

HHPA 334 Wallyball
1 hour. This course will use lectures, practice sessions, video analysis, and tournament play to acquaint students with the fundamental techniques and strategies of wallyball.

HHPA 336 Weight Training
1 hour. This course is designed to teach the physiological principles and training techniques involved in effective strength training and to apply those principles in a 13-week strength-conditioning program.

HHPA 337 Aerobic-Step Exercise
1 hour. This course is designed primarily to introduce students to the basic principles and techniques of step exercise, to improve cardiovascular endurance, muscular strength and endurance, flexibility, agility, and motor skill performance. Emphasis will be placed upon identifying correct body alignment and postural deviations, proper use of step. jump rope and dynaband/strength equipment, and proper warm-up and cool-down stretches. Additional course fee is required.

HHPA 338 Aerobic-Cross Training
1 hour. This course is designed primarily to introduce students to the basic principles and techniques of cross-training exercise and to improve cardiovascular endurance, muscular strength and endurance, flexibility, agility, and motor skill performance. Emphasis will be placed upon identifying correct body alignment and postural deviations, proper use of step, cardio, and strength equipment, and proper warm-up and cool-down stretches. Additional course fee is required.

HHPA 339 Advanced Racquetball
1 hour. This class is designed to take students past the beginning level (e.g. HHPA 119/319 Racquetball) in basic skills and help them learn to play at a more skillful and competitive level.

HHPA 340 Self-Defense
1 hour. Twan-Chi means fellowship and is designed to teach students how to rationally respond to any situation in life with confidence, control, and protection. Various techniques of self-defense, as well as how to fall, roll, basic strikes, kicks, pressure points, and submission holds will be taught. Students will learn technique to control fear, anxiety, and their own body when involved in person-to-person contact.

HHPA 345 Intercollegiate Athletics
1 hour. 2 credits toward the physical education general education requirement may be earned in athletics, but no more than 1 hour in any one sport may be counted toward the requirement.

HHPA 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

Health and Human Performance Education (HHPE) Courses

HHPE 200 History and Principles of Physical Education
2 hours. A survey of the history and development of physical education and athletics in America. The course will also emphasize fundamental principles of physical education and sport.

HHPE 221 Basketball/Golf
1 hour. Intermediate to advanced instruction in skills, teaching techniques, rules, and strategy for basketball and golf.

HHPE 222 Field Sports
1 hour. Beginning to intermediate instruction in skills, teaching techniques, rules, and strategy. Flag football, soccer, speedball, and korfball are emphasized.

HHPE 223 Tumbling/Gymnastics
1 hour. Beginning to intermediate instruction in skills, teaching techniques, spotting, and safety factors involved in tumbling and gymnastics.

HHPE 226 Tennis/Volleyball
1 hour. Intermediate to advanced skills and techniques, with emphasis on learning how to teach basic skills and drills. Tournament organization and game administration are included.

HHPE 228 Conditioning/Body Mechanics and Aerobics
1 hour. Instruction in concepts related to developing and maintaining physical fitness and movement skills.

HHPE 275 Field Experience
1-3 hours. Supervised experience in the discipline including internships and practica required for professional programs. This introductory experience must have an on-site supervisor and/or a departmental instructor overseeing, designing, and evaluating the content of the course.
Prerequisite: instructor's permission.

HHPE 285 Selected Topics
2-3 hours. A seminar dealing with various topics, as announced, that represent current faculty interests and competencies.

HHPE 295 Special Study
1-3 hours. Individual research under the guidance of the faculty.
Prerequisite: instructor's permission.

HHPE 300 Coaching Theory and Practice
2 hours. The development of a philosophy of coaching. Emphasizes the psychological, sociological, and technical aspects of athletic participation.

HHPE 301 Sports Psychology
2 hour. This course is designed to enhance the understanding of how personality, self-esteem, goal setting and behavior can influence performance and performance preparation. It is also designed to provide future teachers/coaches with coping skills and observational techniques, which will serve them well in coaching as well as in managerial settings.

HHPE 310 Coaching Basketball
2 hours. An analysis of systems of play, principles of offense and defense, and strategies of the game. The organization of practice sessions, administration of games,and techniques of scouting are stressed.
Prerequisite: instructor's permission.

HHPE 320 Coaching Baseball/Softball
2 hours. A study of systems of play, principles of offense and defense, and strategies of the game. The organization of practice sessions, administration of games, and techniques of scouting are stressed.

HHPE 330 Coaching Soccer
2 hours. An analysis of systems of play, principles of offense and defense, and strategies of the game. The organization of practice sessions, administration of games, and techniques of scouting are stressed.
Prerequisite: instructor's permission.

HHPE 340 Coaching Track
2 hours. A study of the techniques and principles of coaching each event. The organization of practice sessions and the strategy for - and administration of - track meets are discussed.
Prerequisites: varsity experience and instructor's permission.

HHPE 350 Coaching Volleyball
2 hours. An analysis of systems of play, principles of offense and defense, and strategies of the game. Organization of practice sessions, administration of games, and techniques of scouting are stressed.

HHPE 360 Organization and Administration of Health, Physical Education, and Athletic Training
2 hours. Instruction in the planning and implementation of health, physical education, athletic training, and athletics programs. Course content will include curriculum design, budget formation, facility design, and coordination. Professional conduct and ethics will be stressed.

HHPE 364 Psychosocial Intervention and Referral in Athletic Training
3 hours. Examines the knowledge, skills, and values that the entry-level certified athletic trainer must possess to recognize and intervene, and when appropriate, refer to a recognized professional; the socio-cultural, mental, emotional, and physical behaviors of athletes and others involved in physical activity.

HHPE 366 General Medical Conditions in Athletic Training
2 hours. Examines the knowledge, skills, and values that the entry-level certified athletic trainer must possess to recognize, treat, and refer, when appropriate, the general medical conditions and disabilities of

athletes and others involved in physical activity. Students will be introduced and exposed to various health care providers.

HHPE 370 Camp Programming and Counseling
3 hours. A camping overview: its historical development and philosophy. Types of camps, program activities, teaching-learning models, leadership recruitment and training - with special emphasis on methods of camp counseling - are covered. Overnight campout is required. Additional course fee is required. (Identical to CHMN 370.)

HHPE 374 Athletic Training Practicum I
1 hour. Supervised experience in an athletic training environment. Additional study required, with an emphasis on athletic training techniques and athletic injury management. Additional course fee is required.
Prerequisites: BIOL 331 Human Anatomy and Physiology I, BIOL 332 Human Anatomy and Physiology II, HHPE 390 Care and Prevention of Athletic Injuries, HLTH 233
Responding to Emergencies, acceptance into the Athletic Training Education Program, and permission.

HHPE 375 Athletic Training Practicum II
1 hour. Supervised experience in an athletic training environment. Additional study required, with an emphasis on athletic training techniques and athletic injury management.
Prerequisites: HHPE 374 Athletic Training Practicum I, HHPE 394 Kinesiology, HHPE 400 Recognition of Athletic Injuries.

HHPE 376 Athletic Training Practicum III
3 hours. Supervised experience in an athletic training environment. Additional study required, with an emphasis on athletic training techniques and athletic injury management.
Prerequisite: HHPE 375 Athletic Training Practicum II.

HHPE 377 Athletic Training Practicum IV
3 hours. Supervised experience in an athletic training environment. Additional study required, with an emphasis on athletic training techniques and athletic injury management.
Prerequisites: HHPE 376 Athletic Training Practicum III, HLTH 300 Nutrition.

HHPE 378 Athletic Training Practicum V
3 hours. Supervised experience in an athletic training environment. Additional study required, with an emphasis on athletic training techniques and athletic injury management.
Prerequisites: HHPE 228 Conditioning/Body Mechanics and Aerobics, HHPE 360 Organization and Administration of Health, Physical Education, and Athletic Training, HHPE 364 Psychosocial Intervention and Referral in Athletic Training, HHPE 377 Athletic Training Practicum IV, HHPE 413 Therapeutic Exercise.

HHPE 379 Athletic Training Practicum VI
3 hours. Supervised experience in an athletic training environment. Additional study required, with an emphasis on athletic training techniques and athletic injury management.
Prerequisites: HHPE 366 General Medical Conditions in Athletic Training, HHPE 378 Athletic Training Practicum V, HHPE 384 Pharmacology in Athletic Training, HHPE 430 Exercise Physiology

HHPE 380 Experiential Recreational Leadership
3 hours. A study of theory and practice of experiential leadership in adventure and recreation

education/programming. Leadership styles, techniques, methods, and practices will be the core subjects taught in this highly experiential class involving an outdoor lab component.

HHPE 384 Pharmacology in Athletic Training
1 hour. An emphasis on the knowledge, skills, and values required of an athletic trainer on pharmacologic applications, including indications, contraindications, precautions, interactions, and governing regulations relevant to the treatment of injuries and illnesses of the physically active.
Prerequisites: BIOL 331 Human Anatomy and Physiology I and BIOL 332 Human Anatomy and Physiology II.

HHPE 390 Care and Prevention of Athletic Injuries
3 hours. An introductory survey of athletic training. Emphasis will be on terminology, injury prevention, evaluation, treatment, and emergency care procedures. Common taping techniques also will be presented. Additional course fee is required.

HHPE 394 Kinesiology
3 hours. Application of human anatomy and physical laws to the explanation of movement activities. Special emphasis is given to detailed analysis of various sports activities.
Prerequisites: BIOL 331 Human Anatomy and Physiology I and BIOL 332 Human Anatomy and Physiology II.

HHPE 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

HHPE 400 Recognition of Athletic Injuries
3 hours. Course will examine "normal" human anatomy, mechanisms of athletic injury, and deviation from "normal" anatomy in an athletic injury. Practice time will be given on techniques of evaluation. Permission required.
Prerequisites: BIOL 331 Human Anatomy and Physiology I and BIOL 332 Human Anatomy and Physiology II and HHPE 390 Care and Prevention of Athletic Injuries.

HHPE 410 Teaching Physical Education
2 hours. Development of competence, style, and confidence in teaching physical education for the physical education major. Emphasis is given to analysis of objectives, unit and lesson planning, instruction methods, means of evaluation, and class procedures and control.

HHPE 413 Therapeutic Exercise
2 hours. Course will examine exercise procedures as the first modality for rehabilitation of the injured athlete. Also examines the role of exercise for the prevention of injuries, as well as rehabilitation to all major joints and musculature of the body. Includes a lab for practice.
Prerequisites: HHPE 390 Care and Prevention of Athletic Injuries and HHPE 394 Kinesiology.

HHPE 414 Therapeutic Modalities
2 hours. Course will examine the role of therapeutic modalities including thermal modalities, electrical agents, deep heating agents, and mechanical modalities in the rehabilitation of the injured athlete. Includes a lab for practice.
Prerequisites: HHPE 390 Care and Prevention of Athletic Injuries and HHPE 400 Recognition of Athletic Injuries.

HHPE 420 Exercise Prescription
3 hours. Application of exercise testing and prescription of individuals ranging from athletes to special populations. Includes aspects of nutrition, disease, training methods, and exercise responses.
Prerequisites: BIOL 331 Human Anatomy and Physiology I and BIOL 332 Human Anatomy and Physiology II.

HHPE 430 Exercise Physiology
3 hours. Application of principles of physiology to physical activity. Special attention is given to the effect of exercise on the various body systems and the construction of training programs.
Prerequisites: BIOL 331 Human Anatomy and Physiology I and BIOL 332 Human Anatomy and Physiology II.

HHPE 440 Camp Administration
2 hours. Designed to develop a basic understanding of programming, business, and leadership at an administrative level. A weekend camping trip is required. Additional course fee is required. (Identical to CHMN 440, but doesn't include a prerequisite.)

HHPE 460 Physical Education for the Exceptional Student
3 hours. This course considers the nature and etiology of disability and handicapping conditions, as well as the implications for and development of appropriate physical education programs.

HHPE 470 Motor Development and Motor-Skill Learning
3 hours. A study of the development of motor skills. Psychological principles of learning are applied to motor-skill learning. A review of research and an inquiry into the effect of various conditions on the learning and performance of motor skills from early childhood through the adult years.

HHPE 475 Fitness Management Field Experience
6 hours. Supervised field experience for senior human performance majors in the fitness management major track. Field experience takes place in a variety of settings, including health clubs, YMCAs, cardiac rehabilitation programs, nutritional centers, senior citizen centers, and community recreation programs. Prerequisite: by permission only, with application made one semester in advance of placement.

HHPE 480 Tests and Measurements in Physical Education
2 hours. Emphasis is given to methods of evaluation in programs of physical education. Testing procedures, standard tests, physical examinations, and evaluation activities are discussed.

HHPE 485 Selected Topics
2-3 hours. A seminar dealing with various topics, as announced, that represent current faculty interests and competencies.

HHPE 490 Senior Seminar
1 hour. Research of current issues in health, physical education, and athletics. Senior thesis and public presentation of thesis is required.

HHPE 495 Special Study
1-3 hours. Individual research under the guidance of the faculty.
Prerequisite: instructor's permission.

History (HIST) Courses

HIST 110 Western Civilization to 1648
3 hours. A survey of Western civilization from the ancient world through the Reformation and religious wars, including attention to the origins and development of religious, political, and economic life and ideas.

HIST 120 Western Civilization from 1648
3 hours. A survey of European civilization from early modern Europe to the present day. Special attention is given to the political, economic, and religious developments that continue to influence European society and its role in world events.

HIST 151 United States to 1865
3 hours. The first half of a two-semester survey of American history. The course surveys historical development from human origins in North America through the founding of the United States to the end of the Civil War.

HIST 152 United States from 1865
3 hours. The second half of a two-semester survey of American history. The course surveys historical development in the United States beginning with Reconstruction of the nation during and after the Civil War and continuing through contemporary times.

HIST 250 Latin America
3 hours. Latin American countries from colonial times to the present, with an emphasis on the conditions that have led to the crises of recent years.

HIST 275 Field Experience
2-10 hours. Supervised experiences in museums, historical societies, and government agencies.
Prerequisites: upper-division history majors, and by permission.

HIST 280 Introduction to Political Philosophy
3 hours. A study of great political thinkers and issues from Socrates to the present. Students are encouraged to understand and evaluate these thinkers in their historical contexts, and to consider them as philosophers whose insights are relevant for contemporary debates. (Identical to PHIL 280 and PSCI 280.)

HIST 285 Selected Topics
3 hours. Occasional special courses scheduled to fit the interests of students and faculty and the needs of a shifting society. A course in presidential elections is offered in presidential-election years (2012, 2016).

HIST 290 Introduction to Historical Studies
3 hours. An introduction to the basic skills, methods, and resources of historical scholarship; the types of historical literature and scholarship; Christian foundations for historical interpretation; historical schools of interpretation; and the uses of historical scholarship.

HIST 300 American Political Theory
3 hours. A survey of the major developments in U.S. political theory from the Puritans to the present. The relationship between Christianity and American political theory is given special attention. (Identical to PHIL 300 and PSCI 300.)

HIST 330 The American West
3 hours. Examines the relationship of the American West to the rest of the nation through its exploration, settlement, and development. Special attention is given to the Pacific Northwest and to the Native American experience.

HIST 331 England to 1688
3 hours. The growth of the English nation from Roman times to the Glorious Revolution, with special attention given to constitutional and religious development.

HIST 332 England from 1688
3 hours. England in the modern age, emphasizing the response of its institutions to its rapidly changing role in the European and world communities.

HIST 340 History of the Middle East
3 hours. Explores the political, economic, social, and religious developments in the Middle East from the ancient to the modern era, with emphasis on the latter period.

HIST 343 History of Southern Africa
3 hours. A study of the history of southern Africa from about 1500 to the present with particular attention to the native groups of the region, Dutch colonization and British imperialism, and relations between diverse ethnic groups in the last two centuries.

HIST 360 Modern Russia
3 hours. A study of 20th- and 21st-century Russia and other former Soviet republics, with emphasis on their current significance in the world and the factors in their history that brought the Revolution of 1917 and the collapse of the Soviet Union.

HIST 363 War and Conscience in the United States
3 hours. An exploration of American thought on the subject of war, both today and in past crises such as the American Revolution, Civil War, wars with the American Indians, the world wars, Vietnam War, and the Gulf War; a study of the official position major church bodies have taken in regard to war; and the experiences of individuals who refused to fight. (Identical to PSCI 363.)

HIST 370 Modern China and Japan
3 hours. Political and cultural developments of China and Japan.

HIST 380 The African-American Experience in the United States
3 hours. A study of Africans in an America dominated by those of European descent.

HIST 390 Peace Research
1-3 hours. Directed research on peace subjects, both current and historical. Students will normally write a major research paper. (Identical to PSCI 390.)

HIST 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

HIST 401 Christianity in History I
3 hours. The development of Christianity from its appearance within the Greco-Roman world through the medieval period, and its influence as a base for culture in the West. (Identical to RELI 401.)

HIST 402 Christianity in History II
3 hours. Christianity's development from the dawn of the Protestant Reformation through its global spread during the modern era, observing its historical context and relationship to the surrounding cultures. (Identical to RELI 402.)

HIST 410 Classical Greece and Rome
3 hours. A survey of classical Greece and Rome from 1600 B.C. through the collapse of the Roman Empire in the West in the fifth century A.D. Political, economic, and social developments are stressed, including the rise of Christianity and the early church.

HIST 419 Medieval Europe
3 hours. A survey of medieval Europe from the collapse of the Roman Empire in 500 to the rise of Modern Europe in 1500. Special attention is given to the important political, economic, and religious developments of this period.

HIST 421 Europe from the Age of Enlightenment to 1890
3 hours. European political, economic, cultural, and intellectual developments from the late 17th century through 1890.

HIST 422 Europe 1890-Present
3 hours. Europe in the 20th and 21st centuries, with emphasis on the upheavals of the two world wars and the status of the European states today.

HIST 450 The United States and Persian Gulf Conflicts
3 hours. Examines the American role in the two wars with Iraq, their antecedents and results. Attention is also given to the contemporary issue of terrorism and its relation to these wars.

HIST 456 Classics of American History
3 hours. This course is a seminar that allows students to study some of the great works of American history.

In addition to mastering the historical knowledge the books provide, students will develop an advanced understanding of both the social and political climate within which the books were written, and the histiographical traditions that informed the interpretations.

HIST 457 The Colonial Experience, 1607-1763
3 hours. Studies Colonial life in the British colonies of North America from the founding of Jamestown to the end of the French and Indian War. Emphasis is placed on religious conflict and development, the growing sense of a unique American identity, and the importance of community as opposed to the distant British government in the lives of everyday citizens.

HIST 458 The Making of the American Republic, 1754-1825
3 hours. Studies the world of the founders. Emphasis is placed on the ideological, social, and political milieu that gave birth to the American Revolution and Constitution. The course also considers the radical changes in American society the revolution set in motion.

HIST 459 The Era of the Civil War, 1825-1898
3 hours. Examines the causes of the Civil War. In addition, slavery, Christianity, the westward movement, the struggle for power in Congress, Abraham Lincoln, the rise of Northern industrialism, and Southern society are all studied in their own right and in relation to the conflict some historians call "the crossroads of our being."

HIST 468 America in the Time of the Two World Wars, 1898-1945
3 hours. Considers how economic growth and then depression challenged the American government and people to redefine the American Dream and to discover new avenues for achieving it. At the same time, Europe confronted America with two world wars,
which also changed the nature of American society and the role of the United States in the world.

HIST 469 Recent America, 1945-Present
3 hours. Studies America as the leader of the Western world during the Cold War and how that role impacted the social, economic, intellectual, and political currents in American life. This course also examines the rise of interest groups, the increased political prominence of ethnic and women's groups, and the impact of these groups on American culture.

HIST 470 Renaissance and Reformation
3 hours. The political, social, and religious life of Europe from the beginning of the Renaissance to the Peace of Westphalia, with emphasis on the various reform movements and their impact on the modern world.

HIST 475 Field Experience
2-10 hours. Supervised experiences in museums, historical societies, and government agencies.
Prerequisites: upper-division history majors, and by permission.

HIST 485 Selected Topics
3 hours. Occasional special courses scheduled to fit the interests of students and
faculty and the needs of a shifting society. A course in presidential elections is offered in presidential-election years (2012, 2016).

HIST 490 History Seminar
3 hours. The course examines the methods professional historians use in writing history and the main currents in American historiography through the reading of America's most influential historians. Working closely with the instructor, students are required to write a research paper based on primary sources. The paper will be permanently retained by
the history faculty.

HIST 495 Special Study
1-3 hours. Independent study of subjects outside regular offerings. Guiding bibliographies are provided, and regular reading reports and conferences are scheduled.
Prerequisites: upper-division history majors, and by permission.

Health Education (HLTH) Courses

HLTH 210 Drug Education
2 hours. Issues concerned with the use, misuse, and abuse of selected pharmacological agents. Social, psychological, physical, and moral implications are considered.
Particular consideration is given to ergogenic aids in athletics.

HLTH 230 First Aid and Safety
1 hour. Instruction in first aid and safety and leading to certification in first aid and cardiopulmonary resuscitation CPR). Additional course fee is required.

HLTH 233 Responding to Emergencies
2 hours. Students will receive instruction in Basic First Aid and CPR for the Professional Rescuer using the curriculum of the American Red Cross, leading to American Red Cross certification in First Aid and CPR/AED for the Professional Rescuer. Additional course information will meet first aid competencies outlined by the Athletic Training Education Program. Additional course fee is required.
Prerequisite: instructor's permission.

HLTH 240 Stress Management
3 hours. A study of causes, symptoms, and results of stress. Introduces practical techniques to alleviate stress, promote relaxation, and encourage a healthy lifestyle. HLTH 275 Field Experience
1-3 hours. Supervised experience in the discipline including internships and practica required for professional programs. This introductory experience must have an on-site
supervisor and/or a departmental instructor overseeing, designing, and evaluating the
content of the course.
Prerequisite: instructor's permission.

HLTH 285 Selected Topics
1-3 hours. A seminar dealing with various topics as announced that represent current faculty interests and competencies.

HLTH 300 Nutrition
3 hours. A study of nutrients present in foods and their relation to the nutritive needs of the human body. Emphasis on the young adult, along with discussion of contemporary nutrition-related topics of national and global concern. Computer-assisted dietary analysis will be included. (Identical to FCSC 300.)

HLTH 320 Contemporary Health Issues
3 hours. A study of our nation's current health problems and concerns. Emphasis on health consumerism and current trends, diseases, the sanctity of life, and fitness. Goal is to develop an educated view on current health issues.

HLTH 323 Sociology of Families
3 hours. A study of marriage and the family from a sociological perspective, including historical, cross-cultural, and economic backgrounds. A Christian faith perspective will emphasize the worth of people, the importance of the family as a place of nurture, and the gift of marriage. (Identical to FCSC 323 and SOCI 323).

HLTH 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

HLTH 475 Field Experience
1-3 hours. Supervised experience in the discipline including internships and practica required for professional programs. This advanced experience must have an on-site supervisor and/or a departmental instructor overseeing, designing, and evaluating the content of the course.
Prerequisite: instructor's permission.

HLTH 485 Selected Topics
1-3 hours. A seminar dealing with various topics as announced that represent current faculty interests and competencies.

International Studies (INTL) Courses

INTL 200 Cultural Geography and Global Relationships
3 hours. A study of the world's cultural regions developed through the themes of location, human environmental relationships, movement, and regions, with emphasis on the interrelatedness of culture, physical, economic, historical, and political geography in creating the dynamic cultural landscapes existing today. (Identical to GEOG 200.)

INTL 230 Introduction to International Relations
3 hours. Introduction to the principles and study of interstate relations in the contemporary world. Special attention is given to the issues of sovereignty, the United Nations, and international law. (Identical to PSCI 230.)

INTL 275 Field Experience
1-3 hours. Supervised experience in the discipline including internships and practica required for professional programs. This introductory experience must have an on-site supervisor and/or a departmental instructor overseeing, designing, and evaluating the content of the course.
Prerequisite: instructor's permission.

INTL 285 Selected Topics
1-3 hours. An introductory seminar offered on an occasional basis addressing a current topic in the field that is of special interest to students and current faculty.

INTL 303 International Conflict and Peace
3 hours. This course considers the causes of international conflict and possible approaches to their resolution. An emphasis is placed on strategies to prevent and resolve conflicts without the use of violence. (Identical to PSCI 303 and SOCI 303.)

INTL 310 Cultural Anthropology
3 hours. A comparative study of world societies and their ways of life. (Identical to SOCI 310.)

INTL 330 Introduction to the World Christian Movement
3 hours. The biblical basis and history of missions are considered, with a special focus upon the modern missionary movement of the last 200 years. (Identical to RELI 330.)

INTL 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

INTL 440 World Religions
3 hours. A comparative study between Christianity and other prominent religions of the world, such as Buddhism, Islam, Hinduism, and contemporary kinds of alternative religion. (Identical to RELI 440.)

INTL 461 International Trade
3 hours. An overview of international trade theory and its applications with respect to the direction of trade flows, determination of prices and volumes in international trade, the impact of tariffs and non-tariff barriers, and the role of bilateral and multilateral trade negotiations. Particular emphasis is given to the broader social impact of trade policy and patterns. (Identical to ECON 461 and SOCI 461.) *Prerequisites: ECON 201 Principles of Microeconomics.*

INTL 462 International Finance
3 hours. An overview of international monetary economics including the balance of payments, foreign exchange rate, the globalization of financial markets and its implications, international macroeconomic interdependence and capital flows. Particular attention is given to multilateral financial institutions and reform of the global financial architecture. (Identical to ECON 462 and SOCI 462.)
Prerequisites: ECON 202 Principles of Macroeconomics.

INTL 475 Culture-Oriented Fieldwork
3-12 hours. Supervised experiences in a non-American culture.
Prerequisite: upper-division international studies majors or minors, and by permission.

INTL 485 Selected Topics
1-3 hours. An advanced seminar offered on an occasional basis addressing a current topic in the field that is of special interest to students and current faculty.

INTL 490 International Studies Senior Seminar
3 hours. Required of senior international studies majors, the course emphasizes the investigation of theoretical and current applications of interdisciplinary research in international studies. Students with a significant interest in international issues are welcome, with the consent of the instructor. A research paper based upon primary source materials is the main assignment of the course.

Journalism (JOUR) Courses

JOUR 200 Persuasive Communication
3 hours. A presentation of key principles of persuasion as they are reflected in typical organizational communication contexts. Focus on developing a planning sequence that will function as a practical guide for designing, executing, and evaluating communication events. Students will be expected to develop a "real world" communication event, e.g., publicity campaign, speech, newsletter. (Identical to COMM 200)
Prerequisite: COMM 100 Introduction to Communication or equivalent.

JOUR 210 Practical Grammar and Editing
3 hours. This course helps those who want to understand and to be able to explain to others what can be done to make writing correct, clear, and precise. Focuses on constructing, editing, and correcting sentences and paragraphs. This is not a remedial course. (Identical to WRIT 210)

JOUR 230 Introduction to Journalism
3 hours. A course designed to provide fundamental knowledge and experience in reporting, writing, and editing news for the print media. (Identical to WRIT 230.) *Prerequisite: WRIT 110 College Writing or equivalent, or instructor's permission.*

JOUR 270 Broadcast News I
3 hours. This class covers the basic principles of broadcast journalism: broadcast news writing, broadcast videography, and Internet-distributed video news production. Students participate in a student-focused television news show by creating news and feature videos for broadcast (cable, online); they will create a demo tape/DVD from those packages. (Identical to CMCO 270)
Prerequisite: CMCO 230 Introduction to Video Production or instructor's permission.

JOUR 275 Field Experience
1-3 hours. Supervised experience in the discipline including internships and practica required for professional programs. This introductory experience must have an on-site supervisor and/or a departmental instructor overseeing, designing, and evaluating the content of the course. *Prerequisite: instructor's permission.*

JOUR 285 Selected Topics
3 hours. Occasional special courses created to fit the needs and interests of faculty, visiting professors, and students.

JOUR 310 Professional Writing
3 hours. This course explores trends in media convergence, focusing as well on the ways reporters, editors,

and designers create stories for the web. Particular emphasis will be on web-based story design, the coordination of text and art, and the creation of stories for a variety of new media outlets. (Identical to WRIT 310)
Prerequisite: WRIT 110 College Writing or equivalent, or instructor's permission.

JOUR 320 Introduction to Public Relations
3 hours. A course designed to introduce and develop a clear concept of public relations as a communication profession. Topics to be covered include the function of public relations in both public and private enterprises; the process of planning and implementing a public relations communication campaign; techniques for communicating with various publics; and the laws and ethics governing the practice of public relations. (Identical to COMM 320)
Prerequisite: one course in business or communication arts.

JOUR 330 Magazine and Feature Writing
*3 hours.*A workshop approach to writing feature articles and other shorter nonfiction forms for periodicals. Student-produced material is submitted to various publications as part of course expectations. (Identical to WRIT 330)
Prerequisite: WRIT 110 College Writing or equivalent, or instructor's permission.

JOUR 470 Journalism II
3 hours. Students hone journalistic skills in areas such as interviewing techniques, cultivating sources, investigative reporting, and editing and layout. (Identical to CMCO 470.)
Prerequisite: JOUR 230 Introduction to Journalism or instructor's permission.

JOUR 475 Field Experience
1-3 hours. Supervised experience in the discipline including internships and practica required for professional programs. This introductory experience must have an on-site supervisor and/or a departmental instructor overseeing, designing, and evaluating the content of the course.
Prerequisite: instructor's permission.

JOUR 480 Senior Capstone: Ethical and Spiritual Dimensions of Communication
3 hours. Designed to integrate skills and concepts from communication course work with ethical and spiritual principles through readings, written assignments, and assessment instruments. Students will complete portfolios that will include work samples and department exit exams along with a statement of what it means to be a Christian communicator. A service component may be included as part of the course. (Identical to COMM 480)

JOUR 485 Selected Topics
3 hours. Occasional special courses created to fit the needs and interests of faculty, visiting professors, and students.

JOUR 495 Special Study
1-3 hours. Individualized study related to the student's needs and interests. Open to exceptional students at the discretion of the faculty.

Japanese (JPNS) Courses

JPNS 101 First-Year Japanese I
3 hours. A study of the structures of the Japanese language, with practice in listening, speaking, reading, and writing. The culture of Japan is presented as an integral component of language study.

JPNS 102 First-Year Japanese II
3 hours. A study of the structures of the Japanese language, with practice in listening, speaking, reading, and writing. The culture of Japan is presented as an integral component of language study.
Prerequisite: JPNS 101 First-Year Japanese I or one year of high school Japanese or placement by exam.

JPNS 201 Second-Year Japanese I
3 hours. A thorough review of Japanese language structures, with intensive practice in reading, speaking, and writing. Language lab listening and interaction are required. *Prerequisite: JPNS 102 First-Year Japanese II or two years of high school Japanese or placement by exam.*

JPNS 202 Second-Year Japanese II
3 hours. A thorough review of Japanese language structures, with intensive practice in reading, speaking, and writing. Language lab listening and interaction are required. *Prerequisite: JPNS 201 Second-Year Japanese I or two years of high school Japanese or placement by exam.*

Leadership Studies (LEAD) Courses

LEAD 235 Residence Life Seminar
1 hour. An integrative seminar linking residence-life leadership, course work, and group exercises. Examines the educational implications of residence life by giving attention to what causes dissonance in the lives of undergraduates, how community is created, and how leaders function as models on a college campus. Pass/No Pass.
Prerequisite: current member of the residence life staff.

LEAD 260 Leadership Advance I
1 hour. Designed as an introduction to leadership for first and second year students. Required for incoming Miller Scholarship recipients. Delivered in either a weekly class format or through a series of workshops. Students also engage in an outdoor education experience. Possible topics include leadership stlyes and theories, followership, decision making, team building, communication, discovering personal vocation and identifying spiritual gifts. Pass/No Pass.

LEAD 270 Leadership Advance II
1 hour. Designed as an introduction to student leadership for first and second year students. Required for incoming Miller Scholarship recipients. Students engage in a community service project as well as a capstone project assisting a local organization. May include workshop or classsessions. Pass/No pass.

LEAD 360 Student Leader Development I
1 hour. Provides a common core of leadership knowledge and skill for students in formal roles and programs on campus (i. e. student government, spiritual life, Act VI scholars, residence life). Focus

on the development of effective and innovative leaders through self-understanding, skill development, relational competence and service. Possible topics include community building and group dynamics, emergency response, identifying individual strengths, diversity, decision-making, dealing with conflict and setting leadership priorities. Fall Semester. Pass/No Pass.

LEAD 370 Student Leader Developemnt II
1 hour. Provides a common core of leadership knowledge and skill for students in formal roles and programs on campus (i. e. student government, spiritual life, Act VI scholars, residence life). Focus on the development of effective and innovative leaders through self-understanding, skill development, relational competence and service. Possible topics include community building and group dynamics, emergency response, identifying individual strengths, diversity, decision-making, dealing with conflict and setting leadership priorities. Fall Semester. Pass/No Pass.

LEAD 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

LEAD 435 Residence Life Seminar
1 hour. An integrative seminar linking residence-life leadership, course work, and group exercises. Examines the educational implications of residence life by giving attention to what causes dissonance in the lives of undergraduates, how community is created, and how leaders function as models on a college campus. Pass/No Pass.
Prerequisite: current member of the residence life staff.

LEAD 275/475 Leadership Experience
1-3 hours. Designed to provide students with an opportunity to develop their leadership skills through work or volunteer experience. All leadership experience proposals subject to the approval of the leadership studies program directors. Possible placements might include leading a church youth group, directing a social-concern project, managing the campus radio station, or serving as a member of student government. Pass/No Pass.

LEAD 491 Leadership Seminar I
1 hour. Integrative seminar linking leadership practicum, course work, and readings. Topics include servant leadership, transformational leadership, and leadership development. Occasional retreats and other off-campus activities. Pass/No Pass. LEAD 492 Leadership Seminar II
1 hour. Integrative seminar linking leadership practicum, course work, and readings. Topics include servant leadership, transformational leadership, and leadership development. Occasional retreats and other off-campus activities. Pass/No Pass.

Literature (LITR) Courses

LITR 100 Introduction to Literature
3 hours. Explores the major genres, themes, and elements of literature.

LITR 180 Studies in Literature
3 hours. Introduces important concepts in the study of literature. Students will learn techniques in close reading, and will read, discuss, and produce written analyses of a variety of literary texts in order to better understand historical, political, cultural, and formalistic aspects of literary works.

LITR 220 Great American Writers
3 hours. A brief survey of American literary history, combined with a close study of some of the most engaging works and writers in the tradition.

LITR 236 Ancient World Literature
3 hours. Introduces and examines as literary texts significant works of world mythologies. Readings stress those cross-cultural themes and literary forms exemplifying the ideals, values, and concerns that have shaped our shared human condition. The course surveys myths from African, Middle Eastern, Asian, Native American, Meso-American, Oceanic, and European literatures. Universal motifs and unique differences in these traditional sacred and secular stories are examined with an eye to understanding how myths underpin cultural, community, and individual values, ethical teachings, and spiritual experiences that continue to inform the world's cultures.

LITR 237 World Literature, Medieval to Modern
3 hours. Considers works written in Africa, the Middle East, Asia, Oceania, Europe, and the Americas during the medieval and early modern periods. Students examine culturally defining texts that reflect both the uniqueness of culture and the universality of literary themes. Students read a sample of texts written between the medieval period and 1900. The focus is on texts that continue to be important to the culture they represent, such as *The Tale of Genji, Journey to the West, The Thousand and One Nights, The Divine Comedy*, and *Shakuntala*.

LITR 238 Contemporary World Literature
3 hours. Examines contemporary literatures across the world in order to explore both the similarities and differences in literary styles and themes. Because so much current non-Western literature is influenced by Western literature, culture, and values, students will consider historical background, including colonial, post-colonial, or political readings of writers such as Chinua Achebe, Gabriel Gárcia Márquez, Nadine Gordimer, Lu Xün, and Jamaica Kincaid.

LITR 240 Understanding Drama
3 hours. A study of significant plays from the classical period to the present, both as literary works and staged productions, the goal being a deeper understanding and appreciation of drama as a symbolic form. Primary focus is on literary values, with attention also given to the constraints and interpretations embodied in the staging, acting, and directing of a play. (Identical to THEA 240.)

LITR 270 Great British Writers
3 hours. An introduction to British literary history, combined with a close study of some of the most engaging works and writers in the tradition.

LITR 275 Field Experience
*1-3 hours.*Supervised experience in the discipline including internships and practica required for professional programs. This introductory experience must have an on-site supervisor and/or a departmental instructor

overseeing, designing, and evaluating the content of the course.
Prerequisite: instructor's permission.

LITR 280 Literary Foundations of Women's Studies
3 hours. Introduces students to literature that presents the groundwork for women's studies and considers a selection of contemporary texts that apply that perspective. Reading will include significant novels, poems, and essays that demonstrate the history of women's contribution to literature, culture, and Christianity.

LITR 285 Selected Literary Topics
3 hours. An occasional course that allows professors and students to investigate interesting literary byways. Past selections have included studies in science fiction, the literature of human rights, the short story, and the works of particular authors.

LITR 326 American Literature to 1865
3 hours. A selective look at early American literature, from 1607 to 1865. Examines themes, movements, and writers who influenced and were influenced by the growth of the new nation.
Prerequisite: another LITR course or equivalent, or permission of instructor.

LITR 327 American Literature, 1865-1914
3 hours. A selective look at the literature of the United States, from 1865 to 1914. Particular attention is given to the masters of realistic and naturalistic fiction, and to the poets who most clearly influenced modern poetry.
Prerequisite: another LITR course or equivalent, or instructor's permission.

LITR 328 American Literature, 1914-Present
3 hours. A selective look at the literature of the United States, from 1914 to the present. Particular attention is given to the masterworks of Modernism, especially to those that have proven influential in contemporary literature.
Prerequisite: another LITR course or equivalent, or permission of instructor.

LITR 335 Advanced Studies in American Literature
3 hours. An advanced study of selected authors and topics in American Literature. May be repeated with permission of instructor.
Prerequisite: another LITR course or equivalent, or permission of instructor.

LITR 350 Literary Criticism
3 hours. Introduces students to various schools of literary criticism. Students will practice using different critical approaches to writing about literature. Recommended for juniors and seniors.
Prerequisite: WRIT 200 Understanding Literature and 6 hours of literature courses or instructor's permission.

LITR 365 Advanced Studies in British Literature
3 hours. An advanced study of selected authors and topics in British Literature. May be repeated with permission of instructor.
Prerequisite: another LITR course or equivalent, or permission of instructor.

LITR 376 British Literature to 1660
3 hours. A selective look at the literature of the British Isles, from the earliest texts through 1660. Particular attention is given to the Anglo-Saxon, Medieval, and Renaissance periods.
Prerequisite: another LITR course or equivalent or instructor's permission.

LITR 377 British Literature, 1660-1830
3 hours. A selective look at the literature of the British Isles during the Restoration, the Neoclassical, and the Romantic periods. Particular attention is given to the emergence of the novel and the poets who most clearly influenced the continuing development of poetry.
Prerequisite: another LITR course or equivalent or instructor's permission.

LITR 378 British Literature, 1830-Present
3 hours. A selective look at the literature of the British Isles during the Victorian, Modern, and Contemporary periods. Particular attention is given to the literature of doubt and faith, the development of the novel, and post-Colonial issues.
Prerequisite: another LITR course or equivalent or instructor's permission.

LITR 379 Shakespeare
3 hours. A consideration of the life and works of the poet/playwright and the sociopolitical history of the Renaissance. The course examines the sonnets and a selection of the plays from each genre: comedy, tragedy, history, and tragicomedy.
Prerequisite: another LITR course or equivalent or instructor's permission.

LITR 380 Gender Theory
3 hours. This course is designed expose students to the ways that gender theory, including feminism, womanism, anti-sexism, and masculinism, has developed over the years, and how that theory is applied to literature.

LITR 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

LITR 475 Field Experience
1-3 hours. Supervised experience in the discipline including internships and practica required for professional programs. This advanced experience must have an on-site supervisor and/or a departmental instructor overseeing, designing, and evaluating the content of the course.
Prerequisite: instructor's permission.

LITR 480 International Women's Voices
3 hours. Considers contemporary writings from women around the world. Students analyze these literary texts, examine the cultures they represent, and keep apprised of current events related to women.
Prerequisite: another LITR course or equivalent or instructor's permission.

LITR 485 Selected Literary Topics
3 hours. An occasional course that allows professors and students to investigate interesting literary byways. Past selections have included studies in science fiction, the literature of human rights, the short story, and the works of particular authors.

LITR 490 Senior Experience
3 hours. Students will choose to research and write a senior thesis, working with a faculty member in their area of interest; or will complete a service project in a community organization, in a school classroom, or in another identified literacy program; or will complete a professional internship; or will create a portfolio of written work. (Course identical to WRIT 490)
Prerequisite: senior standing.

LITR 495 Special Study
1-3 hours. Individualized study related to the student's needs and interests. Open to exceptional students at the discretion of a faculty member.

Mathematics (MATH) Courses

MATH 095 Math Skills
1-3 hours. Individually designed mathematical training to meet the needs and goals of any individual student. The extent of this training will be determined through a testing process. Topics covered include basic math, elementary algebra, and intermediate algebra. This course does not fulfill general education requirements.
This course is pre-college level and carries no credit toward degree requirements.

MATH 150 The World of Mathematics
3 hours. An introduction to various topics of modern mathematics from an elementary point of view so as to be understandable to nonmathematics and nonscience majors and to foster an appreciation for the art, history, beauty, and applications of mathematics. Topics will be covered that allow students to do the mathematics involved without needing a strong mathematical background.

MATH 180 College Algebra
3 hours. An algebra course designed for students who have a good background in high school algebra and are prepared to cover the major topics of algebra in more depth and breadth. Applications of algebra will be emphasized in this course. This course does not serve as a prerequisite for the calculus sequence.
Prerequisite: high school algebra or equivalent.

MATH 190 Precalculus Mathematics
4 hours. A course for students who are preparing to take calculus or other courses requiring a similar background. In addition to studying the topics found in a college algebra course, this course will focus on trigonometry and an introduction to exponential and logarithmic functions.
Prerequisite: high school algebra or its equivalent. Students who have taken MATH 180 College Algebra may not take this course for credit.

MATH 201 Calculus I
4 hours. A study of limits of function, derivatives of functions, applications of derivatives, and an introduction to integration.

Prerequisite: MATH 190 Precalculus Mathematics or equivalent.

MATH 202 Calculus II
4 hours. A study of applications of integration, techniques of integration, techniques for improper integrals, limits of indeterminate forms, sequence and series, polar coordinates and parametric equations in the plane.
Prerequisite: MATH 201 Calculus I.

MATH 211 Foundations of Elementary Mathematics I
4 hours. This course focuses on the development of the mathematical knowledge needed for teaching elementary and middle school mathematics. Topics include elementary number theory, arithmetic operations, and algebra, and the NCTM process strands of problem solving, representation, and communication. Additional course fee is required.

MATH 212 Foundations of Elementary Mathematics II
4 hours. This course focuses on the development of the mathematical knowledge needed for teaching elementary and middle school mathematics. Topics include geometry, measurement, data analysis, statistics, and probability, and the NCTM process strands of reasoning and proof and connections.
Prerequisite: MATH 211 Foundations of Elementary Mathematics I (4 semester hours).

MATH 240 Statistical Procedures
3 hours. An introduction to probability and statistics with content and application directed toward the natural and physical sciences. Topics to be covered include methods of describing data, probability, random variables and their distributions, estimation, hypothesis testing, linearregression, and correlation.
Prerequisite: MATH 180 College Algebra or equivalent.

MATH 260 Discrete Mathematics
3 hours. An introduction to discrete mathematics. Topics covered include sets,
functions, math induction, combinatorics, recurrence, graph theory, trees, and networks.
Prerequisite: MATH 190 Precalculus Mathematics or equivalent.

MATH 275 Field Experience
1-3 hours. Supervised experience in the discipline including internships and practica required for professional programs. This introductory experience must have an on-site supervisor and/or a departmental instructor overseeing, designing, and evaluating the content of the course.
Prerequisite: instructor's permission.

MATH 285 Selected Topics
1-3 hours. A class with topics in mathematics chosen to fit special needs orinterests of students, faculty, or visiting professors.
Prerequisite: instructor's permission.

MATH 290 Introduction to Proofs
*3 hours.*This course is intended to facilitate a smooth transition from lower-level, computation-oriented math courses to upper-level, more theoretical courses. Topics include symbolic logic, methods of proof, and set theory.
Prerequisite: MATH 201 Calculus I.

MATH 300 Numerical Methods
3 hours. A study of numerical solutions of mathematical problems, including nonlinear equations, systems of linear equations, polynomial approximations, root finding, integration, and differential equations. Computer programs are written to solve these problems. (Identical to CSIS 300.)
Prerequisites: MATH 202 Calculus II and either CSIS 201 Introduction to Computer Science I or ENGR 152 Engineering Principles II.

MATH 301 Calculus III
3 hours. This course is an extension of MATH 201 and 202 Calculus I and II to functions of more than one variable. Topics include vectors, vector-valued functions, partial derivatives, and multiple integration.
Prerequisite: MATH 202 Calculus II.

MATH 310 Differential Equations with Linear Algebra
4 hours. A study of the theory, methods of solution, and applications of ordinary differential equations and the techniques of linear algebra necessary to accomplish that study.
Prerequisite: MATH 301 Calculus III.

MATH 320 Linear Algebra
3 hours. A study of matrices and their properties and application, linear transformations, and vector spaces.
Prerequisites: MATH 310 Differential Equations with Linear Algebra.

MATH 331 Probability
3 hours. A study of sample spaces, combinatorial methods, discrete and continuous distributions, moment-generating functions, and the central limit theorem. *Prerequisite: MATH 301 Calculus III.*

MATH 332 Mathematical Statistics
3 hours. A study of statistical methods - including estimators, confidence intervals, tests of statistical hypotheses, and correlation analyses - from a theoretical point of view, including applications.
Prerequisite: MATH 331 Probability.

MATH 340 Number Theory
3 hours. An introduction to the basic properties of whole numbers, including such topics as prime numbers, Euclid's algorithm, Fermat's Theorem, congruences, and Diophantine equations. The course will emphasize historical development of the relevant topics.
Prerequisites: MATH 202 Calculus II and MATH 290 Mathematical Logic.

MATH 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

MATH 410 Algebraic Structures
3 hours. A study of groups, rings, integral domains, fields,polynomial rings, and algebraic number systems. Prerequisites: MATH 202 Calculus II and MATH 290 Mathematical Logic.

MATH 420 Real Analysis
3 hours. An introduction to the fundamental concepts in real analysis including limits, continuity, sequences, series, differentiation, and integration.
Prerequisites: MATH 290 Mathematical Logic and MATH 301 Calculus III.

MATH 475 Field Experience
1-3 hours. Supervised experience in the discipline including internships and practica required for professional programs. This advanced experience must have an on-site supervisor and/or a departmental instructor overseeing, designing, and evaluating the content of the course.
Prerequisite: instructor's permission.

MATH 485 Selected Topics
1-3 hours. A class with topics in mathematics chosen to fit special needs orinterests of students, faculty, or visiting professors.
Prerequisite: instructor's permission.

MATH 490 Senior Seminar
2 hours. A seminar for junior and senior math majors to explore current topics selected by the instructor. Emphasis will be placed on significant student involvement in the classroom.
Prerequisite: junior or senior status.

MATH 495 Special Study
1-3 hours. Independent study of mathematical topics outside the regular offerings. Topics include advanced calculus, mathematical statistics, topology, real and complex analysis, and others.
Prerequisite: upper-division mathematics majors, and by permission.

Management (MGMT) Courses

MGMT 260 Principles of Management
3 hours. A study of the theory and practice of management. The course involves discussion and application of areas such as social responsibility, strategy, problem solving, communication, change, job performance, and financial/operational controls.
Prerequisite: BUSN 110 Introduction to Business.

MGMT 275 Field Experience
1-6 hours. Supervised experiences in businesses, nonprofit organizations, and public agencies.

MGMT 285 Selected Topics
1-3 hours. Occasional special courses chosen to fit the interests and needs of students and faculty.

MGMT 300 Leading and Managing People
3 hours. This course recognizes that managers are also called upon to be leaders. The differences between a leader and manager will be discussed with focus on effective leadership and management skills, philosophies and orientations.
Prerequisite: MGMT 260 Principles of Management.

MGMT 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

MGMT 440 International Management
3 hours. Managing and organizing global operations, with attention to both multinational corporations and nonprofit organizations. Consideration will be given to the strategy and structure of international business, the practices of international commerce, the challenges of living and working in other cultures, and career development in a global context.
Prerequisite: MGMT 260 Principles of Management.

MGMT 450 Operations Management
3 hours. This course examines the basic principles of managing the production and distribution of goods and services. The course provides frameworks and tools to target and implement improvements in business processes.
Prerequisites: BUSN 240 Statistics for Business and Economics and MGMT 260 Principles of Management.

MGMT 475 Field Experience
1-6 hours. Supervised experiences in businesses, nonprofit organizations, and public agencies.

MGMT 480 Organizational Behavior
3 hours. This course examines the complex and dynamic interactions of people and organizations in society. Particular focus will be on organizational theory, human perception, motivation, group dynamics, power, conflict, culture, leadership, organizational development, and managing change.
Prerequisite: MGMT 260 Principles of Management.

MGMT 485 Selected Topics
1-3 hours. Occasional special courses chosen to fit the interests and needs of students and faculty.

MGMT 495 Special Study
1-3 hours. Independent study of subjects outside regular offerings of particular interest to business and economics majors. Regular reading reports and conferences are scheduled.
Prerequisite: upper-division majors and by permission.

Marketing (MKTG) Courses

MKTG 260 Principles of Marketing
3 hours. Study of the marketing concept, consumer demand and behavior, and marketing functions of the firm. The objective is to understand the development of marketing channels, products, prices, and promotion strategies.
Prerequisite: BUSN 110 Introduction to Business.

MKTG 275 Field Experience
1-6 hours. Supervised experiences in businesses, nonprofit organizations, and public agencies.

MKTG 285 Selected Topics
1-3 hours. Occasional special courses chosen to fit the interests and needs of students and faculty.

MKTG 300 Consumer Behavior
3 hours. This course considers how having things affects consumers' lives and how possessions influence the way consumers feel about themselves and others. Models of consumer decision processes are introduced and the marketing implications of the various aspects of consumer behavior are examined. The course combines a balance of traditional and emerging ideas in consumer behavior focusing on local, pan-European and global scenarios. The impact of new technology, globalization, eclecticism, and postmodern perspectives are also considered.
Prerequisite: MKTG 260 Principles of Marketing.

MKTG 340 Global Marketing
3 hours. This course will expose the student to marketing strategies and activities that enable organizations to be competitive in the global economy and market. This course will enable the student to understand how to target global markets and how to manage and lead in the global marketing effort. Students in this course will have the option of participating in a Juniors Abroad trip that will examine marketing in three different global markets.
Prerequisite: MKTG 260 Principles of Marketing.

MKTG 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

MKTG 420 Marketing Communications
3 hours. Consideration of promotional strategies, with particular emphasis on evaluation and selection of advertising media, public relations, selling, and management of the promotion mix. Investigation of the international aspects of marketing to include importing, exporting, and the role of multinational firms.
Prerequisites: MKTG 260 Principles of Marketing and senior status.

MKTG 450 Marketing Research and Decision Making
3 hours. Research methods for marketing decisions. Topics include defining research needs, the formulation of research questions, consideration of alternative methodologies, sources of data and information, sampling, and interpretation and reporting of findings. Consideration of strategies for decision making relative to the marketing mix. Examination of forecasting, pricing, and decision-making models.
Prerequisites: BUSN 240 Statistics for Business and Economics, MKTG 260 Principles of Marketing, and senior status.

MKTG 475 Field Experience
1-6 hours. Supervised experiences in businesses, nonprofit organizations, and public agencies.

MKTG 480 Marketing Management and Strategy
3 hours. RThis course examines problems in high-level marketing decision making, considering several strategic marketing planning frameworks frequently applied during the analysis of such problems. The course will focus on a variety of management problems, which include balancing needs of competing strategic business units, factoring competitors' behaviors in the marketplace, developing long-term marketing advantages, and consideration of profit and other financial consequences.
Prerequisite: MKTG 260 Principles of Marketing.

MKTG 485 Selected Topics
1-3 hours. Occasional special courses chosen to fit the interests and needs of students and faculty.

MKTG 495 Special Study
1-3 hours. Independent study of subjects outside regular offerings of particular interest to business and economics majors. Regular reading reports and conferences are scheduled.
Prerequisite: upper-division majors and by permission.

Music, Applied and Ensembles (MUSA) Courses

MUSA 105 VC Applied Voice
1/2 or 1 hour. Study of proper voice production, with emphasis on posture, breathing, and resonance. Studies from the standard repertoires, including English songs, Italian classics, German lieder, French art songs, oratorio and operatic arias, and selected contemporary works. Additional course fee is required.

MUSA 105 PN Applied Piano
1/2 or 1 hour. Technical exercises, scales, and arpeggios in various rhythms; Ã©tudes of varying difficulty, such as those by Duvernoy, Burgmuller, Heller, Czerny, and Clementi. Repertoire from the historical periods are studied, including selected contemporary composers. A select group of concerti are also studied. Additional course fee is required.

MUSA 105 OR Applied Organ
1/2 or 1 hour. Basic study of pedal and manual techniques. Standard works from the Baroque, Classic, Romantic, and Modern periods. Additional course fee is required. MUSA 105 ST Applied Strings *1/2 or 1 hour*. Instruction on violin, viola, cello, and string bass. Basic fundamentals, posture, bow, and arm techniques, shifting, and vibrato. Included are scale and arpeggio studies and works from the standard solo and orchestral repertoire. Additional course fee is required.

MUSA 105 WW Applied Woodwinds
1/2 or 1 hour. Instruction on flute, clarinet, oboe, saxophone, and bassoon. Tone production, scales, and arpeggios in various articulations. Includes technical studies and works from the standard solo and orchestral repertoire. Additional course fee is required.

MUSA 105 BR Applied Brass
1/2 or 1 hour. Instruction on trumpet, French horn, trombone, baritone, and tuba. Technical studies include tone production, scales, and arpeggios with various articulation. Works from the standard solo and orchestral repertoire are studied. Additional course fee is required.

MUSA 105 PR Applied Percussion
1/2 or 1 hour. Instruction on snare drum, tympani, the mallet instruments, and drum set. An in-depth study of all the percussion instruments used in the wind ensemble and orchestra. Additional course fee is required.

MUSA 105 GT Applied Guitar
1/2 or 1 hour. Study of playing techniques, with emphasis on chordal knowledge and basic strums. Solos and ensemble pieces will be included for each student at his or her performance level. Additional course fee is required.

MUSA 105 JZ Applied Jazz Piano
1/2 or 1 hour. A study of improvisational methods through task-oriented performance of selected jazz repertoire. The goal of this class is to introduce concepts and practice methods used by jazz artists to gain provisation skills and to apply them to your own practice and performance over selected jazz repertoire. Additional course fee is required.

MUSA 305 VC Applied Voice
1/2 or 1 hour. Study of proper voice production, with emphasis on posture, breathing, and resonance. Studies from the standard repertoires, including English songs, Italian classics, German lieder, French art songs, oratorio and operatic arias, and selected contemporary works. Additional course fee is required.

MUSA 305 PN Applied Piano
1/2 or 1 hour. Technical exercises, scales, and arpeggios in various rhythms; Ã©tudes of varying difficulty, such as those by Duvernoy, Burgmuller, Heller, Czerny, and Clementi. Repertoire from the historical periods are studied, including selected contemporary composers. A select group of concerti are also studied. Additional course fee is required.

MUSA 305 OR Applied Organ
1/2 or 1 hour. Basic study of pedal and manual techniques. Standard works from the Baroque, Classic, Romantic, and Modern periods. Additional course fee is required. MUSA 305 ST Applied Strings
1/2 or 1 hour. Instruction on violin, viola, cello, and string bass. Basic fundamentals, posture, bow, and arm techniques, shifting, and vibrato. Included are scale and arpeggio studies and works from the standard solo and orchestral repertoire. Additional course fee is required.

MUSA 305 WW Applied Woodwinds
1/2 or 1 hour. Instruction on flute, clarinet, oboe, saxophone, and bassoon. Tone production, scales, and arpeggios in various articulations. Includes technical studies and works from the standard solo and orchestral repertoire. Additional course fee is required.

MUSA 305 BR Applied Brass
1/2 or 1 hour. Instruction on trumpet, French horn, trombone, baritone, and tuba. Technical studies include tone production, scales, and arpeggios with various articulation. Works from the standard solo and orchestral repertoire are studied. Additional course fee is required.

MUSA 305 PR Applied Percussion
1/2 or 1 hour. Instruction on snare drum, tympani, the mallet instruments, and drum set. An in-depth study of all the percussion instruments used in the wind ensemble and orchestra. Additional course fee is

required.

MUSA 305 GT Applied Guitar
1/2 or 1 hour. Study of playing techniques, with emphasis on chordal knowledge and basic strums. Solos and ensemble pieces will be included for each student at his or her performance level. Additional course fee is required.

MUSA 305 JZ Applied Jazz Piano
1/2 or 1 hour. A study of improvisational methods through task-oriented performance of selected jazz repertoire. The goal of this class is to introduce concepts and practice methods used by jazz artists to gain provisation skills and to apply them to your own practice and performance over selected jazz repertoire. Additional course fee is required.

Ensembles

MUSA 115 Master Chorus
1/2 hour. This chorus is composed of members of the community and open to all university students, faculty, staff, and alumni singers. The chorus, usually accompanied by orchestra, performs a major and/or master sacred choral work each spring. Handel's *Messiah* is usually performed every third year.

MUSA 125C Concert Choir
1/2 or 1 hour. The Concert Choir is committed to excellent choral singing in a wide variety of styles, including contemporary sacred and gospel arrangements, spirituals, and hymn settings. The choir's combined commitment to excellence and ministry finds expression in concerts given on campus and in churches throughout the Northwest. Rehearsals are held four days a week.
Prerequisite: audition.

MUSA 125O Opera Workshop
1 hour. The purpose of this course is to provide intensive training in the musical, linguistic and theatrical aspects of opera production. A workshop-based ensemble in which students prepare and present scenes from complete works of traditional and contemporary operatic literature culminates in a semi-staged public performance.

MUSA 125T Music Theatre
1/2 or 1 hour. Membership is open to all students interested in the production aspects of theatre. This organization offers one major presentation each spring. Works performed include Broadway musicals, light opera, music reviews, and an occasional opera. Orchestra accompaniment generally is used, and productions are completely staged, choreographed, costumed, and lighted.
Prerequisite: chorus members and leading roles are selected by audition.

MUSA 135A Chamber Singers
1/2 hour. This ensemble sings a flexible repertoire ranging from Renaissance madrigals through contemporary vocal jazz settings and Christian contemporary gospel. Members present concerts in the Portland region and participate in various campus concerts.
Prerequisite: audition and concurrent enrollment in Concert Choir.

MUSA 135B Chorale
1/2 hour. A chorus of men's and/or women's voices using a variety of sacred and secular literature that is appropriate to members' skill level. Students learn proper tone production and sight-reading skills and experience rehearsal techniques that will prepare them for Concert Choir and/or singing beyond graduation. This class meets twice a week.
Prerequisite: instructor's permission at the beginning of each semester.

MUSA 135H George Fox University Handbell Ringers
1/2 hour. This musical ensemble shares its music with community agencies, churches, and university audiences. Limited to 11 ringers.
Prerequisite: audition/interview.

MUSA 135J Vocal Jazz Ensemble
1/2 hour. A vocal ensemble and rhythm section specializing in the preparation, study, and performance of vocal jazz. Performances are usually for university events and some off-campus concerts. Vocalists will learn to improvise and sing with style and tone appropriate to the idiom. Rhythm section players will learn how to effectively accompany, improvise, and play as a trio.
Prerequisite: audition, instructor's permission, and concurrently enrolled in major ensembles.

MUSA 145B Symphonic Band
1/2 or 1 hour. The Symphonic Band is a touring ensemble that plays concerts throughout the Northwest. The spring tour repertoire is played in schools, churches, and for chapel. This ensemble serves to train students for careers in instrumental conducting and performing.
Prerequisite: instructor's permission.

MUSA 145J Jazz Ensemble
1/2 hour. An ensemble organized to train instrumentalists in the jazz repertoire. Performances are usually for school events and some off-campus concerts.
Prerequisite: members who are music majors must also be enrolled in the Symphonic Band.

MUSA 145K Keyboard Ensemble
1/2 hour. Open to any piano student, regardless of major. The repertoire includes all styles, with emphasis on pieces composed for multiple keyboards. Participants share in performance opportunities. For music majors who are not vocal students or do not play band or orchestral instruments, the course will satisfy the "major ensemble" requirement.
Prerequisite: audition or instructor's permission.

MUSA 155 Chehalem Symphony Orchestra
1/2 or 1 hour. The symphony orchestra performs music by the master composers of the Baroque, Classical, Romantic, and Modern eras. Concertos featuring student soloists are often part of the annual repertoire. Community and faculty musicians combine with university students to form this ensemble. Performances include fall and spring concerts, as well as accompaniment of the Master Chorus.
Prerequisite: instructor's permission.

MUSA 165 Instrumental Ensemble
1/2 hour. An ensemble organized to meet the needs of the instrumental music student who desires to explore literature for the small ensemble, such as string quartet, brass quartet, woodwind quintet, or flute ensemble.

MUSA 315 Master Chorus
1/2 hour. This chorus is composed of members of the community and open to all university students, faculty, staff, and alumni singers. The chorus, usually accompanied by orchestra, performs a major and/or master sacred choral work each spring. Handel's *Messiah* is usually performed every third year.

MUSA 325C Concert Choir
1/2 or 1 hour. The Concert Choir is committed to excellent choral singing in a wide variety of styles, including contemporary sacred and gospel arrangements, spirituals, and hymn settings. The choir's combined commitment to excellence and ministry finds expression in concerts given on campus and in churches throughout the Northwest. Rehearsals are held four days a week.
Prerequisite: audition.

MUSA 325O Opera Workshop
1 hour. The purpose of this course is to provide intensive training in the musical, linguistic and theatrical aspects of opera production. A workshop-based ensemble in which students prepare and present scenes from complete works of traditional and contemporary operatic literature culminates in a semi-staged public performance.

MUSA 325T Music Theatre
1/2 or 1 hour. Membership is open to all students interested in the production aspects of theatre. This organization offers one major presentation each spring. Works performed include Broadway musicals, light opera, music reviews, and an occasional opera. Orchestra accompaniment generally is used, and productions are completely staged, choreographed, costumed, and lighted.
Prerequisite: chorus members and leading roles are selected by audition.

MUSA 335A Chamber Singers
1/2 hour. This ensemble sings a flexible repertoire ranging from Renaissance madrigals through contemporary vocal jazz settings and Christian contemporary gospel. Members present concerts in the Portland region and participate in various campus concerts.
Prerequisite: audition and concurrent enrollment in Concert Choir.

MUSA 335B Chorale
1/2 hour. A chorus of men's and/or women's voices using a variety of sacred and secular literature that is appropriate to members' skill level. Students learn proper tone production and sight-reading skills and experience rehearsal techniques that will prepare them for Concert Choir and/or singing beyond graduation. This class meets twice a week.
Prerequisite: instructor's permission at the beginning of each semester.

MUSA 335H George Fox University Handbell Ringers
1/2 hour. This musical ensemble shares its music with community agencies, churches, and university audiences. Limited to 11 ringers.
Prerequisite: audition/interview.

MUSA 335J Vocal Jazz Ensemble
1/2 hour. A vocal ensemble and rhythm section specializing in the preparation, study, and performance of vocal jazz. Performances are usually for university events and some off-campus concerts. Vocalists will learn to improvise and sing with style and tone appropriate to the idiom. Rhythm section players will learn how to effectively accompany, improvise, and play as a trio.
Prerequisite: audition, instructor's permission, and concurrently enrolled in major ensembles.

MUSA 345B Symphonic Band
1/2 or 1 hour. The Symphonic Band is a touring ensemble that plays concerts throughout the Northwest. The spring tour repertoire is played in schools, churches, and for chapel. This ensemble serves to train students for careers in instrumental conducting and performing. *Prerequisite: instructor's permission.*

MUSA 345J Jazz Ensemble
1/2 hour. An ensemble organized to train instrumentalists in the jazz repertoire. Performances are usually for school events and some off-campus concerts. *Prerequisite: members who are music majors must also be enrolled in the Symphonic Band.*

MUSA 345K Keyboard Ensemble
1/2 hour. Open to any piano student, regardless of major. The repertoire includes all styles, with emphasis on pieces composed for multiple keyboards. Participants share in performance opportunities. For music majors who are not vocal students or do not play band or orchestral instruments, the course will satisfy the "major ensemble" requirement.
Prerequisite: audition or instructor's permission.

MUSA 355 Chehalem Symphony Orchestra
1/2 or 1 hour. The symphony orchestra performs music by the master composers of the Baroque, Classical, Romantic, and Modern eras. Concertos featuring student soloists are often part of the annual repertoire. Community and faculty musicians combine with university students to form this ensemble. Performances include fall and spring concerts, as well as accompaniment of the Master Chorus.
Prerequisite: instructor's permission.

MUSA 365 Instrumental Ensemble
1/2 hour. An ensemble organized to meet the needs of the instrumental music student who desires to explore literature for the small ensemble, such as string quartet, brass quartet, woodwind quintet, or flute ensemble.

Music , Theory and Literature (MUSI) Courses

MUSI 100 Music Fundamentals
2 hours. This course provides a fundamental understanding of music by considering the basics of musical construction, with examples drawn from the history of music. A study of musical notation, interval recognition, elements of pitch and rhythm, scale and chord construction, essential concepts in harmony, and basic musical forms. The student will be able to experience these fundamental concepts at the piano. No musical or keyboard experience is necessary. This is a general education course for non-music majors.

MUSI 110 Understanding Jazz
2 hours. A study of various aspects and types of jazz, from blues to jazz rock. Students will discover the great jazz artists and learn how to listen to a variety of jazz idioms.

MUSI 120 The World of Music
2 hours. This course acquaints the liberal arts student with a broad range of musical styles reflecting diverse cultures, including classical, jazz, and popular music. Various composers, performers, and their music are listened to and studied. This is a general education course for non-music majors.

MUSI 121 Theory I
3 hours. A course designed to help the student systematically acquire basic information and interrelated skills that will be of value in future musical endeavors as performer, teacher, or composer. Includes work in part writing, keyboard harmony, analysis, and creative writing.
Corequisite: MUSI 131 Sight Singing and Ear Training I.

MUSI 122 Theory II
3 hours. A course designed to help the student systematically acquire basic information and interrelated skills that will be of value in future musical endeavors as performer, teacher, or composer. Includes work in part writing, keyboard harmony, analysis, and creative writing.
Corequisite: MUSI 132 Sight Singing and Ear Training II. Prerequisite: MUSI 121 Theory I.

MUSI 125 Voice Class
1 hour. May be repeated for credit. This course is intended to improve and strengthen the voice as a solo instrument. The ability to read music is helpful although not necessary. Attendance and class participation coupled with a minimum of four 15- to 30-minute individual practice sessions each week will enable consistent growth and increased strength. Students will sing individually to the group using exercises and songs worked on in class. The group format and class size provide an excellent built-in performance opportunity.

MUSI 130 Music in World Cultures
2 hours. An introductory thematic study of the roles of music in a variety of world cultures, with emphasis on listening to, viewing, and understanding a broad selection of musical styles mostly outside the Western classical tradition.

MUSI 131 Sight Singing and Ear Training I
1 hour. A lab experience designed to develop proficiency in singing prepared melodies, melodies at sight, rhythmic patterns, and in taking basic melodic dictation.
Corequisite: MUSI 121 Theory I.

MUSI 132 Sight Singing and Ear Training II
1 hour. A lab experience designed to develop proficiency in singing prepared melodies, melodies at sight, rhythmic patterns, and in taking basic melodic dictation.
Corequisite: MUSI 122 Theory II.

MUSI 135 Class Piano
1 hour. May be repeated for credit. Elementary- to intermediate-level class instruction in piano. This class is

open to any student regardless of previous experience and does not require an instruction fee in addition to the normal tuition cost. Students working toward achieving the required piano proficiency may choose to study private applied piano with the instructor's consent rather than enroll for Class Piano. Required of all music majors who have not yet met the piano proficiency skill level.

MUSI 150 Keyboard Accompaniment
1 hour. This course provides "on-the-job training" and special insights and skills in the art of accompanying. A wide range of repertoire is studied, from accompanying classical solo artists to accompanying choirs (both classical and gospel), small ensembles, and congregational singing.

MUSI 180 Introduction to Music Technology
2 hours. Introductory work with technological resources basic to work in the music field. Includes hands-on experience with MIDI and sequencing, music notation programs and desktop publishing, digital sound formats, and basic Web authoring.

MUSI 190 Foundations of Music Education
1 hour. Required for Music Education Majors. This course will lay the foundation for all music education courses that will be taken after. In this course students will explore what it means to be a music educator and as the course continues they will delve into the teaching process. Course content will include preparing and executing short teaching episodes, guided observation of master teachers in the field and keeping a journal of all activities done in the class. All students will join George Fox's Collegiate Music Educators National Conference chapter and will participate in the Oregon Music Educators Conference.

MUSI 200 Basic Conducting
1 1/2 hours. Introduction to the basic fundamentals of conducting for the music major, the music education major, and the future church musician. Emphasis is placed upon the mastery of simple conducting patterns, cues, and expressive gestures, and on common problems in leading group singing and in directing musical ensembles.

MUSI 210 Keyboard Literature
2 hours. Through a variety of keyboard music (harpsichord, piano, organ, and synthesizer), students will acquire an understanding of diverse keyboard approaches from the Baroque through contemporary styles. Recommended for those especially interested in keyboard music.

MUSI 221 Theory III
4 hours. A continuation of Theory II. Includes chromatic harmonies and remote modulations. Introduction to 20th-century harmonic usage. Creative work is required.
Prerequisite: MUSI 122 Theory II.

MUSI 222 Theory IV
4 hours. A continuation of Theory III. Includes chromatic harmonies and remote modulations. Introduction to 20th-century harmonic usage. Creative work is required.
Prerequisite: MUSI 221 Theory III.

MUSI 225 Composition I
1 hour. Individual lessons in composition. Initial inquiry into organization of sound resources, developing techniques for working with musical materials, and composition in small forms. May be repeated for credit.

Prerequisites: MUSI 122 Theory II and MUSI 132 Sight Singing and Ear Training II, or instructor's permission.

MUSI 240 Body Mapping and Movement for Musicians
1 hour. Students will learn how to apply Alexander Technique and Andover Body Mapping principles to musical performance. The course strives to guide students to freedom and ease in body use to avoid injury and pain in music making.

MUSI 250 Beginning Class Guitar
1 hour. This course offers vital foundational instruction in the techniques of playing guitar. Proper hand position, fingering, and strumming styles, and a broad range of chords are presented. Learn to read music, tab, and understand basic concepts of theory. Have fun playing cool riffs, chord progressions, and songs. Ideal for learning techniques applicable to leading worship.

MUSI 270 Music Techniques Instrumental I
1 hour. Fundamental instruction in the technique required to play music instruments at an intermediate level. Attention will be given to the technical aspects of music performance with an emphasis on the various demands related to teaching instrumentalists.
Prerequisites: MUSI 121 Theory I and MUSI 122 Theory II.

MUSI 271 Music Techniques Instrumental II
1 hour. Fundamental instruction in the technique required to play music instruments at an intermediate level. Attention will be given to the technical aspects of music performance with an emphasis on the various demands related to teaching instrumentalists.
Prerequisites: MUSI 121 Theory I and MUSI 122 Theory II. (MUSI 270 is not a prerequisite for MUSI 271.)

MUSI 272 Music Techniques Vocal
1 hour. This course is designed to present a practical program to explain the physical, technical, and artistic aspects of singing combining historical pedagogy with current research in acoustics and the physiology of the human voice. We will explore how to coordinate the activities of resonation, articulation, vibration, and energization of the system to produce a freely functioning voice. Students will increase their aural awareness and understand the distinction between speaking and singing. They will learn to problem-solve and diagnose vocal stress in the role of teacher, observer, and student.
Prerequisite: MUSA 105 VC Applied Voice or MUSA 305 VC Applied Voice or MUSI 125 Voice Class. (MUSI 270 and MUSI 271 are not prerequisites for MUSI 272.)

MUSI 273 Instrumental Music Techniques for Choral Conductors
1 hour. A technical overview of woodwind, brass, string, and percussion instruments designed for choral music education students. Emphasis on helping the student troubleshoot and teach the fundamentals of instrumental music.

MUSI 275 Field Experience
1-5 hours. Supervised experience in music apprenticeship as conductor, performer, or composer.
Prerequisite: permission of music faculty.

MUSI 280 Vocal Diction
1 hour. The purpose of this course is to prepare students to sing accurately, idiomatically and expressively in English, Latin, Italian, French and German. Elements of lyric diction will be presented in ways that stress

their connection to the meaning, color, and expressive power of the text. We will use the International Phonetic Alphabet as a means of presenting and reinforcing the "sonic vocabulary" as well as rudiments of grammar and vocabulary that will enable the student to present the text clearly and with poetic intent. Music studied will be performed in class.

MUSI 285 Selected Topics
1-3 hours. Selected topics are offered as music electives when special needs arise or when sufficient enrollment permits. Course content includes specific interests of students and faculty.

MUSI 310 Counterpoint
2 hours. Principles of 16th- and 18th-century polyphony. Detailed study of the works of J.S. Bach and his contemporaries. Original composition required. *Prerequisites: MUSI 221 Theory III and MUSI 222 Theory IV.*

MUSI 311 Music History I
3 hours. A study of the development of music from antiquity through the 20th century. Comparisons are made to the development of the other arts. Concentrated study of music literature emphasizing the change in musical styles during the different historical periods.
Prerequisites: MUSI 121 Theory I and MUSI 122 Theory II.

MUSI 312 Music History II
3 hours. A study of the development of music from antiquity through the 20th century. Comparisons are made to the development of the other arts. Concentrated study of music literature emphasizing the change in musical styles during the different historical periods.
Prerequisite: MUSI 311 Music History I.

MUSI 320 Form and Analysis
2 hours. Detailed study of the structural components of music, including the motive, phrase, and period. Application to principal contrapuntal and homophonic forms of the Classic, Romantic, and Modern periods.
Prerequisites: MUSI 221 Theory III and MUSI 222 Theory IV.

MUSI 340 Church Music (History and Administration)
3 hours. A study of music within the church, viewed historically from the early centuries through the expectations of the contemporary church.

MUSI 350 Music Theatre Performance
3 hours. An introduction to the acting, dance, and vocal techniques required for music theatre performance and a formal study of the history of music theatre. Through in-depth scene study, vocal training, dance training, and in class performances, the student will be introduced to the various artistic challenges inherent in music theatre since its inception. This course requires additional outside-of-class time for rehearsals and performance of selected material. Additional course fee is required. (Identical to THEA 350).
Prerequisites: THEA 100 Acting I - Fundamentals and MUSA 105 VC Applied Voice or MUSA 305 VC Applied Voice or MUSA 125T Music Theatre or MUSA 325T Music Theatre.

MUSI 380 Keyboard Improvisation and Service Playing
2 hours. A practical course for pianists and organists seeking to discover creative approaches in programming

and leading the congregation in inspirational worship and celebration.

MUSI 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

MUSI 400 Music and Christian Faith
2 hours. A study of the relationships between musical communication and Christian faith and practice. Also includes some preparatory modules for senior recital.
Prerequisites: MUSI 222 Theory IV and MUSI 312 Music History II or equivalents, and junior or senior standing.

MUSI 410 Elementary Music Methods
3 hours. Students will be introduced to the foundations of elementary music education including the National Standards and current teaching methodologies. Student observation and participation will provide the basis of an understanding of teaching music at the elementary level.
Prerequisites: MUSI 121 Theory I and MUSI 122 Theory II.

MUSI 411 Middle Level and High School Music Methods
3 hours. Students will investigate the many special teaching demands of music education at the secondary level. Vocal and instrumental music ensembles will be studied to determine the special requirements of these performance groups. Music courses at the secondary level will be examined to determine their individual teaching methodologies.
Prerequisites: MUSI 121 Theory I and MUSI 122 Theory II.

MUSI 425 Composition II
1 1/2 hours. Individual lessons in composition. Continuing work in composition including (but not limited to) composition in larger forms, digital media, multimovement forms, exploration of style resources.
Prerequisites: MUSI 225 Composition I and admission to upper-division study, or instructor's permission.

MUSI 430 Instrumentation and Orchestration
2 hours. A study of the instruments of the orchestra and band, including their ranges, characteristics, and capabilities. Practical application of the principles of arranging and scoring for orchestral/band instrumental combinations.
Prerequisites: MUSI 221 Theory III and MUSI 222 Theory IV.

MUSI 460 Advanced Conducting
2 hours. A course designed to acquaint the student with advanced choral and instrumental literature. Basic conducting patterns are reviewed and adapted to all aspects of conducting: syncopation, cuing, and expressive gestures.
Prerequisite: MUSI 200 Basic Conducting.

MUSI 475 Field Experience
1-5 hours. Supervised experience in music apprenticeship as conductor, performer, or composer.

Prerequisite: permission of music faculty.

MUSI 485 Selected Topics
1-3 hours. Selected topics are offered as music electives when special needs arise or when sufficient enrollment permits. Course content includes specific interests of students and faculty.

MUSI 490 Degree Recital/Project
1 hour. Students prepare a project in cooperation with a faculty advisor. The project is presented before an audience and filed permanently in the music department.

MUSI 495 Special Study
1-3 hours. Individual research under the guidance of the faculty.
Prerequisite: permission of music faculty.

Nursing (NURS) Courses

NURS 200 Nursing Fundamentals
2 hours. Exposes students to theories concerning clients in need of primary, acute, and restorative nursing care through the introduction of basic nursing concepts, skills, and techniques of nursing practice, and provides students with a foundation for advanced nursing practice in a variety of health care settings.
Prerequisite: admission to nursing major.

NURS 203 Nursing Fundamentals Practicum
2 hours. Application of health assessment and basic nursing skills in the care of individuals experiencing alterations in biopsychosocial, cultural, and spiritual health status. Additional course fee is required.
Corequisites: NURS 200 Nursing Fundamentals, NURS 210 Health Assessment.

NURS 210 Health Assessment
2 hours. The systematic and continuous collection of biopsychosocial, cultural, and spiritual data through the assessment of clients' strengths and coping resources, actual and potential health problems, and the identification of factors that place clients at risk for alterations in health.
Prerequisite: admission to nursing major.

NURS 275 Field Experience
1-3 hours. Supervised experience in the discipline including internships and practica required for professional programs. This introductory experience must have an on-site supervisor and/or a departmental instructor overseeing, designing, and evaluating the content of the course.
Prerequisite: instructor's permission.

NURS 285 Selected Topics
*1-3 hours.*An introductory seminar offered on an occasional basis addressing a current topic in the field that is of special interest to students and current faculty.

NURS 300 Medical-Surgical Nursing I
2 hours. The acquisition, integration, and prioritization of theoretical knowledge vital to the care of individuals and groups experiencing alterations in pathophysiological processes of human illnesses and

injuries.
Corequisites: NURS 303 Medical-Surgical Nursing I Practicum, NURS 330 Nursing Research, NURS 350 Pharmacology. Prerequisites: junior status, NURS 200 Nursing Fundamentals, NURS 203 Nursing Fundamentals Practicum, NURS 210 Health Assessment.

NURS 303 Medical-Surgical Nursing I Practicum
3 hours. Implementation of theoretical knowledge vital to the care of individuals and groups experiencing alterations in pathophysiological processes of human illnesses and injuries. Additional course fee is required.
Corequisite: NURS 300 Medical-Surgical Nursing I.

NURS 320 Medical-Surgical Nursing II
2 hours. The acquisition, integration, and prioritization of evidence-based nursing knowledge critical to the care of individuals and families with complex pathophysiological alterations in their biopsychosocial health status.
Corequisite: NURS 330 Nursing Research. Prerequisites: NURS 200 Nursing Fundamentals, NURS 203 Nursing Fundamentals Practicum, NURS 210 Health Assessment, NURS 300 Medical-Surgical Nursing I, NURS 303 Medical-Surgical Nursing I Practicum, NURS 350 Pharmacology, and NURS 360 Health Promotion.

NURS 323 Medical-Surgical Nursing II Practicum
3 hours. Acquisition, synthesis, and implementation of theoretical knowledge necessary for the provision of holistic care to individuals and groups experiencing complex
pathophysiological alterations in their health status. Additional course fee is required.
Corequisite: NURS 320 Medical-Surgical Nursing II.

NURS 330 Nursing Research
2 hours. An exploration of systematic approaches (quantitative and qualitative) to collecting and analyzing information to enhance students' understanding of factors and phenomena impacting professional nursing practice.
Prerequisites: MATH 240 Statistical Procedures, PSYC 340 Statistical Procedures, SOCI 340 Statistical Procedures, or approval of instructor.

NURS 350 Pharmacology
3 hours. A study of various drug classifications, their impact on living tissue, and their actions and distributions in the body - pharmacodynamics and pharmacokinetics.
Prerequisites: NURS 200 Nursing Fundamentals, NURS 203 Nursing Fundamentals Practicum, NURS 210 Health Assessment, or permission of instructor.

NURS 360 Health Promotion
2 hours. "Health is the state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity" (WHO, 1947). The practice of nursing is guided by one's understanding of factors that impact a client's beliefs about health. This course will explore the impact of epidemiological concepts and health promotion theories in the promotion of health in individuals and communities.
Prerequisite: junior status or permission of instructor.

NURS 370 Nursing of Children & Families
2 hours. Acquisition and integration of knowledge vital to the holistic nursing care of children and families

experiencing acute and chronic threats to health.
Prerequisite: junior status or permission of instructor.

NURS 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

NURS 400 Public Health Nursing
2 hours. The synthesis of nursing theory and public health theory applied to promoting, preserving, and maintaining the health of populations through the delivery of personal health care services to individuals, families, and groups.
Prerequisite: all nursing courses at junior level.

NURS 403 Public Health Nursing Practicum
3 hours. Application of nursing theory and public health theory in the care of individuals, families, and groups in the community.
Corequisite: NURS 400 Public Health Nursing.

NURS 410 Nursing Administration/Leadership
2 hours. The study of the contemporary role(s) of an effective nurse leader/administrator/manager as they assess, plan, organize, implement, and evaluate care for groups in acute, primary, and/or community health settings.
Prerequisite: all nursing courses at junior level.

NURS 413 Nursing Administration/Leadership Practicum
3 hours. Facilitate student's transition into the professional role(s) through implementation of leadership theories in acute, primary, and/or community health settings. Additional course fee is required.
Corequisite: NURS 410 Nursing Administration/Leadership.

NURS 420 Maternity Nursing
2 hours. Study of the care of childbearing women and their families throughout all the stages of pregnancy and childbirth.
Prerequisite: all nursing courses at junior level.

NURS 423 Maternity Nursing Practicum
3 hours. are of women and their families during the events surrounding childbearing. Additional course fee is required.
Corequisite: NURS 420 Maternity Nursing.

NURS 440 Mental Health Nursing
2 hours. Exploration of psychiatric nursing principles of mental health promotion and illness prevention; of evidenced-based treatment modalities; of hospital and community treatment options; and of nursing principles applied to specific psychiatric clinical disorders.
Corequisite: NURS 330 Nursing Research. Prerequisites: NURS 200 Nursing Fundamentals, NURS 203 Nursing

Fundamentals Practicum, NURS 210 Health Assessment, NURS 300 Medical-Surgical Nursing I, NURS 303 Medical-Surgical Nursing I Practicum, NURS 350 Pharmacology, and NURS 360 Health Promotion.

NURS 443 Mental Health Nursing Practicum
3 hours. Implementation of theoretical psychiatric nursing principles in the practice setting.
Corequisites: NURS 320 Medical-Surgical Nursing II, NURS 323 Medical-Surgical Nursing Practicum II, NURS 340 Mental Health Nursing.

NURS 475 Field Experience
1-3 hours. Supervised experience in the discipline including internships and practica required for professional programs. This advanced experience must have an on-site supervisor and/or a departmental instructor overseeing, designing, and evaluating the content of the course.
Prerequisite: instructor's permission.

NURS 485 Selected Topics
1-3 hours. An advanced seminar offered on an occasional basis addressing a current topic in the field that is of special interest to students and current faculty.

NURS 492 Senior Synthesis
1 hours. A comprehensive review of nursing content and practice in preparation for the nursing Senior Academic Milestone and NCLEX-RN, the National Council Examination for Registered Nurses. This course to be taken a students last semester of the program.

Philosophy (PHIL) Courses

PHIL 150 Introduction to Philosophy
3 hours. This course is designed to introduce students to what it means to think and live philosophically. There are a number of different variations of this course. Each variation picks a different topic through which to explore how philosophy be a tool for interpreting, understanding and interacting with the world. Not only that, we will also examine how philosophy can shape the way in which we live out our lives. Each course includes some reading of Plato and at least one other major philosophy in the tradition. Examples of different variations of this course include: "God, Freedom and Evil", "Simplicity", "Socrates and Plato", "Land and Humans", and "Virtue and Faith."

PHIL 180 Ethics
3 hours. Ethics consists of an analysis of the ethical theories and systems by which persons make judgments and choices, with special attention to contemporary moral issues and the modern revival of virtue theory.

PHIL 250 Thinking Well: Logic and Life
3 hours. Logic involves a study of Aristotelian forms of deductive reasoning, including the syllogism, inductive reasoning, fallacies, and some aspect of symbolic logic, including Venn diagrams and truth tables. Its goal is to facilitate sound thinking that is both creative and critical.

PHIL 270 Philosophy of the Arts
3 hours. An introduction to philosophical issues in the arts, such as art and morality, the nature of creativity, aesthetics, and the relation of the arts to worldviews.

PHIL 275 Field Experience
1-3 hours. Supervised experience in the discipline including internships and practica required for professional programs. This introductory experience must have an on-site supervisor and/or a departmental instructor overseeing, designing, and evaluating the content of the course.
Prerequisite: instructor's permission.

PHIL 277 Spirituality and the Intellectual Life
3 hours. This course seeks to overcome the opposition between spirituality and the intellectual life. We will examine ways in which spirituality can deepen and undergird the intellectual life, as well as finding ways that a reflective, deep thinking life can nurture and strengthen one's spirituality. We will not only examine these relationships abstractly, but will attempt to put into practice patterns of integrating mind and spirit.

PHIL 280 Introduction to Political Philosophy
3 hours. A study of great political thinkers and issues from Socrates to the present. Students are encouraged to understand and evaluate these thinkers in their historical contexts, and to consider them as philosophers whose insights are relevant for contemporary debates. (Identical to HIST 280 and PSCI 280.)

PHIL 285 Selected Topics
1-3 hours. A seminar on a topic chosen by the professor. Recent topics have been apologetics; postmodern philosophy and Christian thought; philosophy of science; philosophy of E. Levinas; and philosophy of sex, singleness, and marriage. *Prerequisite: upper-division majors and others by permission.*

PHIL 300 American Political Theory
3 hours. A survey of the major developments in U.S. political theory from the Puritans to the present. The relationship between Christianity and American political theory is given special attention. (Identical to HIST 300 and PSCI 300.)

PHIL 310 Christian Apologetics
3 hours. A study of classic and contemporary defenses of the Christian faith, including theistic/atheistic arguments, postmodern assessments of religious belief, issues surrounding the doctrine of the resurrection, the miraculous and religious diversity. (Identical to RELI 310.)

PHIL 311 History 1: Ancient and Medieval Philosophy
3 hours. What is the good life, how do we know things, if we do, and what is reality? Many proposed answers to these questions can be traced to those in the past whose thought is classified as philosophical. This course continues to study the trajectory of thought in the Western world begun in History 1. The course begins with Ockham and continues through to current times. Readings include both original sources and contemporary interpretations.

PHIL 312 History 2: Modern and Postmodern Philosophy
3 hours. What is the good life, how do we know things, if we do, and what is reality? Many proposed answers to these questions can be traced to those in the past whose thought is classified as philosophical. This course continues to study the trajectory of thought in the Western world begun in History 1. The course begins with Ockham and continues through to current times. Readings include both original sources and contemporary interpretations.

PHIL 315 Sex and Gender
3 hours. What we are sexually as humans is complex and our theories and beliefs about our sexuality profoundly influence us. No less does our gender and our beliefs about it influence us. The subject of this course will vary term to term but can include the nature of sex, the nature of gender, feminism, marriage, singleness, love, pornography among others. May be repeated for credit under different topics.

PHIL 320 Agrarian Philosophy: Life and Land
3 hours. This course seeks to develop an understanding of how humans are affected by their relation to the land and how land is affected by humans. We will examine how this relationship between humans and land affects who we are, how we know, and how we live ethical lives. We will examine this at a theoretical level, but also at the practical level of where we live, how we live, what we eat, and how we engage our local and global economies.

PHIL 330 Religion and Reason
3 hours. What is the nature of religion? Is there a God? What evidence is there for the existence of God? What role does reason play in faith? Does the existence of evil rule out God's existence? What is religious experience? Does it provide grounds for rational religious belief? This course is a general introduction to the philosophy of religion and some of the problems falling under that title.

PHIL 332 Virtue Philosophy
3 hours. This course explores questions crucial to the virtue tradition: What is a good life? What are virtues? How do virtues contribute to a good life? What is the role of natural law and divine commands in understanding virtues? How does the study of moral philosophy contribute to living well? This course in ethical theory examines the history of the virtue tradition as represented by philosophers such as Plato, Aristotle, Aquinas, Hume and Kant as well as the tradition's revival by contemporary philosophers, including Alasdair MacIntyre and Robert Adams. *Prerequisite: PHIL 180 Ethics.*

PHIL 335 Knowledge and What There Is
3 hours. What kinds of things exist? How do we know they do, if we do? The subject of this course will vary term to term, but can include freewill, theory of knowledge, skepticism, the nature of existence, human nature, the nature of God, personal identity, realism and antirealism, the nature of science and others. May be repeated for credit under different topics.

PHIL 373 Social Theory
3 hours. A critical study of some major social philosophers from Comte to the present. (Identical to SOCI 373.)
Prerequisites: SOCI 150 Principles of Sociology or PHIL 150 Introduction to Philosophy, or instructor's permission.

PHIL 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

PHIL 415 Contemporary Philosophers
3 hours. This course gives students the opportunity to explore the work of a particular contemporary philosopher in depth. There are a number of different variations of this course. Each variation picks a different philosopher for careful reading and criticism. Students are encouraged to incorporate insights gained from such study into their own beliefs and manner of life. May be repeated for credit under different topics.
Prerequisite: junior or senior standing as a philosophy major or instructor's permission.

PHIL 435 Contemporary Problems
3 hours. This course examines a chosen philosophical problem by comparing the contributions of several contemporary influential thinkers who have addressed it. There are a number of different variations of this course. Each variation focuses on a different persistent philosophical topic (sometimes called "perennial questions" in philosophy). Students are expected to incorporate critical reflection on the chosen topic into their own beliefs and manner of life. Students may repeat the course, for credit, with a different subtitle.
Prerequisite: junior or senior standing as a philosophy major or instructor's permission.

PHIL 445 History Seminar
3 hours. Examines a particular period or person in the history of philosophy. Choice of period or person determined by student interest and professorial competence.

PHIL 475 Field Experience
1-3 hours. Supervised experience in the discipline including internships and practica required for professional programs. This advanced experience must have an on-site supervisor and/or a departmental instructor overseeing, designing, and evaluating the content of the course.
Prerequisite: instructor's permission.

PHIL 485 Selected Topics
1-3 hours. A seminar on a topic chosen by the professor. Recent topics have been apologetics; postmodern philosophy and Christian thought; philosophy of science; philosophy of E. Levinas; and philosophy of sex, singleness, and marriage. *Prerequisite: upper-division majors and others by permission.*

PHIL 490 Philosophy Capstone
3 hours. Taken by each senior philosophy major, this course is designed to allow each student to pursue his or her chosen track (pre-law, social justice, graduate school) in greater depth. This is comprised of some common reading among the entire cohort, a practicum related to one's chosen track, and student-led discussion based on research done related to each person's chosen track. For example, a pre-med philosophy student might do a practicum at a hospital, while researching medical ethics, and leading a seminar session on that research. It is meant as a culminating course shared with all the other senior philosophy students.

PHIL 495 Special Study
1-3 hours. Individual research.
Prerequisite: open to qualified students upon application.

Physics (PHYS) Courses

PHYS 150 Physics of Everyday Life
3 hours. A relevant and practical introduction to everyday physical phenomena through a conceptual survey of various physics topics, including motion, energy, sound, light, electricity, and relativity. No mathematical background is required. This course meets the general education requirement and is designed for nonscience majors. Two lectures and one laboratory period per week. Additional course fee is required.

PHYS 190 Astronomy
3 hours. An introduction to astronomy covering the solar system, stars, galaxies, and cosmology. The historical context of astronomy will be addressed along with its complex and dynamic relation to faith. The laboratory experience will allow a firsthand experience with some of the pivotal observations and experiments of astronomy. This course fulfills the general education requirement. Two lectures and one two-hour laboratory per week. Additional course fee is required.

PHYS 201 General Physics I
4 hours. Mechanics, thermodynamics, electricity and magnetism, wave motion and optics, and modern physics, using algebraic methods for analysis. Three lectures and one lab per week. Additional course fee is required.
Prerequisite: MATH 190 Precalculus Mathematics.

PHYS 202 General Physics II
4 hours. Mechanics, thermodynamics, electricity and magnetism, wave motion and optics, and modern physics, using algebraic methods for analysis. Three lectures and one lab per week. Additional course fee is required.
Prerequisite: PHYS 201 General Physics I.

PHYS 211 General Physics with Calculus I
4 hours. Mechanics, thermodynamics, electricity and magnetism, wave motion and optics, and modern physics, using calculus methods for analysis. Three lectures and one lab per week. Additional course fee is required.
Prerequisite: MATH 201 Calculus I.

PHYS 212 General Physics with Calculus II
4 hours. Mechanics, thermodynamics, electricity and magnetism, wave motion and optics, and modern physics, using calculus methods for analysis. Three lectures and one lab per week. Additional course fee is required.
Prerequisite: PHYS 211 General Physics with Calculus I.

Political Science (PSCI) Courses

PSCI 150 Introduction to Political Science
3 hours. An introduction to the study of the use of political processes to decide public policy and the distribution of resources within and among communities and nations. Systems of government, and individual behaviors and informal political processes within those systems, will be examined using examples from various parts of the world throughout history. In the process, students will begin to explore the major questions of political philosophy, civic leadership, and Christian public ethics.

PSCI 190 American Government
3 hours. The theory and practice of the federal government and the study of key issues in government in general.

PSCI 230 Introduction to International Relations
3 hours. Introduction to the principles and study of interstate relations in the contemporary world. Special attention is given to the issues of sovereignty, the United Nations, and international law. (Identical to INTL 230.)

PSCI 240 State and Local Government
3 hours. The origins, evolution, structure, and present functions of state, county, and city government, with particular reference to Oregon. Special attention is given to the rising problems of urban government and regional planning.

PSCI 243 Introduction to Public Administration
3 hours. Introduces the theory and practice of managing public agencies with a focus on the unelected levels of the executive branch in local, state, and federal government. The course examines both external dynamics (including relations with legislatures, elected officials, clients, interest groups, and voters) and internal issues (including budgeting, program management, and organizational theory as applied to not-for-profit agencies).

PSCI 253 Introduction to Comparative Government
3 hours. This course introduces students to the field of comparative government and politics through an examination of selected political systems.

PSCI 260 Introduction to Law
3 hours. A general study of the role of law and the legal profession in American life, and a survey of the major topics addressed by the law. Attention also is given to the values promoted by our legal system and the Christian's interaction with it.

PSCI 275 Field Experience
1-3 hours. Supervised experiences in varied political agencies. A maximum of three hours of credit can be gained through one internship. No more than six hours of internship credit will be counted toward major requirements, and of these no more than three hours may be upper-level credit.

PSCI 280 Introduction to Political Philosophy
3 hours. A study of great political thinkers and issues from Socrates to the present. Students are encouraged to understand and evaluate these thinkers in their historical contexts, and to consider them as philosophers whose insights are relevant for contemporary debates. (Identical to HIST 280 and PHIL 280.)

PSCI 285 Selected Topics
1-3 hours. A seminar dealing with various topics as announced that represent current faculty interests and competencies.

PSCI 300 American Political Theory
3 hours. A survey of the major developments in U.S. political theory from the Puritans to the present. The

relationship between Christianity and American political theory is given special attention. (Identical to HIST 300 and PHIL 300.)

PSCI 303 International Conflict and Peace
3 hours. This course considers the causes of international conflict and possible approaches to their resolution. An emphasis is placed on strategies to prevent and resolve conflicts without the use of violence. (Identical to INTL 303 and SOCI 303.)

PSCI 310 Conflict Resolution
3 hours. A study of communication principles found useful in managing conflict productively. Focus is given to conflict occurring in institutional and organizational settings between individuals and groups. Attention also is given to conflict in social, national, and international settings. (Identical to COMM 310.)

PSCI 320 Constitutional Law: Issues of National Power
3 hours. Considers the powers of the federal judiciary, Congress, and president; the distribution of authority between the national and state governments; and how the Constitution has reflected our evolving theories of politics.

PSCI 330 Politics of the Developing World
3 hours. This course covers the main issues faced by developing countries in Africa, the Middle East, Latin America, and Asia. Special attention is given to economic development and the impact of globalization on these nations.

PSCI 333 European Politics
3 hours. This course covers the main issues of European politics and the historical backgrounds that frame those issues. Topics covered include European integration, immigration, racial, ethnic, and religious minorities, trade, security, foreign policy, environmental concerns, and the role of women. Special attention will be given to how Christians and their values engage in political involvement.

PSCI 353 Constitutional Law: Civil Rights and Liberties
3 hours. This course focuses on the Supreme Court's interpretation of the Bill of Rights and the Fourteenth Amendment. Special emphasis is placed upon the religion clauses of the First Amendment.

PSCI 363 War and Conscience in the United States
3 hours. An exploration of American thought on the subject of war, both today and in past crises such as the American Revolution, Civil War, wars with the American Indians, and the world wars; a study of the official position major church bodies have taken in regard to war; and the experiences of individuals who refused to fight. (Identical to HIST 363.)

PSCI 380 American Foreign Policy
3 hours. An inquiry into relationships between the social structure and ideological tradition of the United States and its conduct in world affairs. Attention is given to the substance of American foreign and military policy; to the roles of the White House, State Department, CIA, the military, Congress, private elites, and mass opinion; and to foreign policy impacts on domestic life.

PSCI 383 International Organizations and International Law
3 hours. This course provides students with a solid theoretical and practical understanding of the nature of

international organizations (i.e. their origins, structure, and function in world politics) and relation to emerging international law. The practical component of this course examines the historical development, activities, and performance of specific institutions and agencies on a diverse set of policy issues including: security, economics (trade and development), humanitarian assistance, and human rights.

PSCI 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

PSCI 410 Community Mediation
3 hours. A study of mediation skills and their uses in community disputes, including neighborhood conflicts, public policy issues, and as court-annexed alternatives to litigation. Students also will examine the impact of mediation on democratic political theory, on the theory underlying our adversarial legal system, and on Christian views of conflict in the public arena.

PSCI 430 Women and Politics in American History
3 hours. Considers the role of women in politics from colonial days to the present. Special consideration is given to the role of Quaker women and grassroots organizers.

PSCI 440 Christianity and Politics in America
3 hours. This course considers how Christianity and politics have been related throughout American history,how they are related today, and how they should be related. Quaker contributions in each area are carefully considered.

PSCI 450 Campaigns and Elections
3 hours. Considers issues surrounding American campaigns and elections. Special emphasis is placed on the role of political parties and the voting behavior of individuals and groups.

PSCI 460 Peace Theory
3 hours. An advanced study of the main theories of peace and nonviolence: what peace is; how it emerges in human, civil, and international relationships; what sustains it; what causes it to break down; and the potential and practice of active nonviolence. Emphasis is given to theories articulated by both scholars and prominent activists (such as Woolman, Gandhi, King, and Dix), and to ideas embodied in such practices as South Africa's Truth and Reconciliation Commissions and Christian Peacemaker Teams.

PSCI 475 Field Experience
1-3 hours. Supervised experiences in varied political agencies. A maximum of three hours of credit can be gained through one internship. No more than six hours of internship credit will be counted toward major requirements, and of these no more than three hours may be upper-level credit.

PSCI 480 Global Environmental Politics and Policy
3 hours. This course explores the wide range of global environmental problems such as climate change, ozone depletion, trade in hazardous waste, protection of biological diversity and overfishing. In recent decades, thousands of international agreements and hundreds of international institutions have been

developed with the goal of protecting the global environmental commons. This course will examine whether these efforts have made much difference, exploring the interactions between specific agencies such as the World Trade Organization and the quality of the environment, as well as giving special attention to the growing power of business and environmental non-governmental organizations in world politics.

PSCI 485 Selected Topics
1-3 hours. A seminar dealing with various topics as announced that represent current faculty interests and competencies.

PSCI 490 Senior Seminar
3 hours. This capstone course requires majors to think in a sophisticated manner about the relationship between their Christian faith and politics. In addition, students will complete a major project that requires them to draw together skills and information they have learned in lower-level courses.

Psychology (PSYC) Courses

PSYC 150 General Psychology
3 hours. An introduction to the scientific study of human behavior. Major topics include the biological basis of behavior, sensation, perception, thinking, learning, memory, development, emotion, motivation, personality, social interaction, and abnormal behavior. Prerequisite to most other psychology courses.

PSYC 275 Exploratory Field Experience
2-3 hours. An opportunity to observe professionals in the helping environment. PSYC 285 Selected Topics
1-3 hours. A course dealing with various topics, as announced, that represent current
faculty interests and competencies and student interest. Previous offerings have included psychology of relationships, drug and alcohol abuse, child and adolescent psychopathology, and psychology of gender.
Prerequisite: PSYC 150 General Psychology.

PSYC 310 Lifespan Human Development
3 hours. A study of physical, intellectual, personality, social, and moral development from infancy to old age. Will not count as part of the psychology major.
Prerequisite: PSYC 150 General Psychology.

PSYC 311 Child Development
3 hours. A study of physical, intellectual, personality, social, and moral development from the prenatal period through late childhood. (Identical to FCSC 311.) *Prerequisite: PSYC 150 General Psychology*.

PSYC 312 Adult Development
3 hours. A study of physical, intellectual, personality, social, and moral development from young adulthood to old age.
Prerequisite: PSYC 150 General Psychology.

PSYC 314 Adolescent Development
3 hours. A study of the unique physical, intellectual, personality, social, and moral developmental changes during the period of adolescence.
Prerequisite: PSYC 150 General Psychology.

PSYC 320 Neuroscience
3 hours. This course provides an overview of the neuropsychological, neuroanatomical, and biochemical basis for mental functions including motor control, object recognition, spatial reasoning, attention, language, memory, and emotion. Methods of neuropsychological research are explored.

PSYC 330 Personality Theories
3 hours. A survey of the major theorists of personality and their theories. Included are psychoanalytic, dispositional, phenomenological, and behavioral theories. An integrative approach will involve synthesis of important elements of theory and Scripture.
Prerequisite: PSYC 150 General Psychology.

PSYC 340 Statistical Procedures
3 hours. Applied statistics for the social and behavioral sciences. Emphasis is placed on statistical logic and decision making.
Prerequisite: high school algebra or equivalent.

PSYC 350 Social Psychology
3 hours. A study of the social and psychological processes of human interaction. Major topics to be covered include conformity, aggression, self-justification, persuasion, prejudice, attraction, and interpersonal communication.
Prerequisite: PSYC 150 General Psychology.

PSYC 353 Culture and Psychology
3 hours. This course will cover the nature of culture and its applications to understanding human functioning. Students will examine their own and other cultures, as well as cultural influence on their thought, behavior, and relationships.
Prerequisite: PSYC 150 General Psychology.

PSYC 360 Learning
3 hours. A survey of learning theories and the basic research questions being asked in this important field. Special emphasis will be placed on translating experimental theory into practical methods.
Prerequisite: PSYC 150 General Psychology.

PSYC 370 Cognition
3 hours. Traditional areas of study in cognitive psychology will be discussed. These areas include perception, attention, memory, reasoning, problem solving, and language. Traditional views as well as current trends will be discussed.
Prerequisite: PSYC 150 General Psychology.

PSYC 381 Counseling
3 hours. A study of theory and technique of person-centered counseling. The course is designed to teach basic theoretical postulates and to focus on effective intervention skills for those anticipating future work in Christian ministries, teaching, or mental health settings. Recommended as a prerequisite for field experience work (PSYC 475). (Identical to CHMN 381.)
Prerequisites: PSYC 150 General Psychology and sophomore status or above. Recommended: PSYC 330 Personality Theories.

PSYC 382 Advanced Counseling
3 hours. This course builds on the knowledge and skills learned in PSYC 381
Counseling. The course is designed to enhance the clinical skills necessary to form a therapeutic relationship and to connect these skills to a theoretical orientation. A focus of the course is on utilizing counseling skills in various settings including schools and clinics, and with various populations.
Prerequisite: PSYC 381 Counseling. Recommended: PSYC 330 Personality Theories.

PSYC 391 Research Methods
3 hours. An introduction to methods of psychological research. Explores essential topics for experimental research including research design, reliability, validity, and research ethics. Students also learn how to critically assess research literature, assimilate information from a variety of sources, and interpret data. In addition, students learn how to prepare manuscripts in APA format and to prepare professional research presentations.
Prerequisites: PSYC 150 General Psychology and PSYC 340 Statistical Procedures.

PSYC 392 Advanced Research Methods
3 hours. Students will explore research design, analyses, and computer applications in the areas of cognition, learning, sensation and perception, and development using a variety of hands-on methods.
Prerequisites: PSYC 340 Statistical Procedures and PSYC 391 Research Methods.

PSYC 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

PSYC 400 Psychological Testing
3 hours. Students will develop skills in understanding and critically evaluating educational and psychological tests (measures of ability, achievement, personality, and vocational interest). Also, modern principles of "psychometrics" - data-based analysis of test items, scores, and interpretations - will be emphasized, particularly the reliability and validity of items and scales. Students will have hands-on experience with various tests and will computer-analyze sample data from test development projects.
Prerequisites: PSYC 150 General Psychology and PSYC 340 Statistical Procedures. Recommended: PSYC 391 Research Methods.

PSYC 410 Sensation and Perception
3 hours. Using psychophysical techniques, students will study sensory systems, including vision, audition, olfaction, taste, touch, and kinesthesis. Classic and current theories of perception and sensation will be discussed.
Prerequisite: PSYC 150 General Psychology.

PSYC 420 Abnormal Psychology
3 hours. A study of the nature, causation, and treatment of the major psychiatric and behavioral disorders.
Prerequisite: PSYC 150 General Psychology.

PSYC 430 Addictions
3 hours. Examines the complex interaction of psychological and sociological forces involved in substance abuse and addictions. Etiology, treatment options, and efficacy of treatments are reviewed.
Prerequisite: PSYC 381 Counseling.

PSYC 440 Psychology of Religion
3 hours. This course will cover topics such as the human experience of the divine, the psychology of religious development, the psychology of dogmatic beliefs, ritual religious psychopathology, the psychology of conversion, and the psychology of faith. The course will also discuss and critique the body of research on religious behaviors.
Prerequisite: PSYC 150 General Psychology.

PSYC 450 History and Systems of Psychology
3 hours. The history of the various schools of psychology, their origins, distinguishing characteristics, major contributions, theoretical positions, and contemporary issues are investigated. Required for psychology majors and minors.
Prerequisite: PSYC 150 General Psychology.

PSYC 460 Human Sexuality
3 hours. This course explores human sexuality from psychological, cultural, biological and spiritual perspectives. Topics include the physiological, psychological, and cultural variables associated with the development and manifestation of sexual identity and sexual behavior. Special attention is given to the Christian perspective and response to a highly sexualized culture.

PSYC 475 Field Experience
2-10 hours. Supervised experiences in helping activities in mental health agencies and institutions. A maximum of 3 hours may be applied toward a psychology major. *Prerequisite: upper-division majors only and by permission. Recommended: PSYC 381*
Counseling or other 300-level psychology course.

PSYC 485 Selected Topics
1-3 hours. A course dealing with various topics, as announced, that represent current faculty interests and competencies and student interest. Previous offerings have included psychology of relationships, drug and alcohol abuse, child and adolescent psychopathology, and psychology of gender.
Prerequisite: PSYC 150 General Psychology.

PSYC 490 Senior Seminar
1 hour. Integration of Christianity and psychology is emphasized. In addition, students make preparations for careers in psychology. Required for all psychology majors. *Prerequisite: senior status.*

PSYC 495 Special Study
1-3 hours. Independent study of subjects outside regular offerings and/or supervised research under the direction of faculty. Guiding bibliographies are provided, and regular reading reports and conferences are scheduled.
Prerequisites: upper-division psychology majors and by permission.

Religion (RELI) Courses

RELI 230 Sociology of Religion
3 hours. A sociological examination of the meaning and function of religion in human society. Gives attention to the development of religious organization, the relationship of religion to class and politics, the nature of the sacred, dimensions of religiosity, and denominational diversity in the United States. (Identical to SOCI 230.)

RELI 260 History and Doctrine of Friends
3 hours. This course explores the rich heritage of the Quaker movement in its historical, social, and religious settings. The distinguishing beliefs of Friends and contemporary trends also will be studied, with particular interest in how to apply timeless truths in timely ways.

RELI 270 History and Doctrine of _____ (Selected Churches)
3 hours. Offered upon sufficient demand by denominational leaders, who supply the appropriate course descriptions.

RELI 275 Field Experience
1-3 hours. Supervised experience in the discipline including internships and practica required for professional programs. This advanced experience must have an on-site supervisor and/or a departmental instructor overseeing, designing, and evaluating the content of the course.
Prerequisite: instructor's permission.

RELI 285 Selected Topics
2-3 hours. Occasional special courses chosen to fit the interests and needs of students and faculty.

RELI 300 Christian Foundations
3 hours. Christ-centered believers are united in basic understandings that should inform and guide all of life, including service, worship, and vocation. This course introduces a Christian view of the world through the lens of historic theology and its implications for living the Christian life.
Prerequisite: BIBL 100 Bible Survey, or BIBL 101 and BIBL 102 Literature of the Old and New Testaments.

RELI 310 Christian Apologetics
3 hours. A study of classic and contemporary defenses of the Christian faith, including theistic/atheistic arguments, postmodern assessments of religious belief, issues surrounding the doctrine of the resurrection, the miraculous and religious diversity. (Identical to PHIL 310.)

RELI 320 American Women of Faith
3 hours. American Women of Faith is a Christian history course in which issues of gender are central. Students reflect on historical and contemporary experiences of women, particularly as influenced by Christian beliefs and ideology. Such study helps prepare women and men for full participation in the life of their faith communities.

RELI 330 Introduction to the World Christian Movement
3 hours. The biblical basis and history of missions are considered, with a special focus upon the modern missionary movement of the last 200 years. (Identical to INTL 330.)

RELI 340 Christian Classics
3 hours. Certain Christian writings have endured the test of time and have been found to be a rich source of spiritual nourishment. A representative sampling of these significant works representing the life and thought of Christians from the second to the mid-20th century will be considered.

RELI 350 Spiritual Formation
3 hours. An exploration of how people grow and change spiritually. The study integrates biblical insights, classic Christian spirituality, developmental theory, and contemporary individual and corporate practice in spiritual formation. It will critically explore how spirituality relates to vocation, relationships, and the demands of daily living.

RELI 360 Cross-Cultural Christian Outreach
3 hours. Cross-cultural communication in Christian ministry, focusing on the concepts of identification, mutuality, the process of cultural change from a biblical perspective, and strategies for cross-cultural outreach.

RELI 380 Christian Beliefs
3 hours. As an introduction to Christian theology, this course considers the basic doctrines of the Christian faith and their application to contemporary living.

RELI 385 Quaker Seminar
1 hour. Designed to address topics of interest to Friends and matters of Quaker faith and practice. Topics will vary from semester to semester, and include sacramentality, worship and ministry, peace and social work, evangelism, leadership, decision making, and Christian testimonies.

RELI 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

RELI 401 Christianity in History I
3 hours. The development of Christianity from its appearance within the Greco-Roman world through the medieval period, and its influence as a base for culture in the West. (Identical to HIST 401.)

RELI 402 Christianity in History II
3 hours. Christianity's development from the dawn of the Protestant Reformation through its global spread during the modern era, observing its historical context and relationships to the surrounding cultures. (Identical to HIST 402.)

RELI 430 Sociology of Religion
3 hours. A sociological examination of the meaning and function of religion in human society. Gives attention to the development of religious organization, the relationship of religion to class and politics, the nature of the sacred, dimensions of religiosity, and denominational diversity in the United States. (Identical to SOCI 430.)

RELI 440 World Religions
3 hours. A comparative study between Christianity and other prominent religions of the world, such as Buddhism, Islam, Hinduism, and contemporary kinds of alternative religion. (Identical to INTL 440.)

RELI 460 Issues in Contemporary Missions
3 hours. Selected movements, trends, and leaders of contemporary Christian missions are studied. Lectures, readings, and learning activities are chosen to provide tools and methods for continuing education in missiology.

RELI 475 Field Experience
1-3 hours. Supervised experience in the discipline including internships and practica required for professional programs. This advanced experience must have an on-site supervisor and/or a departmental instructor overseeing, designing, and evaluating the content of the course.
Prerequisite: instructor's permission.

RELI 485 Selected Topics
2-3 hours. Occasional special courses chosen to fit the interests and needs of students and faculty.

RELI 490 Contemporary Religious Life
3 hours. The movement, trends, and leaders of contemporary Christianity are studied in their social setting. Lectures and readings are chosen to provide tools and methods for thoughtful and continuing interpretation of religious life. As this is a senior capstone course, students must be juniors or seniors.

RELI 495 Special Study
1-3 hours. Individual research. Open to qualified students upon application.

Sociology (SOCI) Courses

SOCI 150 Principles of Sociology
3 hours. An introduction to the study of society, including the study of the shared relationships that create social organization and social processes of society. Required for sociology majors and for admission into the social work major.

SOCI 230 Sociology of Religion
3 hours. A sociological examination of the meaning and function of religion in human society. Gives attention to the development of religious organization, the relationship of religion to class and politics, the nature of the sacred, dimensions of religiosity, and denominational diversity in the United States. (Identical to RELI 230.)

SOCI 275 Field Experience
1-3 hours. Supervised experience in the discipline including internships and practica required for professional programs. This introductory experience must have an on-site supervisor and/or a departmental instructor overseeing, designing, and evaluating the content of the course.
Prerequisite: instructor's permission.

SOCI 285 Selected Topics
1-3 hours. A seminar dealing with topics of special interest to students and current faculty.

SOCI 303 International Conflict and Peace
3 hours. This course considers the causes of international conflict and possible approaches to their resolution. An emphasis is placed on strategies to prevent and resolve conflicts without the use of violence. (Identical to INTL 303 and PSCI 303.)

SOCI 310 Cultural Anthropology
3 hours. A comparative study of world societies and their ways of life. (Identical to INTL 310.)

SOCI 320 Men and Women in Society
3 hours. A study of how societies construct gender similarities and differences. The impact of gender upon individuals and social institutions, and the implications of a sociological understanding of gender for the Christian faith will be explored.

SOCI 323 Sociology of Families
3 hours. A study of marriage and the family from a sociological perspective, including historical, cross-cultural, and economic backgrounds. A Christian faith perspective will emphasize the worth of people, the importance of the family as a place of nurture, and the gift of marriage. (Identical to FCSC 323 and HLTH 323.)

SOCI 326 Sociology of Sexuality
3 hours. The socio-cultural study related to human sexual behavior, including adolescent sexuality, STIs and sex education, same-sex attraction and homosexuality, contraceptives and birthing alternatives, marital sexuality, the sex trade, and sexual abuse. The course is presented within a redemptive Christian value framework, and encourages the connecting of the private and personal to public issues and concerns.

SOCI 340 Statistical Procedures
3 hours. Applied statistics for the social and behavioral sciences. Emphasis is placed on statistical logic and decision making. Recommended for the sophomore or junior year. Required for sociology and social work majors. (Identical to SWRK 340)
Prerequisites: SOCI 150 Principles of Sociology and high school algebra.

SOCI 360 Crime and Deviance
3 hours. An introduction to the study of deviance and criminology, including theoretical and paradigms and research.

SOCI 363 Social Stratification
3 hours. Examines the nature, causes, and consequences of inequality in society. An understanding of how social resources are distributed, and the resulting distribution of life chances, is central to understanding the fundamental bases of social order and social organization. This course takes a sociological approach to the study of inequality in which we argue that inequality is a characteristic of societies, not individuals.

SOCI 366 Social Change
3 hours. Explores socio-historic contexts, sources, and patterns related to social change, such as globalization, social movements, technological innovation, economic and political forces. Gives attention to understanding the role of individuals and groups in social change; moving toward a reflective, informed way

of thinking and living as thoughtful Christians committed to justice.

SOCI 370 Global Political Economy
3 hours. An integrated view of the world economy, with particular attention to such topics as economic growth, debt crises, the distribution of wealth and income, the relationships between economic and political systems, the economics of peace and war, and environmental issues. (Identical to ECON 370.)
Prerequisite: ECON 201 Principles of Microeconomics or ECON 202 Principles of Macroeconomics.

SOCI 373 Social Theory
3 hours. A critical study of major social philosophers from Comte to the present. Required for sociology majors. (Identical to PHIL 373)
Prerequisite: SOCI 150 Principles of Sociology or PHIL 210 Introduction to Philosophy.

SOCI 380 Race and Ethnicity
3 hours. A study of the historical and socioeconomic factors experienced and lived by people of differing racial and ethnic backgrounds in the United States. Specific attention is placed on the social construction of race, social attitudes and past and present racial issues.
Prerequisite: SOCI 150 Principles of Sociology or instructor's permission.

SOCI 390 Research Methods
3 hours. An overview of quantitative and qualitative research methods in the social sciences. Students will design a research project. Required for sociology and social work majors.
Prerequisites: SOCI 150 Principles of Sociology, SOCI 373 Social Theory, and SOCI 340 Statistical Procedures or PSYC 340 Statistical Procedures.

SOCI 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

SOCI 410 Juvenile Delinquency
3 hours. A study of the causes and nature of juvenile delinquency, the development of the juvenile court, probation, and other rehabilitative programs.
Prerequisite: SOCI 150 Principles of Sociology or instructor's permission.

SOCI 430 Sociology of Religion
3 hours. A sociological examination of the meaning and function of religion in human society. Gives attention to the development of religious organization, the relationship of religion to class and politics, the nature of the sacred, dimensions of religiosity, and denominational diversity in the United States. (Identical to RELI 430.)

SOCI 461 International Trade
3 hours. An overview of international trade theory and its applications with respect to the direction of trade flows, determination of prices and volumes in international trade, the impact of tariffs and non-tariff

barriers, and the role of bilateral and multilateral trade negotiations. Particular emphasis is given to the broader social impact of trade policy and patterns. (Identical to ECON 461.)
Prerequisite: ECON 201 Principles of Microeconomics.

SOCI 475 Internship
3-6 hours. Supervised experiences in private and public social agencies. Students may opt for 3 hours of SOCI 475 Internship as part of their concentration, or 3 hours of SOCI 475 Internship as an elective in the major.
Prerequisites: upper-division majors and by permission.

SOCI 480 Senior Research Project
1-3 hours. For sociology majors only, this course requires students to complete a research project. With an expectation of a literature review, data collection and analysis, students will produce a piece of original research that is worthy of publication and/or presentation.
Prerequisite: SOCI 390 Research Methods.

SOCI 485 Selected Topics
1-3 hours. A special-interest course that addresses current topics in the field of sociology. Course offerings depend on current faculty competencies and student interest. Previous offerings have included a Christian response to the contemporary family, criminal justice, cross-cultural education, death and dying, Native American cultures, sociology of religion, sociology of adolescence, and sociology of literature. *Prerequisites: SOCI 150 Principles of Sociology and upper-division majors.*

SOCI 495 Special Study
1-3 hours. Independent study of subjects outside regular offerings. Guiding bibliographies are provided, and regular reading reports and conferences are scheduled.
Prerequisites: upper-division majors and by permission.

Spanish (SPAN) Courses

Note: Placement testing is generally required of all students prior to registration for their first Spanish course at George Fox University. Placement exams are typically administered during orientation.

SPAN 101 Introductory Spanish I
4 hours. An integrated introductory study of Spanish. Listening, speaking, reading, and writing are all integral to learning the language. Cultural aspects of Spain and Latin America are also presented as essential components. Three class sessions and one laboratory per week.
Prerequisite: placement exam required.

SPAN 102 Introductory Spanish II
4 hours. An integrated introductory study of Spanish. Listening, speaking, reading, and writing are all integral to learning the language. Cultural aspects of Spain and Latin America are also presented as essential components. At the end of SPAN 102, students should have novice high proficiency as defined by the American Council of the Teaching of Foreign Languages (ACTFL). Three class sessions and one laboratory per week.
Prerequisite: SPAN 101 Introductory Spanish I or placement by exam.

SPAN 201 Intermediate Spanish I
4 hours. A proficiency-centered approach to the study of Spanish, with extensive practice in listening, speaking, reading, and writing. Three class sessions and one laboratory per week.
Prerequisite: SPAN 102 Introductory Spanish II or placement by exam.

SPAN 202 Intermediate Spanish II
4 hours. A proficiency-centered approach to the study of Spanish, with extensive practice in listening, speaking, reading, and writing. At the end of SPAN 202, students should have intermediate mid proficiency as defined by ACTFL. Three class sessions and one laboratory per week.
Prerequisite: SPAN 201 Intermediate Spanish I or placement by exam.

SPAN 275 Field Experience
1-10 hours. Supervised experience in a situation demanding extensive use of Spanish. Admission and credit hours determined by instructor.

SPAN 285 Selected Topics
2-4 hours. Occasional special courses chosen to fit the needs and interests of students and faculty.

SPAN 295 Special Study
1-4 hours. Individual study under the guidance of a faculty member, as determined by student needs and faculty availability.
Prerequisite: instructor's permission.

SPAN 301 Intermediate/Advanced Spanish I
4 hours. A thorough review of Spanish to develop intermediate high proficiency, as defined by ACTFL. Activities include reading authentic texts, writing in a variety of styles, and developing strategies for communication. Three class sessions and one laboratory per week.
Prerequisite: SPAN 202 Intermediate Spanish II or placement by exam.

SPAN 302 Intermediate/Advanced Spanish II
4 hours. A thorough review of Spanish to develop intermediate high proficiency, as defined by ACTFL. Activities include reading authentic texts, writing in a variety of styles, and developing strategies for communication. Three class sessions and one laboratory per week.
Prerequisite: SPAN 301 Intermediate/Advanced Spanish I or placement by exam.

SPAN 340 Spanish Culture and Civilization
3 hours. An introduction to the cultures and civilizations of the Iberian Peninsula. Students continue to develop skills toward advanced proficiency, as defined by ACTFL. Activities include reading authentic texts and listening to native speakers. Areas of study may include history, art, music, the role of religion, governmental systems, and gender differences. Taught in Spanish.
Corequisite: SPAN 301 Intermediate/Advanced Spanish I or instructor's permission.

SPAN 350 Latin American Culture and Civilization
3 hours. An introduction to the cultures and civilizations of Latin America. Students continue to develop skills toward advanced proficiency, as defined by ACTFL. Activities include reading authentic texts, field trips, and listening to native speakers. Areas of study may include history, art, music, the role of religion, governmental systems, and gender differences. Taught in Spanish.

Corequisite/Prerequisite: SPAN 302 Intermediate/Advanced Spanish II or concurrent enrollment in SPAN 302 Intermediate/Advanced Spanish II or instructor's permission.

SPAN 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

SPAN 410 Introduction to Spanish Literature
3 hours. A one-semester introduction to Spanish peninsular literature. This course introduces students to selected masters and periods of Spanish literature and reflects on matters of faith as revealed in the pieces studied. Students continue to develop skills toward advanced proficiency, as defined by ACTFL. Taught in Spanish.
Prerequisite: SPAN 302 Intermediate/Advanced Spanish II or instructor's permission.

SPAN 420 Introduction to Latin American Literature
3 hours. This course introduces students to selected masters and periods of Latin American literature and reflects on matters of faith as revealed in the pieces studied. Students continue to develop skills toward advanced proficiency, as defined by ACTFL. Taught in Spanish.
Prerequisite: SPAN 302 Intermediate/Advanced Spanish II or equivalent.

SPAN 475 Field Experience
1-10 hours. Supervised experience in a situation demanding extensive use of Spanish. Admission and credit hours determined by instructor.

SPAN 480 Senior Capstone
3 hours. This course synthesizes all the student's skills in Spanish. It includes a portfolio of written work, journal kept while abroad and reflection paper completed upon return to U.S., an oral proficiency interview, and a service-learning project. Meetings with professor focus on integration of faith and learning. Preferably taken after semester abroad.

SPAN 485 Selected Topics
2-4 hours. Occasional special courses chosen to fit the needs and interests of students and faculty.

SPAN 495 Special Study
1-4 hours. Individual study under the guidance of a faculty member, as determined by student needs and faculty availability.
Prerequisite: instructor's permission.

Social Work (SWRK) Courses

SWRK 180 Introduction to Social Welfare
3 hours. This course serves as an introduction to the philosophy, historical development, and current practices of the social work profession and social welfare in general. Specifically, the knowledge base, values, skills, practices, settings, educational and career opportunities of the profession will be examined.

Emphasis is placed on developing awareness of the scope of the profession using a scientific, analytic approach to service delivery and evaluation; relating generalist social work practice to social welfare systems; economic and social justice; and work with diverse, oppressed, and at-risk populations. This course includes community service opportunities and/or social service agency tours. This course is required for those majoring in social work and must be taken prior to entrance into the major.

SWRK 275 Field Experience
1-3 hours. Supervised experience in the discipline including internships and practica required for professional programs. This introductory experience must have an on-site supervisor and/or a departmental instructor overseeing, designing, and evaluating the content of the course.
Prerequisite: instructor's permission.

SWRK 285 Selected Topics
1-3 hours. A special-interest class offered on a onetime basis addressing a subject in the field that is of general interest to the university community.
Prerequisite: by permission.

SWRK 290 Diversity Issues in Social Work
3 hours. Introduces students to diverse populations and helps them understand the different constraints and motivations of people from backgrounds different from their own, providing important lessons for social work practice.

SWRK 331 Human Behavior in the Social Environment I
3 hours. This course is the first of a two-semester sequence that provides and seeks to apply a basic framework for creating and organizing knowledge of human behavior during the lifespan stages of conception, infancy, childhood, and adolescence and the social environment to situations encountered by generalist practice social workers. Social systems, human development theories, and strengths approaches are critically examined to foster understanding of individual, family, group, organizational, and community behaviors and the impact of the larger environment on these systems. Special attention is given to the impact of human diversity, discrimination, and oppression on the ability of individuals, families, groups, organizations, and communities to reach or maintain optimal health and well-being. Required for majors.
Prerequisites: PSYC 150 General Psychology and SOCI 150 Principles of Sociology.

SWRK 332 Human Behavior in the Social Environment II
3 hours. This course is the second of a two-semester sequence that provides and seeks to apply a basic framework for creating and organizing knowledge of human behavior during the lifespan stages of young adulthood, middle adulthood, and later adulthood and the social environment to situations encountered by generalist practice social workers. Social systems, human development theories, and strengths approaches are critically examined to foster understanding of individuals, family, group, organizational, and community behaviors and the impact of the larger environment on these systems. Special attention is given to the impact of human diversity, discrimination, and oppression on the ability of individuals, families, groups, organizations, and communities to reach or maintain optimal health and well-being. Required for majors.
Prerequisites: PSYC 150 General Psychology, SOCI 150 Principles of Sociology, and SWRK 331 Human Behavior in the Social Environment I.

SWRK 340 Statistical Procedures
3 hours. Applied statistics for the social and behavioral sciences. Emphasis is placed on statistical logic and

decision making. Recommended for the sophomore or junior year. Required for sociology and social work majors. (Identical to SOCI 340.)
Prerequisites: SOCI 150 Principles of Sociology and high school algebra.

SWRK 370 Foundations of Social Work Practice I
3 hours. This course provides basic knowledge about research methods as it applies to social work practice. This course provides an overview of commonly used social work practice theories and a review of each one's primary focus and linkages among them.

SWRK 391 Social Work Practice I
3 hours. A study of generalist social work practice with individuals. Microlevel theory, skills, and interviewing techniques are applied to generalist social work. The course will cover theory and techniques of person-centered case management that are specifically applicable to work with individuals. A prerequisite for Field Experience/Practicum I (SWRK 475). Required for majors. Additional course fee is required.
Prerequisites: PSYC 150 General Psychology, SOCI 150 Principles of Sociology, SWRK 180 Introduction to Social Welfare, declared social work majors only, and formal admission into the social work program.

SWRK 392 Social Work Practice II
3 hours. A study of mezzo-level generalist social work practice with families and groups. Attention is given to a systems framework of generalist social work practice, with a particular focus upon assessment and development of appropriate intervention strategies. A prerequisite for SWRK 476 Field Experience/Practicum II. Required for majors.
Prerequisite: SWRK 391 Social Work Practice I and declared social work majors only.

SWRK 393 Social Work Practice III
3 hours. An overview of generalist social work methods practiced with organizations and communities. Attention is given to assessment, planning, implementation, and evaluation of macro-level systems. A prerequisite for SWRK 477 Field Experience/Practicum III. Required for majors. This class is open to declared social work majors only.
Prerequisite: SWRK 392 Social Work Practice II.

SWRK 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings in the spring followed by travel to various locations throughout the world in May. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Offered at the discretion of the department. Upper division students, by permission. Additional course fee is required.

SWRK 400 Social Work with Children
3 hours. Basic principles of child welfare, with emphasis upon the services for families and children needing various types of support. Focus is on developing a knowledge and understanding of child welfare and supportive services.
Prerequisite: SWRK 180 Introduction to Social Welfare or instructor's permission.

SWRK 410 Social Work with Vulnerable Adults
3 hours. This course provides a general introduction to the study of aging, older people, and their adaptation

to a rapidly-changing world from a social work perspective. It examines a wide variety of physical, cognitive, and psycho-social changes that occure aso ne ages, how these factors influence interaction with social/physical environments, and how the older person is, in turn, affected by these interactions. Social work perspectives, values, and interventions with this population will be emphasized.
Prerequisite: SWRK 180 Introduction ot Social Welfare.

SWRK 440 Social Work Research Methods
3 hours. This course provides basic knowledge about research methods as it applies to social work practice. This course is designed to survey the basic processes of research methodology as practiced in the social sciences. Topics include research design, problem formulation, measurement, sampling, data analysis, and ethics in research. This course introduces the theory and application of basic social scientific research techniques, including qualitative and quantitative methods, data collection and statistical thinking. Topics specific to social work research such as agency-based research, program evaluation, outcomes evaluation and single-subject design will be emphasized. The use of research as one tool in the professional repertoire of skills available to the social work generalist and evaluation of practice are emphasized. This course is designed to increase students' ability to read for understanding, critically evaluate, and better utilize the social work research literature. At the same time it is designed to prepare students to begin work on the senior research paper/project. Finally, this course demonstrates the need for and encourages the use of research in social work practice.

SWRK 460 Social Policy
3 hours. This course proves an in-depth analysis of how human needs and values are translated into social policy on community, national and international levels. Special attention is given to the ways in which values and power interests influence the creation of social policy. Emphasis is placed on the history of social welfare and related policies, the process of policy formation and analysis, and impact of policy on at-risk populations. Implications for generalist social work practice and services will be explored through a variety of class activities. Required for social work majors.
Prerequisites: SWRK 180 Introduction to Social Welfare, PSCI 150 Introduction to Political Science, PSCI 190 American Government or PSCI 240 State and Local Government, SWRK 475 Field Experience/Practicum I, or the instructor's permission.

SWRK 475 Field Experience/Practicum I
3 hours (150 practicum hours in the agency). The first course of the field experience/practicum sequence will emphasize micropractice concepts and address orientation to the agency environment; student roles and responsibilities; agency roles and responsibilities; confidentiality issues; nature and process of supervision; establishing goals and objectives; models of integrating classroom learning with the field practicum; person-in-environment; interviewing techniques; identification of research and policy issues; work with special populations and injustices; process recordings; research methods in the agency; and ethical conduct/NASW code of ethics. Required for majors. Recommended spring of the junior year.
Prerequisites: SWRK 391 Social Work Practice I and declared social work majors only.

SWRK 476 Field Experience/Practicum II
3 hours (150 practicum hours in the agency). Ideally, SWRK 476 and 477 will occur in a full-year practicum during the student's senior year. The second course in the field experience/practicum sequence will build upon knowledge and experience acquired in SWRK 475 and emphasize mezzo-practice concepts. Course topics will include work with small groups, families; integrating research and evaluation methods in the field experience/practicum; agency evaluation and analysis; referral processes; work with special

populations/injustices; ethical dilemmas; ethical conduct/NASW code of ethics; agency recording process; and development of a student portfolio of practicum projects and skills. Required for majors.
Prerequisites: SWRK 475 Field Experience/Practicum I, SWRK 392 Social Work Practice II and declared social work majors only.

SWRK 477 Field Experience/Practicum III
3 hours (150 practicum hours in the agency). Ideally, SWRK 476 and 477 will occur in a full-year practicum during the student's senior year. The third course in the field experience/practicum sequence will provide further depth and integration of theory, classroom learning, and experience within the student's field experience/practicum, building on concepts developed in SWRK 476 and emphasizing macropractice concepts. Additional topics will include work with agency boards, communities, governmental systems; implementation of a research project in the agency; community analysis; termination with clients and the agency; addressing social inequities in the student's field experience/practicum; work with special populations and injustices; policy issues; and ethical conduct/NASW code of ethics. Required for majors.
Prerequisites: SWRK 476 Field Experience/Practicum II, SWRK 393 Social Work Practice III and declared social work majors only.

SWRK 485 Selected Topics
1-3 hours. A special-interest class that addresses a relevant subject in the field of social work. Previous and projected subjects include, but are not limited to, administration and community planning; cognitive and behavioral theories; crisis and trauma recovery; current issues in social work; medical and mental health services; systemic and ecologic theories; social policy; and treating addictive behaviors.
Prerequisite: SWRK 180 Introduction to Social Welfare.

SWRK 490 Senior Seminar
3 hours. A required course for majors to be taken during the spring semester of the senior year. The course will focus on consolidating substantive knowledge regarding 1) social welfare policies and services, 2) human behavior in the social environment, 3) the structure and function of communities and human service organizations, 4) methods of inducing change across the micro-, mezzo-, and macrolevels, and 5) methods of scientific inquiry necessary to assess human problems and the effectiveness of professional interventions. Focus also will be upon the integration of social theories with faith and learning. Required for majors.
Prerequisite: SWRK 392 Social Work Practice II.

SWRK 495 Special Study
1-3 hours. Independent study of subjects outside regular offerings. Guiding bibliographies are provided, and regular reading reports and conferences are scheduled.
Prerequisite: upper-division majors only and by permission.

Theatre (THEA) Courses

THEA 100 Acting I — Fundamentals
3 hours. Study of basic principles of acting, including survey of acting theories, performance of scenes, and critical observation and analysis of productions. This course requires additional outside-of-class time for rehearsal and performance of selected material.

THEA 125 A Theatre Laboratory — Acting
1-3 hours. The practical application of acting techniques in connection with university theatre productions.

Open to any student taking part in a university theatre production. May be repeated for credit.
Prerequisite: instructor's permission.

THEA 125 B Theatre Laboratory — Directing
1-3 hours. The practical application of directing techniques in connection with university theatre productions. Open to any student taking part in a university theatre production. May be repeated for credit.
Prerequisite: instructor's permission.

THEA 125 C Theatre Laboratory — Technical
1-3 hours. The practical application of technical techniques in connection with university theatre productions. Open to any student taking part in a university theatre production. May be repeated for credit.
Prerequisite: instructor's permission.

THEA 125 D Theatre Laboratory — Design
1-3 hours. The practical application of design techniques in connection with university theatre productions. Open to any student taking part in a university theatre production. May be repeated for credit.
Prerequisite: instructor's permission.

THEA 130 Stagecraft
3 hours. Balancing lecture with hands-on experience, the course offers a survey of materials, processes, and equipment in the fabrication, assembly, painting, rigging, and installation of stage scenery, properties, and lighting. Additional course fee is required.

THEA 160 Improvisational Theatre Workshop
2 hours. Focus on development of improvisational skills through structured and directed psychological, physical, and social exercises. May be repeated once for credit.

THEA 165 George Fox University Players: Drama Touring Troupe
1 hour. Participation in theatre's traveling drama ministry ensemble. Students must remain with the troupe the entire year. May be repeated to a maximum of four hours credit. Pass/No Pass.
Prerequisite: audition and invitation.

THEA 200 Acting II – Stage Voice and Movement
3 hours. A study of the basic principles and techniques of increasing vocal and physical awareness and production on the stage, including life study projects and an introduction to basic theoretical approaches to voice and movement. This course requires additional outside-of-class time for rehearsal and performance of selected material.
Prerequisites: THEA 100 Acting I - Fundamentals and instructor's permission.

THEA 220 Oral Interpretation of Literature
3 hours. Introduction to the aesthetic bases of speech communication through the analysis and performance of various genres of literature. Attention given to performance of biblical literature, literature of diverse cultures, and the art of storytelling.

THEA 240 Understanding Drama
3 hours. A study of significant plays from the classical period to the present, both as literary works and staged productions, the goal being a deeper understanding and appreciation of drama as a symbolic form. Primary focus is on literary values, with attention also given to the constraints and interpretations embodied in the staging, acting, directing, and designing of a play. (Identical to LITR 240.)

THEA 275 Field Experience
1-10 hours. Offered summers only. Supervised experience with off-campus professional, community, church, or camp theatre productions or drama programs. The experience may include acting, directing, technical production, design, publicity, management, therapy, or any combination thereof.
Prerequisite: instructor's permission.

THEA 285 Selected Topics
3 hours. Characteristically offered as part of May Term. Special courses offered occasionally to meet the needs and interests of students, professors, and visiting professors, specifically including technical theatre.

THEA 300 Acting III – Contemporary Scene Study
3 hours. A study of the acting and philosophical challenges that face contemporary actors in the professional world of theatre. Through in-depth scene study, structural analysis, in-class presentations, and outside research the student is exposed to the theatre community's various artistic responses to recent political and social movements. This course requires additional outside-of-class time for rehearsal and performance of selected material.
Prerequisite: instructor's permission.

THEA 325 A Theatre Laboratory — Acting
1-3 hours. The practical application of acting techniques in connection with university theatre productions. Open to any student taking part in a university theatre production. May be repeated for credit.
Prerequisite: instructor's permission.

THEA 325 B Theatre Laboratory — Directing
1-3 hours. The practical application of directing techniques in connection with university theatre productions. Open to any student taking part in a university theatre production. May be repeated for credit.
Prerequisite: instructor's permission.

THEA 325 C Theatre Laboratory — Technical
1-3 hours. The practical application of technical techniques in connection with university theatre productions. Open to any student taking part in a university theatre production. May be repeated for credit.
Prerequisite: instructor's permission.

THEA 325 D Theatre Laboratory — Design
1-3 hours. The practical application of design techniques in connection with university theatre productions. Open to any student taking part in a university theatre production. May be repeated for credit.
Prerequisite: instructor's permission.

THEA 330 Stage Lighting and Sound

3 hours. An introductory study of the principles of stage lighting and sound design for theatrical production. The emphasis will be on both design and operation of sound and lighting equipment. Students will apply theory through a number of projects. Additional course fee is required.
Prerequisite: THEA 130 Stagecraft or instructor' permission.

THEA 340 Theatre as Ministry
3 hours. A consideration of theatre skills as tools for meeting human needs in essentially nontheatrical environments. Focus on drama as a service medium rather than as strictly an entertainment vehicle.

THEA 350 Music Theatre Performance
3 hours. An introduction to the acting, dance, and vocal techniques required for music theatre performance. Through in-depth scene study, vocal training, dance, and in-class performances, the student will be introduced to the various artistic challenges inherent in music theatre since its inception. This course requires additional outside-of-class time for rehearsals and performance of selected material. Additional course fee is required. (Identical to MUSI 350.)
Prerequisites: THEA 100 Acting I - Fundamentals and MUSA 105 VC Applied Voice or MUSA 125T Music Theatre or MUSA 325T Music Theatre.

THEA 360 Improvisational Theatre Workshop
2 hours. Focus on development of improvisational skills through structured and directed psychological, physical, and social exercises. May be repeated once for credit.

THEA 365 George Fox University Players: Drama Touring Troupe
1 hour. Participation in theatre's traveling drama ministry ensemble. Students must remain with the troupe the entire year. May be repeated to a maximum of four hours credit. Pass/No Pass.
Prerequisite: audition and invitation.

THEA 370 Directing for Theatre
3 hours. An introduction to the director's role in theatre through historical and artistic research, comprehensive structural analysis, scene work, the creation of composition, stage pictures, blocking, rhythm, tempo, and an exploration of the working relationships with actors and design teams. This course requires additional outside-of-class time for rehearsal and performance of selected material. *Prerequisite: THEA 100 Acting I - Fundamentals.*

THEA 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

THEA 400 Acting IV – Acting Shakespeare
3 hours. An in-depth study of the world and words of Shakespeare. Through classroom exercises, scene study, and outside research the student is exposed to how word choice, syntax, and grammar informs the actor, influences action, exposes character, and creates the world of play. This course requires additional outside-of-class time for rehearsal and performance of selected material.
Prerequisite: instructor's permission.

THEA 420 Theatre Management
3 hours. This course introduces students to the diverse issues involved in managing a theatre company. It includes an examination of marketing and promotions, financial management, and organizational structures of various types of theatres, with special emphasis given to stage management. Students will be able to apply learned principles to hands-on projects and presentations.
Prerequisite: THEA 130 Stagecraft or instructor's permission.

THEA 430 Scenic Design
3 hours. An introductory study of the theories and skills of stage design with an emphasis on script analysis and good visual research. Assignments will guide the student to learning the practices of drafting, perspective drawing, watercolor rendering, and model building. Students will apply these learned techniques and research skills to several projects. Additional course fee is required.
Prerequisite: THEA 130 Stagecraft or instructor's permission.

THEA 440 Theatre History
3 hours. A broad survey of the history of theatre dedicated to the research, study, and analysis of the innovators and revolutionaries in playwriting theory, acting, directing, design, and production.

THEA 475 Field Experience
1-10 hours. Offered summers only. Supervised experience with off-campus professional, community, church, or camp theatre productions or drama programs. The experience may include acting, directing, technical production, design, publicity, management, therapy, or any combination thereof.
Prerequisite: instructor's permission.

THEA 485 Selected Topics
3 hours. Characteristically offered as part of May Term. Special courses offered occasionally to meet the needs and interests of students, professors, and visiting professors, specifically including technical theatre.

THEA 495 Special Study
1-3 hours. Open to exceptional students who want to explore a specific area in greater depth. Entrance at the discretion of a faculty member.

Writing (WRIT) Courses

WRIT 100 English Skills
3 hours. A course to develop collegiate-level learning and written communication skills, focusing on reading speed and comprehension, vocabulary development, and a review of the standards of sentence structure, punctuation, grammar, and usage.
Prerequisite: by placement only.

WRIT 103 Individualized English Skills
1-2 hours. Individualized instruction in spelling, reading,composition, and research skills necessary for effective college learning. Pass/No Pass.

WRIT *110 College Writing*
3 hours. A course concentrating on expository writing, with an introduction to basic research methods.

Argumentative writing is also introduced.

WRIT 200 Studies in Writing
3 hours. Introduces important concepts in the study of writing. Students will read and respond to writing and rhetorical theory, and will read, discuss, and produce written analysis of theories in the study of writing.
Prerequisite: WRIT 110 College Writing or equivalent, or instructor's permission.

WRIT 210 Practical Grammar and Editing
3 hours. This course helps those who want to understand and to be able to explain to others what can be done to make writing correct, clear, and precise. Focuses on constructing, editing, and correcting sentences and paragraphs. This is not a remedial course. (Identical to JOUR 210)

WRIT 230 Introduction to Journalism
3 hours. A course designed to provide fundamental knowledge and experience in reporting, writing, and editing news for the print media. (Identical to JOUR 230.) *Prerequisite: WRIT 110 College Writing or equivalent, or instructor's permission.*

WRIT 240 Technical Writing
3 hours. Introduces students to the principles and procedure of technical writing; attention to analyzing audience and purpose, organizing information, designing graphic aids, and writing such specialized forms as abstracts, instructions, and proposals.
Prerequisite: WRIT 110 College Writing or equivalent, or instructor's permission.

WRIT 250 Creative Nonfiction
3 hours. A workshop approach to writing creative nonfiction. Introduces students to the many voices, styles, and structures of the creative essay.
Prerequisite: WRIT 110 College Writing or equivalent, or instructor's permission.

WRIT 275 Field Experience
1-3 hours. Supervised experience in the discipline including internships and practica required for professional programs. This introductory experience must have an on-site supervisor and/or a departmental instructor overseeing, designing, and evaluating the content of the course.
Prerequisite: instructor's permission.

WRIT 285 Selected Topics
3 hours. Occasional special courses created to fit the needs and interests of faculty, visiting professors, and students.

WRIT 310 Professional Writing and Design
3 hours. This course explores trends in media convergence, focusing as well on the ways reporters, editors, and designers create stories for the web. Particular emphasis will be on web-based story design, the coordination of text and art, and the creation of stories for a variety of new media outlets. (Identical to JOUR 310)
Prerequisite: WRIT 110 College Writing or equivalent, or instructor's permission.

WRIT 330 Magazine and Feature Writing
3 hours. A workshop approach to writing feature articles and other shorter nonfiction forms for periodicals. Student-produced material is submitted to various publications as part of course expectations.(Identical to JOUR 330)
Prerequisite: WRIT 110 College Writing or equivalent, or instructor's permission.

WRIT 360 Writing Fiction
3 hours. A workshop approach to writing fiction. Students write and prepare for publication original works.
Prerequisite: WRIT 110 College Writing or equivalent, or instructor's permission.

WRIT 370 Writing Poetry
3 hours. A workshop approach to writing poetry. Students write and prepare for publication original works.
Prerequisite: WRIT 110 College Writing or equivalent, or instructor's permission.

WRIT 399 Cross-Cultural Study
3 hours. This course offers in-depth discipline specific cross-cultural study designed to enhance the intercultural emphasis of various academic majors. The course includes class meetings followed by travel to various locations throughout the world. Students will use core disciplinary knowledge to serve, learn and interact with other cultures. (Offered in May Term. Students must meet eligibility requirements.) Additional course fee is required.

WRIT 475 Field Experience
1-3 hours. Supervised experience in the discipline including internships and practica required for professional programs. This introductory experience must have an on-site supervisor and/or a departmental instructor overseeing, designing, and evaluating the content of the course.
Prerequisite: instructor's permission.

WRIT 485 Selected Topics
3 hours. Occasional special courses created to fit the needs and interests of faculty, visiting professors, and students.

WRIT 490 Senior Experience
3 hours. A workshop approach to writing feature articles and other shorter nonfiction forms for periodicals. Student-produced material is submitted to various publications as part of course expectations. (Identical to LITR 490)
Prerequisite: senior standing.

WRIT 495 Special Study
1-3 hours. Individualized study related to the student's needs and interests. Open to exceptional students at the discretion of the faculty.

Degrees Offered

To complete an undergraduate academic program at George Fox University, a student must select a major to pursue one of two general degrees—the bachelor of arts or the bachelor of science; or the professional degrees—the bachelor of science in athletic training or the bachelor of social work. A course of study includes three basic components: general education, the major field, and supporting and/or elective courses. Minor fields are optional and are composed of elective courses that have been packaged for identification of a vocational purpose or an interest.

Catalog Requirements

Students are subject to the program requirements of the catalog under which they enter the university (i.e., semester of matriculation). Students who must be readmitted following withdrawal are subject to the program requirements of the catalog under which they reenter. Readmitted students must meet any new or revised graduation requirements as listed in the catalog at the time of readmission.

Major and Minor Requirements

Admission to a Major

Students may enroll at George Fox University with or without a specific major in mind. However, students must formally declare their major with the registrar. A first-year student should declare his or her major by the beginning of the second semester.

Some departments have an application and screening process for admission to a major. In those cases, the declaration of major form is considered to be a statement of intent, and the process is complete only when the department admits the student to the major.

Admission to the university does not imply automatic admission to a major. Entry into George Fox University may be with a major as an objective, but there is a process for declaring a major.

In most cases, admission to a major will include meeting initial standards, as in the example of admission to teacher education and music. Admission to a major is normally accomplished no later than the end of the junior year, or before the completion of 90 credits.

A major is successfully completed when all major courses are completed with no grade below a C- and with a major GPA of 2.0 or above. A minimum of 10 semester hours within the major must be completed in residency.

Interdisciplinary Studies Majors

The interdisciplinary studies major consists of a minimum of 48 semester hours with either a 24/12/12-hour option from three fields or a 24/24-hour option from two fields. A field must consist of approved courses from any traditional undergraduate major, minor, or concentration currently offered according to the undergraduate catalog. Of these hours, 30 must be upper division. The 24/12/12 and the 24/24 options are permitted at the discretion of each department. The designation of the degree (BA or BS) for the 24/12/12 option is determined by the subject of the 24-credit concentration. The designation of the degree (BA or BS) for the 24/24 option is determined by the subject of both 24-hour concentrations. If the degrees for the two subjects differ, the student may elect BA or BS. The student must complete a contract form prepared in consultation with his or her advisor, the registrar, and the department chairperson of each concentration.

A student pursuing an interdisciplinary studies major as a second degree or second major may not choose as a subject area a discipline that is the student's first major or minor.

Selection of a Minor

A minor is a package of elective courses that have a common bond and that identify certain interests and competencies. Usually a minor consists of an approved group of courses with no fewer than 18 semester hours, 6 of which must be upper-division credit. The registrar's office will provide information on requirements, or some are listed in this catalog.

A minor is successfully completed when all minor courses are completed with no grade below a C- and with a minor GPA of 2.0 or above.

Graduation Requirements

Degrees

George Fox University confers these undergraduate degrees: bachelor of arts, bachelor of science, and bachelor of science in athletic training, and bachelor of social work.

Requirements

A student wishing to receive a bachelor of arts, bachelor of science, bachelor of science in athletic training, or a bachelor of social work degree must meet the following requirements:

1. Accumulate at least 126 semester hours with a minimum cumulative and major GPA of 2.0 (engineering and music education majors must complete additional requirements but may graduate within the 126 hour minimum should program requirements be waived, such as through sufficient SAT scores). The GPA is computed on work taken at George Fox University only;
2. Accumulate at least 42 upper-division semester hours (courses numbered 300 or above);
3. Complete the general education requirements;
4. Complete a major in a chosen area with no grade below a C-;
5. Complete at least 30 semester hours in residency (20 hours must be in senior year; 20 of the last 30 hours must be completed at George Fox University);
6. Complete at least 10 hours of one's major in residency;
7. File an Application for Degree form not later than completion of 93 semester hours toward graduation (normally two semesters before expected graduation);
8. Pay in full all accounts at Student Financial Services.

In order to participate in commencement and baccalaureate ceremonies, a student must have completed all degree requirements. Exceptions include a student registered for a post-commencement May term course that is part of the degree program, and a fourth-year engineering student eligible for the B.S. degree in applied science whose first year in a cooperating engineering school may not be completed at the time of the George Fox University commencement.

Second Degree

A student wishing to receive a second or concurrent degree must meet the following requirements:

1. Complete a minimum of 30 semester hours for the "second" degree above the minimum 126 hours required for the "first" degree;
2. Meet the general education and major requirements for each degree;
3. Be in attendance the last two semesters, or 30 hours, preceding the awarding of the "second" degree;
4. Pay an additional $20 graduation fee if participating in one ceremony; otherwise, pay an additional $50 graduation fee for the "second" degree.

The above requirements also apply to students who earned their first bachelor's degree at another institution. For these students no general education is required unless the major has specific general education requirements which must be satisfied. Transfer credit will only be awarded for major requirements of the second degree and limited so as not to reduce the minimum requirements above.

General Education Program

General education is sometimes called a core curriculum, or general studies. It is that part of the college experience required of all graduates (although options may be permitted within certain programs) that gives them a common heritage and helps implement the distinctive university mission.

General education requirements total 54 semester hours. Certain lower- and upper-division courses in general education are required of all students. The specified courses and the options listed below provide knowledge and skills in support of cultural perspectives and major programs. Since some majors have specified certain of the options stated below, students should check the major requirements described for their selected majors. A single course may fulfill only one general education requirement. However, one course may be applied to general education, and/or multiple majors, and/or multiple minors.

Freshmen

All freshmen are expected to register for WRIT 110 College Writing (3) in the first year. Additionally, all first-semester freshman students who matriculate in the fall are required to enroll in GEED 130 First Year Seminar (1).

All new students with less than junior standing are expected to register for BIBL 100 Bible Survey (4), or BIBL 101 Literature of the Old Testament (3) and BIBL 102 Literature of the New Testament (3), and other general education courses during the first year.

Transfer Students

Transfer students should consult closely with their faculty advisors concerning their general education requirements. They will generally be expected to fulfill the requirements of the catalog under which they entered George Fox University.

General Education Requirements

Senior Capstone (3 hrs)

GEED 490 Liberal Arts and Critical Issues (3). This course is designed to encourage students to integrate their specialized knowledge and general education with Christian faith, in the context of addressing a public issue of current significance. The course explores how various disciplinary approaches to discerning truth may contribute to collaborative social action. Students will participate in groups to research the chosen public issue and formulate an action proposal. Individual students will be asked to formulate their own statement of faith, learning, and professional integration.

NOTE: This course is required for all transfer students, except for those with an accepted Oregon or Washington associate of arts transfer degree of at least 60 semester hours.

Bible and Religion (10 hours)

1. BIBL 100 Bible Survey (4). Freshmen are required to take this course, or given a superior placement examination, a 3-hour lower-division Bible elective. Students may substitute BIBL 101 Literature of the Old Testament (3) and BIBL 102 Literature of the New Testament (3). If substituted, both courses must be taken.
2. RELI 300 Christian Foundations (3)
3. One of the following elective courses in Bible:
   BIBL 240 Wisdom Literature (3)
   BIBL 250 The Psalms (3)
   BIBL 260 Life of Christ (3)
   BIBL 290 Biblical Interpretation (3)
   BIBL 310 Old Testament History (3)
   BIBL 330 The Prophetic Writings (4)
   BIBL 350 Writings of John (3)
   BIBL 360 Women and the Bible (3)
   BIBL 385 Selected Bible Topics (3)
   BIBL 390 Biblical Basis for Peacemaking (3)
   BIBL 411 Acts and the Pauline Epistles I (3)
   BIBL 412 Acts and the Pauline Epistles II (3)
   BIBL 480 General Epistles (3)
   Students who are members of the Friends Church are required to substitute RELI 260 History and Doctrine of Friends (3).

Bible and Religion Requirements for Transfer Students (6-7 hours)

- Transfer students with fewer than 62 semester hours must fulfill the regular general education requirements as stated above.
- Transfer students with an accepted Oregon or Washington associate of arts transfer degree of at least 60 hours and transfer students with 62 semester hours or more must fulfill the following:
  1. Take one of the introductory Bible classes:
     BIBL 100 Bible Survey (4)
     BIBL 101 Literature of the Old Testament (3)
     BIBL 102 Literature of the New Testament (3)
  2. Take RELI 300 Christian Foundations (3) (students who are members of the Friends Church may substitute RELI 260 History and Doctrine of Friends [3])

Communication (6 hours)

- WRIT 110 College Writing (3) (may be waived by a verbal SAT score of 670 or above)
- Choose one of the following:
- COMM 100 Introduction to Communication (3)
- THEA 100 Acting I - Fundamentals (3)
- THEA 220 Oral Interpretation of Literature (3)

Health and Human Performance (3 hours)

- HHPA 120 Lifelong Fitness (2)
- One additional hour of physical education activity is required to complete the university's general education requirement. This requirement may be satisfied in the following ways:
- Human performance activity or adapted activity class (1).
- Up to one hour may be waived upon successful completion of proficiency tests in selected areas. A current Red Cross Lifeguarding or Water Safety Instruction certificate will waive 1 hour without further examination (the credit hour waived will be added to elective credits for the degree).
- One hour toward the 3-hour requirement may be earned on intercollegiate athletic teams. Only 1 hour in any one sport will count.
- Any professional activity class meets 1 hour of the requirement, by permission only (HHPE 221, 222, 223, 226, 228, 232).
- Military service may waive 1 hour (the credit hour waived will be added to elective credits for the degree).

Humanities (11 hours minimum)

Choose a minimum of 11 hours, taking four courses from the options listed below, including at least one course and no more than two courses from each of the following areas: fine arts, history, and literature.

Fine Arts

If a student chooses to take two courses in fine arts to fulfill the humanities general education requirement, one must be art and one must be music.

ARTS 111 Drawing (3)
ARTS 216 Art History Survey to 1450 (3)
ARTS 217 Art History Survey from 1450 (3)
MUSI 100 Music Fundamentals (2)
MUSI 110 Understanding Jazz (2)
MUSI 120 The World of Music (2)
MUSI 210 Keyboard Literature (2)

History

HIST 110 Western Civilization to 1648 (3)
HIST 120 Western Civilization from 1648 (3)
HIST 151 United States to 1865 (3)
HIST 152 United States from 1865 (3)

Literature

LITR 100 Introduction to Literature (3)
LITR 220 Great American Writers (3)

LITR 236 Ancient World Literature (3)
LITR 237 World Literature, Medieval to Modern (3)
LITR 238 Contemporary World Literature (3)
LITR 240 Understanding Drama (3)
LITR 270 Great British Writers (3)
LITR 280 Literary Foundations of Women's Studies (3)
LITR 326 American Literature to 1865 (3)
LITR 327 American Literature, 1865-1914 (3)
LITR 328 American Literature, 1914-Present (3)
LITR 376 British Literature to 1660 (3)
LITR 377 British Literature, 1660-1830 (3)
LITR 378 British Literature, 1830-Present (3)
LITR 379 Shakespeare (3)

Philosophy (choose a maximum of one course)
PHIL 150 Introduction to Philosophy (3)
PHIL 180 Ethics (3)
PHIL 270 Philosophy of the Arts (3)

Sciences (15 hours minimum)

Choose a minimum of 15 hours from the options listed below. Students must choose one course from math, two courses from natural science, and two courses from social science.

Mathematics
Waiver of 3 hours of math requirement for an SAT score of 600 or above (the 3 credit hours waived will be added to elective credits for the degree)
CSIS 201 Introduction to Computer Science I (3)
CSIS 202 Introduction to Computer Science II (3)
MATH 150 The World of Mathematics (3)
MATH 180 College Algebra (3)
MATH 190 Precalculus Mathematics (4)
MATH 201 Calculus I (4)
MATH 202 Calculus II (4)
MATH 260 Discrete Mathematics (3)
MATH 301 Calculus III (3)

Natural Science
BIOL 100 Foundations of Biology (3)
BIOL 211 General Biology I (4)
BIOL 212 General Biology II (4)
BIOL 331 Human Anatomy and Physiology I (4)
BIOL 332 Human Anatomy and Physiology II (4)
CHEM 100 Chemistry of Life (3)
CHEM 110 Chemistry and Our Environment (3)
CHEM 151 General, Organic, and Biological Chemistry I (4)
CHEM 152 General, Organic, and Biological Chemistry II (4)
CHEM 211 General Chemistry I (4)
CHEM 212 General Chemistry II (4)

GSCI 120 Environmental Science (3)
GSCI 130 Fundamentals of Geology (3)
PHYS 150 Physics of Everyday Life (3)
PHYS 190 Astronomy (3)
PHYS 201 General Physics I (4)
PHYS 202 General Physics II (4)
PHYS 211 General Physics with Calculus I (4)
PHYS 212 General Physics with Calculus II (4)

Social Science

ECON 201* Principles of Microeconomics (3)
ECON 202* Principles of Macroeconomics (3)
PSCI 150 Introduction to Political Science (3)
PSYC 150 General Psychology (3)
SOCI 150 Principles of Sociology (3)
*Students may select one, but not both, of these courses to fulfill general education requirements.

Global and Cultural Understanding (6 hours minimum)

Choose a minimum of 6 hours from the courses listed below. Students must take 3 hours from the Global Understanding section and 3 hours from either the Global Understanding or Cultural Understanding sections.

Cultural Understanding (Domestic)

GEED 355 Cross-Cultural Experience (Domestic) (3)
HIST 380 The African-American Experience (3)
SOCI 380 Race, Ethnicity, and Class (3)

Global Understanding

COMM 220/420 Intercultural Communications (3) *(This course may only be taken once to meet the Global Understanding requirement.)*
COMM 410 Gender Communication Across Cultures (3)
ECON/SOCI 370 Global Political Economy (3)
ESLA 240 Adjunct Listening (3)
ESLA 250 Adjunct Reading (3)
ESLA 260 Academic Writing (5)
ESLA 280 Speech (3)
ESLA 281 Reading and Vocabulary for Academia (3)
ESLA 282 Writing and Research for Academia (5)
ESLA 283 Speech and Listening for Academia (3)
FCSC 310 Food, Culture, and Society (3)
FREN 102 Introductory French II (4)
FREN 201 Intermediate French I (4)
FREN 202 Intermediate French II (4)
FREN 301 Intermediate/Advanced French I (4)
FREN 302 Intermediate/Advanced French II (4)
GEED 365 Cross-Cultural Experience (International) (3)
GEOG/INTL 200 Cultural Geography and Global Relationships (3)
HIST 250 Latin America (3)

HIST 340 History of the Middle East (3)
HIST 343 History of Southern Africa (3)
HIST 360 Modern Russia (3)
HIST 370 Modern China and Japan (3)
JPNS 102 First-Year Japanese II (3)
JPNS 201 Second-Year Japanese I (3)
JPNS 202 Second-Year Japanese II (3)
*LITR 236 Ancient World Literature (3)
*LITR 237 World Literature, Medieval to Modern (3)
*LITR 238 Contemporary World Literature (3)
LITR 480 International Women's Voices (3)
MUSI 130 Music in World Cultures (2)
PSCI/INTL 230 Introduction to International Relations (3)
PSCI/INTL 303 International Conflict and Peace (3)
PSYC 353 Culture and Psychology (3)
RELI/INTL 330 Introduction to the World Christian Movement (3)
RELI 360 Cross-Cultural Christian Outreach (3)
RELI/INTL 440 World Religions (3)
SOCI/INTL 310 Cultural Anthropology (3)
SPAN 102 Introductory Spanish II (4)
SPAN 201 Intermediate Spanish I (4)
SPAN 202 Intermediate Spanish II (4)
SPAN 301 Intermediate/Advanced Spanish I (4)
SPAN 302 Intermediate/Advanced Spanish II (4)
*The three LITR courses may count for the Humanities or for Global Understanding, but not for both.

Alternative Credit

Course Challenge Programs

Students may reduce the number of required courses and add flexibility to their undergraduate years through one or more of the following programs.

Advanced Placement

College credit may be granted in several subject areas to the student who completes a college-level course in high school and receives a score of three or better through the Advanced Placement program sponsored by the College Entrance Examination Board. Students expecting advanced placement credit should request, at the time the test is taken, for scores to be sent to George Fox University.

College Level Examination Program

The Educational Testing Service of the College Board provides nationally recognized standardized testing through which college credit may be earned or course proficiency verified. This is the College Level Examination Program (CLEP). Testing through the CLEP General Examinations is designed to verify competency in general education. Tests may be taken in five areas for a maximum of 32 semester hours of credit. (General examinations are to be taken prior to the completion of the first semester of enrollment as a freshman at George Fox University.) It is recommended that the English Composition examination with essay be taken in June prior to college enrollment. Testing through the CLEP Subject Examinations provides verification of competency in selected academic fields such as foreign language, mathematics. These may be taken at any time (unless concurrently enrolled in an equivalent course) and assume competency has been gained in nonclassroom settings. See the registrar for details and test applications. The tests are administered by the registrar, as authorized by the College Entrance Examination Board, which sponsors the examinations.

Credit by Examination

Courses offered at George Fox University for which CLEP testing is not available may be challenged by examination at the discretion of the department. There is a test fee of $60 per examination. See the registrar for details.

International Baccalaureate (IB)

College credit may be granted in several subject areas to students who complete college-level work through the program. A minimum score of five is required on High Level examinations for credit consideration. Students must provide the registrar's office with a copy of the transcript to receive consideration. Credits awarded as a result of documentation will be accepted as transfer credit.

Proficiency Test

A student may fulfill general education and some program requirements or become eligible for registration in advanced courses by passing a proficiency test for the area involved. No fee is charged for proficiency testing, and credit is not granted. Typical academic areas for which proficiency tests are available are languages, music, Bible, and physical education activity courses.

A placement test is generally required prior to registration for George Fox University modern language classes. Placement tests are generally given during new student orientation.

A student from a non-English-speaking nation may fulfill the language requirement by demonstrating

proficiency in the English language.

Course Numbering System

Courses are designed for levels of experience and difficulty, and the course numbering system reflects this. Courses numbered 000 to 099 are pre-college courses and carry no credit toward degree requirements. Courses numbered 100 to 299 are lower-division level and normally are open to freshmen and sophomores. Courses numbered 300 to 499 are upper-division level and normally are open to juniors and seniors. Freshmen may not enroll in courses at the 300 and 400 level except by permission of the chairperson of the department in which the course is offered. A 300-numbered course may be open to sophomores. Exceptions may be made when prerequisites are met and general education requirements have been fulfilled on schedule. Courses at the 500 to 700 levels are graduate courses.

- Course numbers ending in 5 (e.g., COMM 305) designate courses that may be pursued for several semesters under the same number, with all credits applicable, within stipulated limits.
- Generally, course numbers ending in 1 and 2 (e.g., CHEM 211, 212) designate courses offered sequentially through the year. Generally, a continuing course may not be entered in the second semester without completing the previous semester or obtaining the permission of the instructor.
- Course numbers ending in 75 designate supervised teaching or field education courses for which application is necessary through the registrar. See Field Education.
- Courses designated 285 and 485 are special classes that may be offered in any department to reflect single-time offerings of visiting professors or group seminars.
- Courses designated 295 and 495 are individualized special study programs not a part of the regular curriculum. Application forms are available from the registrar and, when completed, become a learning contract between the student and the instructor. A student may not be enrolled in more than 4 hours of 295/495 in any regular semester and may not accumulate more than 12 hours of 295/495 for graduation.
- Course number 490 designates a senior seminar that is completed in one semester; numbers 491 and 492 designate a senior seminar completed in two semesters.
- Many 300- and 400-level courses are offered in alternate years. If a year of offering is stated, it should be assumed that the course will be offered in alternate years only.
- A GEED prefix refers to general education.

Preprofessional Programs

Premedicine/Predental/Preveterinary Program

George Fox University is pleased with the excellent success students have had in gaining admission to medical, dental, and veterinary schools. Students who wish to pursue a career in medicine, dentistry, or veterinary medicine usually select a major in biology or chemistry. They may, however, choose any academic major the university offers as long as they take certain specific courses required by the professional schools. George Fox University offers all of the science and mathematics courses required by the professional schools of the region. Even though specific requirements differ with each medical school, the requirements uniformly include the following:

BIOL 101 General Biology I
BIOL 102 General Biology II
CHEM 211 General Chemistry I
CHEM 212 General Chemistry II
CHEM 331 Organic Chemistry I
CHEM 332 Organic Chemistry II
PHYS 201 General Physics I
PHYS 202 General Physics II
One year of mathematics, usually fulfilled by MATH 201 and 202, Calculus I and II.
Other highly recommended courses are as follows:
BIOL 310 Developmental Biology
BIOL 322 Comparative Vertebrate Anatomy
BIOL 330 Animal Physiology
BIOL 350 Genetics
BIOL 370 Microbiology
BIOL 420 Cell Biology
CHEM 310 Analytical Chemistry
CHEM 341 Biochemistry
CHEM 401 Physical Chemistry I
CHEM 402 Physical Chemistry II

It is important to consult with your academic advisor early in setting up a plan for a strong program. Students should be aware that, in addition to meeting the minimal entrance requirements, good grades (3.5 grade point average or above) and a strong performance on the national admission tests (MCAT, DAT, and VAT, usually taken in the spring of the junior year) are essential. Also necessary for admission are letters of recommendation and an interview with the professional school's admission committee.

Our world needs Christian health professionals strong in character and maturity who have had broad educational and social experiences. George Fox University offers excellent opportunities to build these qualities through academic courses in areas such as ethics, psychology, computer science, literature, history, and foreign languages, and through varied social opportunities.

Prelaw Program

Students considering law school enjoy a wide range of options in their course of study, which can be worked out with their prelaw advisor. The best preparation for law school (and a legal career) emphasizes a broad liberal arts education as an undergraduate. Students need to prepare themselves to understand complex real-world problems from as many perspectives as possible.

Therefore, prelaw students may choose from many different majors, supplementing the major with electives and general education options that stress writing and oral communication skills, logical and critical thinking, close reading of difficult material, and deeper understanding of society and culture. Prelaw students are strongly encouraged to take PSCI 260 Introduction to Law, and to join in activities with other prelaw students.

The university's prelaw advisor will work with students to help design their courses of study, plan for entry into law school, and sponsor events to give students exposure to the law and the legal profession.

Transfer Credit Policies

Students who have completed work at other educational institutions may be entitled to transfer credit by presenting official transcripts. George Fox University applies the accepted credits toward the general education requirements, electives, and the student's chosen major. Certain criteria are involved in the evaluation:

1. Only course work with a C- or better grade will be accepted. (The GPA does not transfer. A student's GPA is computed on work at George Fox University only.)
2. A maximum of 64 semester hours may be transferred from community colleges.
3. The OTAA or WTAA degree will satisfy all general education requirements except Bible and religion provided students complete 90 quarter hours (60 semester hours) of transferable credit graded C- or better. The OTAA or WTAA degree may not necessarily meet school, department, or major requirements with regard to courses or GPA.
4. A maximum of 40 semester hours of Bible and Christian ministries may be applied on a degree in a major other than Bible and Christian ministries.
5. A maximum of 15 semester hours of approved correspondence work may be applied toward a degree program.

Transfer credit will be evaluated and assigned a George Fox University course number based on the closest match between the originating course and the George Fox University course descriptions.

Courses that are not equivalent will be assigned to the closest matching four-letter department code and assigned a 285 (lower division) or 485 (upper division) number. HHPA courses will be assigned a 185 (lower division) or 385 (upper division) number.

When the closest match for an originating lower-division course is a George Fox University upper-division course, the number 285 will be assigned and the student may receive a waiver for the upper-division course if required. When the closest match for an originating upper-division course is a George Fox University lower-division course, the student may elect to have a 485 number assigned (to count toward the upper-division course requirement) and receive a waiver for the lower-division course.

Any evaluation of transfer credit is to be considered tentative until the student has completed 12 hours in good standing.

Each student must complete a minimum of 30 semester hours in residence for the bachelor's degree. Twenty hours must be in the senior year. Additionally, transfer students must complete at least 60 hours at George Fox University to be eligible for honors at graduation.

Admissions

The Office of Undergraduate Admissions, located on the second floor of the Stevens Center, serves students planning to enroll in traditional undergraduate programs on the Newberg campus. Degree Completion admissions, located in the Portland Center, assists students seeking enrollment in the adult undergraduate degree-completion programs. Admissions counselors are available on both the Portland Center and Newberg campus to assist students.

Basis of Undergraduate Admission

The university admits applicants who evidence academic interests and ability, moral character, social concern, and who would most likely profit from the curriculum and Christian philosophy of George Fox University. These qualities are evaluated by consideration of each applicant's academic record, test scores, recommendations, writing sample, and participation in extracurricular activities. Admission is possible for fall or spring semester.

George Fox University does not discriminate against students on the basis of race, color, national or ethnic origin, gender, age, disability, or any other status to the extent prohibited under applicable nondiscrimination law in the administration of its admission policies, scholarship and loan programs, educational programs, athletics programs, cocurricular activities, or other university-administered programs.

Admission Procedures for Freshmen

In order to provide a solid foundation for college-level work, it is recommended that the applicant present the equivalent of 16 academic units from an approved high school. The following units are suggested: English, 4; social studies, 3; science, 2; mathematics, 2; foreign language, 2; and health and physical education, 1.

Approximately 90 percent of the freshman class enroll with an A or B high-school grade average. The Admissions Committee may offer provisional admission to students with lower high school grades or low entrance examination scores.

Procedures

1. Write to the Office of Undergraduate Admissions, George Fox University, 414 N. Meridian #6089, Newberg, OR 97132, for information and admission forms. Or visit our website.
2. Complete the Application for Admission and return it to the undergraduate admissions office. Include a nonrefundable application fee of $40. The postmark deadlines are: Dec. 1 for Early Action, Feb. 1 for Regular Decision, and Nov. 1 for spring semester.
3. Request an official transcript of academic credit from the secondary school last attended.
4. Have one recommendation form completed and sent to the admissions office.
5. Submit entrance examination scores. The Scholastic Aptitude Test (SAT) [GFU code is 4325] or American College Test (ACT) [GFU code is 3462] will be accepted. The writing portion of the ACT is not required. Tests should be taken in your junior year or early in your senior year. Contact your high school principal or counselor for information concerning these tests. Soon after the admission file is completed, the applicant is notified of the Admissions Committee's decision. Updates to test scores will be considered until Feb. 1.
6. If applying for financial aid, a Free Application for Federal Student Aid (FAFSA) must be submitted

online at www.fafsa.ed.gov as soon after Jan. 1 as possible. The GFU code for FAFSA is 003194. Forms may be obtained from high school counseling offices or by writing to Student Financial Services at George Fox University. After students have been accepted for admission, they are considered for financial assistance. To permit maximum consideration for financial aid, it is recommended that the application process be completed by March 1.

7. An enrollment deposit of $300 must be submitted by each new student. This deposit reserves housing and a place in the registration sequence, so the deposit should be submitted as soon as possible following notification of acceptance. For fall semester, deposits are due by May 1 and are fully refundable until that date. After May 1, all deposits are nonrefundable. For spring semester, deposits are due by Dec. 1 and are nonrefundable.

Admission Procedures and Policies for Transfer Students

1. Write to the Office of Undergraduate Admissions, George Fox University, 414 N. Meridian #6089, Newberg, OR 97132, for information and admission forms. Or visit our website.
2. Complete the Application for Admission and return it to the admissions office. Include a nonrefundable application fee of $40. The priority due date is March 1 for fall semester and Nov. 15 for spring semester.
3. Request an official transcript from each college where previously registered. An applicant may also be asked to furnish a high school transcript.
4. Transfer students applying for admission during the first year out of high school should submit entrance examination scores. The Scholastic Aptitude Test (SAT) or American College Test (ACT) will be accepted. You will also need to submit your final high school transcript.
5. Have one recommendation form completed and sent to the admissions office. A student must be free from academic or behavioral probation or suspension at all colleges previously attended to be eligible for admission to George Fox University. Soon after the admission file is completed, the applicant is notified of the Admissions Committee's decision.
6. If applying for financial aid, a Free Application for Federal Student Aid (FAFSA) must be submitted online at www.fafsa.ed.gov as soon after Jan. 1 as possible. The GFU code for FAFSA is 003194. Forms may be obtained from your current college financial aid office or by writing to Student Financial Services at George Fox University. After students have been accepted for admission, they are considered for financial assistance. To permit maximum consideration for financial aid, it is recommended that the application process be completed by March 1.
7. An enrollment deposit of $300 must be submitted by each new student. This deposit reserves housing and a place in the registration sequence, so the deposit should be submitted as soon as possible following notification of acceptance. Until May 1, it is refundable by written request. After May 1 a deposit is not refundable. The spring semester enrollment deposit deadline is Dec. 1 and is not refundable after that date.

International Students

George Fox University is authorized under federal law to enroll nonimmigrant alien students. Prospective students who are not U.S. citizens are encouraged to apply early. To be considered for admission, an international student must complete all general admission procedures required of American students and submit a Declaration of Finances form or demonstrate adequate funds by a certified bank statement. Immunizations must be up to date and documented.

International students (F-1 visa students or J-1 visa students) must show proficiency in the English language. The following table lists required levels of proficiency based on the language assessment and the corresponding placement in George Fox University coursework:

Paper-Based TOEFL	Internet-Based TOEFL	IELTS	Placement at George Fox University
550+	79+	5.5+	Regular degree coursework
500-540	61-78	5	Regular degree coursework with English tutorial support
Below 500	Below 61	Below 5.0	English Language Institute coursework

Readmission of Former Students

To apply for readmission after an absence of one or more semesters, a student should request an Application for Readmission from the Office of Undergraduate Admissions. By May 1, a $300 enrollment deposit must be submitted by each readmitted student. Until May 1, it is refundable. The spring semester enrollment deposit deadline is Dec. 1 and is not refundable after that date. Generally readmitted students must meet any new or revised graduation requirements as listed in the catalog at the time of readmission.
Students who drop out to attend another program risk acceptance of that credit on return unless such has been approved by the registrar prior to leaving.

Advanced Placement

Past learning and present ability may recommend that course work begin at an advanced level. This may involve granting of credit or waiving certain prerequisites or university requirements. See General Education Requirements and Course Challenge Programs for more information.

Early Admission of High School Students

An early admission program is available to qualified high school students. This permits study at George Fox University while a student completes a high school program.

Eligibility Requirements

- An applicant must have completed the sophomore year of high school.
- An applicant who has completed the senior year of high school is not eligible.
- Early admission students must receive grades of C or better to remain in the program.

Application Procedures for Early Admission

- Contact the registrar's office for the admission form.
- Complete the Application for Early Admission and return it to the registrar's office with the $40 application fee, and indicate your course selection.
- Only one course of no more than 4 hours may be taken during any regular semester.

Cost and Credit

- Early-admission students may take a maximum of 12 semester hours of work with a tuition charge of $50 per credit hour.
- Credit during early admission may be applied to degree programs at George Fox University without additional charge.
- Credit earned during early admission may be transferred to other colleges or universities upon payment of regular tuition and fees in effect at the time the course was taken.
- After the completion of 60 semester hours (two years) at George Fox University, a student may transfer the hours taken during early admission without an additional payment.

Admission Following Participation in the Early Admission Program
A high school student taking courses in the Early Admission Program and wishing to be admitted to the university as a regular student must complete all application procedures for admission to the university. See Basis of Undergraduate Admission. Since an early admission participant has already paid an application fee, an additional fee will not be required.

Older Adults

Any person 62 years of age or older may enroll in traditional undergraduate courses for credit or audit without a tuition charge. A service fee of $25 per semester is required, plus a fee for materials if such are essential to the course. Students are not eligible to participate in institutional financial aid programs. Unless limited by space, equipment, or essential background, all courses are open. Application is through the registrar's office. A one-time application fee of $40 is required. Counseling in regard to courses is also available in the registrar's office. All school of professional studies courses and graduate program courses are excluded.

Auditors

Subject to instructor and registrar approval, any regular or special student may audit courses from which he or she wishes to derive benefit without fulfilling credit requirements. Auditors may enroll on a space-available basis. Enrollment for audit must be established with the registrar at time of registration. Class attendance standards are to be met. Auditors pay a reduced tuition rate, generally one-half regular tuition. Students' cost may exceed the block-rate tuition if the audit causes them to exceed the 18-hour maximum. Students do not complete course requirements, and no college credit is earned. Audits will not be changed to credit after the registration change deadline. Students who elect to complete course requirements as an auditor may not request a change to credit after the registration change deadline. Students may not complete or submit additional course work to modify the course registration for credit after the conclusion of the course.

High School Non-graduates

A student who does not hold a high school diploma may be admitted on the basis of the General Educational Development (GED) Test, provided the average standard score is at least 530 with no one score below 480. A high-school or two-year-college counseling center can supply testing details.

Spouse Enrollment Program

Spouses of full-time undergraduate and graduate George Fox University students may take traditional undergraduate courses, without credit, at a reduced rate. After completing a part-time application form and paying a $40 fee, the spouse may take up to two courses per semester for $50 per credit. Audited courses are not eligible to be converted to credit at a later date.

Student Life

Located in the Stevens Center, this office is responsible for the organization and programming of residence life and housing, student government, student activities, career services, first year experience, multicultural services, security, student leadership, health and counseling services, international student services, disability services, new-student orientation, the academic resource center, the Tilikum Center for Retreats and Outdoor Ministries, Act Six, and campus ministries. This office also offers individual attention to problems arising among students. Students are encouraged to contact this office whenever they are concerned about aspects of university life not specifically related to academic programs. The vice president for student life coordinates these services and programs.

Student Activities and Organizations

Student organizations provide opportunities for the development of leadership qualities and interpersonal relationships. They are designed to supplement classroom work with practical experience and to provide recreational and social activities. These organizations include student government, athletics, music, drama, publications, social and religious organizations, and various special-interest groups. Students are encouraged to participate in areas of their interest.

In addition, a variety of honor societies are available for student involvement, including Sigma Zeta (natural science and math), Alpha Chi (general academics and character), and Psi Chi (psychology).

ADVANCE Leadership Development Program and Fox Mentoring Program

The ADVANCE Leadership Development Program is a comprehensive lineup of cocurricular experiences designed specifically to enhance and develop the leadership skills and abilities of George Fox University students. Leadership workshops and events take place throughout each semester. All students are encouraged to participate.

In addition, the Fox Mentoring Program exists to provide connections for meaningful relationships between students, staff, and alumni. There are three branches to the Fox Mentoring Program. The first branch is one-on-one mentoring where a student is paired with a faculty, administrator, staff, or alum mentor. The second branch is couples mentoring, available to seriously dating, engaged, or married students at George Fox. The third branch, peer-to-peer mentoring, allows upper-class students to mentor freshmen and sophomores. Every undergraduate student is encouraged to and eligible to apply each semester.

Athletics

Mission Statement
The George Fox University Department of Intercollegiate Athletics is dedicated to providing quality programs and athletic experiences consistent with the stated mission and values of the university.

We are committed to the development of the whole person. The department strives to educate and involve students and the university community in the promotion of personal growth. This personal growth involves intellectual maturity, Christian character, and competitive excellence. The department strives to prepare men and women to be student-athletes distinguished by integrity, winning effort, and Christian conduct.

We expect our student-athletes to pursue excellence on the courts and playing fields, in the classroom, and in our community. Students who choose to participate in our athletic programs are challenged to lead lives committed to health, discipline, perseverance, and stewardship. We expect our players to emulate Christ in all aspects of their lives including their academic and athletic endeavors.

Description of Athletics Program
Intercollegiate sports for men include soccer, cross country, basketball, baseball, tennis, and track and field. Women's intercollegiate sports include soccer, cross country, volleyball, basketball, softball, golf, tennis, and track and field.

Intercollegiate athletics function under the guidelines of the National Collegiate Athletic Association (NCAA) - Division III and the Northwest Conference.

The basic aims of the intercollegiate athletic program are as follows:
Colleges and universities in NCAA Division III place highest priority on the overall quality of the educational experience and on the successful completion of all students' academic programs. They seek to establish and maintain an environment in which a student-athlete's athletics activities are conducted as an integral part of the student-athlete's educational experience. They also seek to establish and maintain an environment that values cultural diversity and gender equity among their student-athletes and athletics staff.

To achieve this end, NCAA Division III institutions:

1. Place special importance on the impact of athletics on the participants rather than on the spectators and place greater emphasis on the internal constituency (students, alumni, and institutional personnel) than on the general public and its entertainment needs;
2. Award no athletically related financial aid to any student;
3. Encourage the development of sportsmanship and positive societal attitudes in all constituents, including student-athletes, coaches, administrative personnel, and spectators;
4. Encourage participation by maximizing the number and variety of athletics opportunities for their students;
5. Assure that the actions of coaches and administrators exhibit fairness, openness, and honesty in their relationships with student-athletes;
6. Assure that athletics participants are not treated differently from other members of the student body;
7. Assure that athletics programs support the institution's educational mission by financing, staffing, and controlling the programs through the same general procedures as other departments of the institution;
8. Provide equitable athletics opportunities for males and females, and give equal emphasis to men's and women's sports;
9. Give primary emphasis to regional in-season competition and conference championships;
10. Support student-athletes in their efforts to reach high levels of athletics performance, which may include opportunities for participation in national championships, by providing all teams with adequate facilities, competent coaching, and appropriate competitive opportunities.

Intramurals

The university has a broad-based, student-led intramural program, which includes men's and women's flag football, 3-on-3 basketball, 5-on-5 basketball, racquetball, and tennis. Also included in the program are coed

competitions in volleyball, indoor soccer, and floor hockey.

Spiritual Formation Requirements and Campus Ministries

Receiving a well-rounded education means growing intellectually, emotionally, and spiritually, and creating a strong foundation on which lives, hopes, and dreams can be built. Helping facilitate this kind of growth is the focus of the Office of Campus Ministries and its Spiritual Formation Program, which is made up of three primary components: 1) praise and worship, 2) study, and 3) ministry/service.

By partnering with George Fox faculty, staff, and administration in providing a wide variety of opportunities, the campus pastor and the director of outreach and discipleship journey with students interested in investigating who God is; present Jesus Christ to students in credible, creative, and caring ways; equip students for service; and disciple new Christians. The goals of helping students embrace and live out the priorities of loving God, hearing God, obeying God, and serving God are always at the forefront, whether in one-on-one situations or in small or large groups. Freshmen, sophomores, and juniors carrying a full class load (12 hours or more) are required to earn 21 Spiritual Formation credits each semester. Throughout each semester, students earn these credits by their involvement in one, two, or all three components of the Spiritual Formation Program.

Praise and Worship. Chapel is a time of praise, worship, and learning. Chapel is held Monday and Wednesday mornings 10:40-11:30 a.m. the first 14 weeks of each 15-week semester. In addition to the weekly Monday/Wednesday chapel services, there are many other daytime and evening opportunities to receive Spiritual Formation credit, as well.

Study. Small-group studies offer a time for interaction, questioning, and fellowship with other students. Some small groups study specific books of the Bible, while others use a variety of other books and study guides as their starting point for discussion and faith learning. Participants can receive four Spiritual Formation credits for participating in a study.

Ministry/Service. Ministry and service opportunities allow students to live out what they say they believe. Serve trips take place during the third week of Christmas break and the whole week of spring break-reaching communities in West Coast areas and beyond. Participants can receive four Spiritual Formation credits.

Media

Student publications include a newspaper, *The Crescent*; the yearbook, *L'Ami*; a photo directory, the *Bruin Directory*; and *The Wineskin*, the literary publication. Student editors direct their staffs in the selection and preparation of materials for these publications. The student radio station, KFOX, broadcasts campus news and music in a contemporary Christian format. KFOX also has expanded into broadcasting George Fox sporting events. The *Campus Album Project* is the annual student album.

Music

Participation in music ensembles is open to all George Fox University students. Ensemble opportunities include Concert Choir, Chorale, Chamber Singers, Jazz Choir, Symphonic Band, Jazz Band, the Chehalem Symphony Orchestra, and many other chamber ensembles. These groups perform at campus events as well as community venues. Ensembles may be taken for credit or as an extra-curricular activity.

Residence Life

On the Newberg campus, approximately 70 percent of the student body live in campus housing. Interpersonal relationships experienced in campus residence halls, suites, apartments, and houses are strong factors in producing positive personal development. The policies and procedures governing residential living are consistent with the core values of George Fox University.

Full-time students must occupy university-owned housing for three years unless they are approved to live off campus according to established guidelines. For a full description of the off-campus housing request process, see the *Undergraduate Student Handbook* or the housing homepage on the George Fox website.

New students will be mailed a Confirmation of Enrollment form with their admissions packet. The admissions packet also will include information about the housing assignment process. Housing assignments will not be made until the enrollment deposit has been paid. Housing assignments begin late in June and continue through the summer. Housing assignments generally will not be made until a housing selection form is received.

Nine residence halls house approximately 650 students, with approximately 1,200 students living in campus housing. Housing administration is handled by the director of housing in the Office of Student Life. Campus housing is furnished with beds, mattresses, and other essential furnishings. Students are expected to provide their own bedding, towels, etc. Card-operated laundry facilities are provided for each residence.

Specified hours have been established for coed visitation. Additional residential housing and lifestyle expectations are included in the *Undergraduate Student Handbook* provided for each entering student.

Occupants of campus housing are held responsible for damage to their unit and furnishings. Cost of damage or cleaning beyond normal wear, unless such damage has been identified with a particular individual, will be charged on a prorated basis among the occupants of the unit. A final inspection by the resident assistant of each campus-housing unit must be made before a student may leave at the end of the academic year or withdraw from the university. Final check-out from a campus housing unit is complete only with this inspection, after the key is turned in, and after the residence life staff has signed off on all paperwork.

A number of residence hall rooms on campus have been designated and equipped for physically handicapped/disabled student housing as needed. There is access for wheelchairs and accommodation for a guide dog.

Students needing accommodations should contact the Office of Residence Life and Housing well in advance of attendance so that specific attention can be made to assist in providing living arrangements and learning accommodations.

Social Events

The academic year at George Fox University is highlighted by a variety of social functions. Homecoming is one of the major campus events of the year, when the entire university community hosts returning alumni. Various other activities occur throughout the year. The student government's Activities Committee tries to provide one activity every week. Several thematic all-campus social dances are sponsored each year by the Associated Student Community under guidelines approved by the university administration and board of trustees.

Student Government

The Associated Student Community (ASC) of George Fox University is an organization of all undergraduate students with the purpose of serving as a unifying force for the university community and providing opportunities for the enrichment of members' lives.

Theatre
Part of the Department of Performing Arts, the George Fox University Theatre presents three main stage productions each year as well as several other events including student-directed one-acts; *Ten! Ten! Ten!*, a collection of student-directed 10-minute plays; *Theatre Games*, an improvisational showcase; and *Shakespeare Under the Stars*, a showcase of monologues and scenes in celebration of Shakespeare's birthday. Augmenting the on-campus theatre program is the University Players, a theatre troupe that tours throughout the Northwest to churches, prisons, retreats, schools, and marketplaces. Each spring, the University Players hold *Players Presents*, where they deliver a special performance of their work to the on-campus community.

Legal Compliance

George Fox University does not discriminate against students on the basis of race, color, national or ethnic origin, gender, age, disability, or any other status to the extent prohibited under applicable nondiscrimination law in the administration of its admission policies, scholarship and loan programs, educational programs, athletics programs, cocurricular activities, or other university-administered programs. The following offices may be contacted for information regarding compliance with legislation:Â

- Director of the Academic Resource Center: Rehabilitation Act of 1973
- Director of Athletics: Title IX (nondiscrimination on the basis of gender)
- Director of International Student Services: Immigration and Naturalization Act
- Executive Director of Student Financial Services: Title IV (Higher Education Act of 1965 as amended), student consumer information, the Pell Program, Supplementary Educational Opportunity Grants, the Perkins Loan/Direct Loan Program, the Stafford Loan Program, the Parents Loan for Undergraduate Students Program, the Supplemental Loans for Students Program, and veterans' benefits.
- Executive Vice President of Finance and Operations /Chief Financial Officer: wage and hour regulations, The Civil Rights Act of 1964 (race, color, or national origin), and age discrimination
- Registrar: Family Educational Rights and Privacy Act

Disabled Students

The Office of Student Life coordinates services for disabled students. This office also promotes campus awareness of issues and needs of disabled students. Supportive services may be provided, depending on the nature of the disability and availability of resources. Documentation of an existing disability generally will be required.

Specific courses on career exploration, study skills, and writing development are available. Special adaptive physical education classes for students with disabilities are offered through the Department of Health and Human Performance.

Interested students should contact Disability Services and provide documentation of disability and information concerning desired accommodations. Students are encouraged to contact Disability Services as early as possible to make arrangements for necessary support services.

Drug-Free Environment

George Fox University is concerned about the intellectual, physical, psychological, and spiritual well-being of all its students and employees. The community recognizes the danger to one's physical and psychological well-being presented by the use of certain products. Therefore, members of the community are prohibited from using illicit or nonprescribed drugs and substances (including marijuana or narcotics). Under no circumstances are the above to be used, possessed, or distributed on or away from campus. Community members are also expected not to abuse the use of legal substances. For information concerning disciplinary actions, please refer to the student and employee handbooks. Students and employees are provided annually a resource guide concerning drug and alcohol issues.

Anti-Harassment Policy

George Fox University students work in an environment where the dignity of each individual is respected. Demeaning gestures, threats of violence, or physical attacks directed toward another person are not tolerated. This includes hazing or other initiations or any actions that may be hazardous, dehumanizing,

harassing, or humiliating to community members. Also included is the use of telephones, United States or campus mail, or e-mail for the purpose of issuing obscene, harassing, or threatening messages. Also, vandalism of property is unacceptable.

Harassment due to race, color, sex, marital status, religion, creed, age, national origin, citizenship status, workers' compensation status, physical or mental disability, veteran's status, or any other status protected under applicable local, state, or federal law is prohibited.

A person may commit criminal harassment if he or she intentionally harasses or annoys another person by:

- Subjecting another person to offensive physical contact
- Publicly insulting another person with abusive words or gestures in a manner intended and likely to provoke a violent response

Sexual Harassment

Unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature may constitute sexual harassment when:

1. Submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment or academic status;
2. Submission to or rejection of such conduct by an individual influences employment or academic status decisions affecting such individual; or
3. Such conduct has the purpose or effect of interfering with an individual's work performance or creating an intimidating, hostile, or offensive work, academic, or student life environment.

The conduct prohibited may be verbal, visual, or physical in nature. It includes unwelcome sexual advances, requests for sexual favors, physical touching, or the granting or withholding of benefits (e.g., pay, promotion, time off, and grades) in response to sexual contact. More subtle forms of inappropriate behavior such as offensive posters, cartoons, caricatures, comments, and jokes of a sexual nature are prohibited, as they may constitute sexual harassment when they contribute to a hostile or offensive work, academic, or student life environment.

Complaint Procedure for Harassment

If any employee or student believes he or she has witnessed discrimination or harassment, has been discriminated against, or has been subjected to sexual or other forms of harassment, the person should immediately report it as follows:

1. If the alleged incident involves two students (outside the context of student employment), the vice president for student life or the dean of students should be contacted.
2. If the alleged incident involves a student and a faculty member, the academic dean, the provost, or the vice president for student life should be contacted.
3. If the alleged incident involves one or more support staff, administrators, faculty members, or student employees, then a supervisor, the director of human resources, the provost, or any vice president should be contacted.

Complaints are to be investigated promptly and appropriate corrective action taken. No one will suffer retaliation for reporting concerns about discrimination or harassment.

Retaliation is prohibited for good-faith reporting of concerns about discrimination or harassment. Employees who are asked to testify during an investigation are expected to cooperate fully. Retaliation against them for doing so is not tolerated. Any employee found to have engaged in discrimination, harassment, or retaliation

is subject to immediate disciplinary action as deemed appropriate by the university, up to and including termination.

Family Educational Rights and Privacy Act

George Fox University accords all the rights under the Family Educational Rights and Privacy Act (FERPA) to students who are enrolled. No one shall have access to, nor does the institution disclose any information from, students' education records without the written consent of students except to personnel within the institution with direct educational interest, to persons or organizations providing students' financial aid, to accrediting agencies carrying out their accreditation function, to persons in compliance with a judicial order, and to persons in an emergency in order to protect the health or safety of students or other persons. All these exceptions are permitted under the Act.

Students are afforded the right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent. One exception that permits disclosure without consent is disclosure to school officials with legitimate education interests. A school official is a person employed by the university in an administrative, supervisory, academic or research, or support staff position; a person serving on the board of trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an educational record in order to fulfill his or her professional responsibility. Upon request, the university may disclose educational records without consent to officials of another school in which a student seeks or intends to enroll.

At its discretion, George Fox University may provide "directory information" in accordance with the provisions of the Act. Directory information is defined as that information which would not generally be considered harmful or an invasion of privacy if disclosed. The university construes the following information to be "directory information": parents' names and addresses; the student's name, permanent address, local address, temporary address, e-mail address, telephone number, date and place of birth, participation in officially recognized activities and sports, major, dates of attendance, full-time and part-time status, degrees and awards received, class year, the most recent previous school attended, and for members of athletics teams, height, weight, and position played. The university also considers photographs to be directory information. As such, release of photographs also is permitted.

Students may restrict the release of their directory information to third parties by annually submitting a signed and dated statement to the registrar's office within the first two weeks of the semester. Otherwise, all photographs and information listed above are considered as "directory information" according to federal law. Nondirectory information, notably grade records, is released to third parties only on written request of the student, or otherwise required by law (e.g., subpoena).

The law provides students the right to inspect and review information contained in their education records, to challenge the contents of their education records, to have a hearing if the outcome of the challenge is unsatisfactory, and to submit explanatory statements for inclusion in their files if they feel the hearing panel's decisions are unacceptable. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

The registrar's office at George Fox University has been designated by the institution to coordinate the inspection and review of procedures for student education records, which include admission, personal, and

academic files, and academic, cooperative education, disciplinary records, and placement records. Students wishing to review their education records must give a written request to the registrar listing the item or items of interest. Only records covered in the Act are made available within 45 days of the request. Education records do not include student health records, employment records, alumni records, or records of instructional, administrative, and educational personnel that are the sole possession of the maker and are not accessible or revealed to any individual except a temporary substitute. Health records, however, may be reviewed by physicians of the student's choosing.

Students may not inspect and review the following as outlined by the Act: financial information submitted by their parents; confidential letters and recommendations associated with admission, employment, or job placement, or honors to which they have waived their rights of inspection and review; or education records containing information about more than one student, in which case the institution permits access only to that part of the record that pertains to the inquiring student.

Complaints of Alleged Violations

Complaints of alleged violations may be addressed to:

Family Policy Compliance Office
US Department of Education
400 Maryland Avenue, SW
Washington, DC 20202-5901

Complaints must:

- Be timely submitted, not later than 180 days from the date you learned of the circumstances of the alleged violation
- Contain specific allegations of fact giving reasonable cause to believe that a violation has occurred, including:
- (Adapted from: *A Guide to Postsecondary Institutions for Implementation of the Family Educational Rights and Privacy Act of 1974*, American Association of Collegiate Registrars and Admissions Officers, 1990.)
- Relevant dates, such as the date of a request or a disclosure and the date the student learned of the alleged violation
- Names and titles of those school officials and other third parties involved
- A specific description of the education record around which the alleged violation occurred
- A description of any contact with school officials regarding the matter, including dates and estimated times of telephone calls and/or copies of any correspondence exchanged between the student and the school regarding the matter
- The name and address of the school, school district, and superintendent of the district
- Any additional evidence that would be helpful in the consideration of the complaint

Learning Environment

George Fox University offers a learning environment designed to facilitate the learning that occurs at the university. We recognize the varied nature of the learning that happens as part of an education as well as the resources needed to accomplish the programs at George Fox. Some of the resources that are provided to students at the university are as follows:

- Academic Centers
- Academic Resource Center
- Career Services
- Health and Counseling Services
- International Student Services
- Libraries
- Multicultural Services

In addition, the university maintains certain standards of conduct that are expected to be upheld by students while enrolled at the institution.

Academic Centers

Center for Global Studies

This program is jointly housed with the Center for Peace and Justice (described below). Its goal is to deepen students' understanding of global issues through on-campus and off-campus experiences.

Among the programs either sponsored by the center or coordinated with the center are these:

- Semester-long programs of study in various parts of the world and in the United States
- Cooperative programs with various international universities
- Global service forum in the spring semester
- Events that inform students about global issues
- Information about internships and careers dealing with global issues

Center for Peace and Justice

This program is the successor to the Center for Peace Learning, established in 1984. Housed in the same location as the Center for Global Studies, it has some of the same goals of enhancing students' understanding about global reconciliation.

The Center for Peace Learning was in part inspired by a concern raised by then U.S. Senator Mark Hatfield that George Fox become more actively committed to issues of peacemaking and reconciliation. These issues had become a substantial part of Senator Hatfield's work in the Senate. Among other achievements, he had much to do with the establishment and funding of the U.S. Institute of Peace. After retiring, Senator Hatfield joined the George Fox faculty and teaches courses in political science and history.

The director of the Center for Peace and Justice coordinates such efforts as:

- The minor in peace studies
- The certificate program in conflict management
- The John Woolman Forum, at which the annual Woolman Peacemaking Award is presented
- Information to students about graduate work in peace studies and careers in peacemaking and reconciliation
- Informational events dealing with peace and justice

Friends Center

In conjunction with George Fox University, Northwest Yearly Meeting of Friends has established a Friends Center serving the leadership preparation needs of Friends in the Northwest and beyond. The mission of this center is to recruit, promote, and coordinate the leadership preparation ventures of Friends at George Fox University as a means of furthering the central mission of the university and Northwest Yearly Meeting in fostering Christ-centered faith and practice. The activities of the center are administered by a director, who reports to a board of directors, consisting of Northwest Yearly Meeting, university, and at-large members. While the work of the Friends Center will be especially concerned with the seminary and the undergraduate programs, its contribution should be seen as extending to other programs as well. The Friends Center, therefore, is intended to assist George Fox University in accomplishing its Christ-centered and Quaker mission in any ways that would be serviceable.

Northwest Center for Play Therapy Studies

The Graduate Department of Counseling is pleased to be the home of the Northwest Center for Play Therapy Studies, established in 2003. Under the direction of Dr. Daniel Sweeney, the NWCPTS is the only university-based center focused on the study and promotion of play therapy in the northwest United States.

Mission

The mission of the Northwest Center for Play Therapy Studies is to promote the healthy development and welfare of children and families through the process of play and filial therapy. In support of the relational, psychological, and spiritual wholeness of children and families, the center seeks to fulfill this objective through the provision of play therapy, training, supervision, and learning resources for students and mental health professionals in the community.

Classes

The center's primary focus is the provision of high-quality play therapy training. This is accomplished through graduate courses here at George Fox University and sponsored workshops. It hosts graduate courses in play therapy, filial therapy, sandtray therapy, and special topics courses (e.g., group play therapy).

Workshops

The NWCPTS also sponsors a one-day conference every November and a five-day play therapy summer institute in June. These cover a wide variety of play therapy topics, including introductory and advanced workshops on such topics as sandtray therapy, play therapy with traumatized children, art in play therapy, and neurobiological issues in the play therapy process.

These workshops have attracted presenters and participants from across the nation. Some of the internationally acclaimed presenters brought in by the NWCPTS include: Dr. Garry Landreth, Dr. Eliana Gil, Dr. John Allan, Dr. Terry Kottman, Dr. RisÃ« VanFleet, and Dr. Kevin O'Connor.

The web site for the NWCPTS is www.nwplaytherapy.org, and the center can be reached at playtherapy@georgefox.edu.

Academic Resource Center

The Academic Resource Center (ARC), housed on the second floor of the Newberg campus' Murdock Learning Resource Center, consists of three primary branches: Writing Services, Academic Coaching, and Tutoring Services.

- Consultants provide writing services by giving guidance and feedback to students engaged in the writing process. ARC consultants are students from various majors who have strong writing skills in their disciplines.
- Academic coaching consists of one or more meetings with an ARC consultant to discuss strategies for success. Everyone can benefit from sharpening skills in areas that support learning. Individual advising might include topics such as reading strategies, note-taking skills, preparation for exams, and time management. Handouts on these and other topics are available in the Academic Resource Center. The center's website also includes links to other learning-related resources.
- Students desiring tutoring services for specific courses should first go to labs on campus that offer discipline-specific tutoring (e.g., math or languages). If such services do not exist, students can check to see if an ARC consultant has experience with the course or discipline. An appointment can then be made with the ARC consultant.
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Additional information about the Academic Resource Center is available at arc.georgefox.edu.

Writing Center

The Writing Center (WC) is located in Room 141 within the Portland Center library. The writing center works with graduate and professional studies students to improve their writing. No matter what the discipline is, clear, effective writing is imperative. The WC is not an editing service - it's purpose is to help students become better writers, not merely edit their papers for them. The hope is to work with students to develop the tools to write well. Elements that might be covered in a consultation include:

- Writing topics (thesis, organization, voice, grammar, etc.)
- Citation formatting (MLA, APA, or Turabian), and
- Software use (Word, EndNote, etc.).

If an in-person appointment cannot be made, papers can be sent in via email. A consultant will add comments to the paper and send it back. Further discussion and clarification can then take place over the phone as needed.

Additional information about the Writing Center is available at wc.georgefox.edu.

Career Services

Career Services

Located on the second floor of the Stevens Center-Newberg campus, this office is the center for career coaching, career information/education, employment services, graduate school admission preparation, and internship assistance. Students can receive guidance as they discover their mission in life, choose a major, explore occupational options, select an internship or other work experience, find professional employment, or plan to attend graduate school. This career planning can be self-managed by each student through the Student to Professional (STP) program.

Programming and resources include three online career classes (for undergraduate students), valuable workshops, career assessment, coaching and consultation, internship guidance and database, virtual internship center, internships for credit, special events, job-search skills training (cover letter, resume) interviewing, portfolio, job search strategy), and networking with alumni on our website (careers.georgefox.edu). Also available is a resource center with occupational, graduate school, and employer information. Permanent, summer, student employment, and internship jobs are posted electronically on JobConnect in Bruindata.

Computerized and Online Career Assessments, Degrees-at-Work Etiquette Dinner, Networking Event, Internship Fair, Oregon Liberal Arts Placement Consortium (OLAPC), Career and Graduate School Fair, Graduate School Focus Week, Job Hunter's Workshop, Practice Interview Day, and Professional Preview Day are special program features. Self-managed job search tools are also available for teachers.

Health and Counseling Services

Health and Counseling Services
Health and Counseling Services exists to help you maintain a good state of health through early diagnosis and treatment of illness and injuries and through preventative medical care, including health education. A medical practitioner and a registered nurse provide medical services fall and spring semesters, September through mid-May. Services are available by appointment. Health and Counseling Services is located in the Woodward House-Newberg campus.

The counseling staff consists of doctoral-level students supervised by the program director, a licensed psychologist. Individual counseling with a focus on using short-term techniques is provided for students who wish to discuss a wide variety of personal concerns. Sessions are normally planned weekly and usually last about one hour. Marriage and premarital counseling, crisis intervention, testing, and referrals are also available. Counseling sessions are by appointment only.

Professional services such as counseling and health care are provided at no cost to full-time undergraduate students. Laboratory and X-ray testing are arranged through an outside provider and are billed to your medical insurance. Fees may be charged for supplies.

International Student Services

International Student Services
International Student Services serves as a resource for advising and assisting international students and helps facilitate the meeting of diverse cultures in the George Fox University community. The university recognizes that international students bring with them unique needs as well as welcomed contributions.
The International Student Services office seeks to help students adjust to their new surroundings and to help the campus community develop a sensitivity to their needs. The director and assistant director of this office encourage the participation of international students in the academic and social life of the university and in the exploration of the surrounding American culture. They also assist students in complying with U.S. Immigration regulations. The staff members are friends and advocates of the international student.

Libraries

Murdock Learning Resource Center (Newberg) and Portland Center Library (Tigard)
George Fox University maintains libraries at both the Newberg and Portland Center campuses. The Murdock Learning Resource Center (MLRC) is a three-story, 35,000-square-foot building serving the Newberg campus from a central location. The MLRC houses 136,000 print volumes and receives nearly 900 periodical titles. In addition, thousands of full-text periodicals are also available online from both the Newberg campus and the Portland Center, and off campus through a proxy server. The MLRC has several special collections, including the Quaker Collection of basic Quaker books, pamphlets, and periodicals. The archives of Northwest Yearly Meeting of Friends Church and of George Fox University, dating from the 1880s, are preserved in a special room. The Hoover Collection contains materials written about President Herbert Hoover and his administration. The Peace Collection contains books and periodicals pertaining to conflict resolution and international peacekeeping.

The Portland Center library houses 67,000 print volumes and receives more than 300 periodicals. The collection is especially strong in religion and counseling. Also located in the Portland Center library are the archives of George Fox Evangelical Seminary.

The university's online library catalog provides access to the holdings of both the Murdock Learning Resource Center and the Portland Center library. Students at one site may request books from the other location through the catalog. George Fox is a member of the Orbis Cascade Alliance, a consortium of 34 academic libraries in Oregon and Washington. Through "Summit Borrowing," students may conveniently request books and other materials from the consortium's union catalog of more than 27 million items. GFU students can also check out directly from any other Orbis Cascade library when presenting their current GFU ID card.

Many licensed indexing/abstracting services and full text journals are made available by the library via the Internet. Journal articles not available through the library may be requested through interlibrary loan. Normally articles are scanned and sent to GFU electronically from other libraries. Users requesting articles will be notified via e-mail as to how to retrieve such documents electronically as a pdf file. George Fox is a member of OCLC, which provides access to thousands of libraries for interlibrary loan purposes.

Multicultural Services

Multicultural Services

The Office of Multicultural Services is a resource center charged with advancing George Fox University's commitment to preparing students for a diverse society and promoting equality and integrity on the campus, in the community, and in the world. Cultural difference is the Lord's creation, which all of us should be proud of and celebrate.

The office provides individuals with the opportunity to broaden their views and enrich their cultural experiences through participation in diversity programs and training workshops. The office encourages and facilitates activities that allow students to voice their opinions, serve the community, and advocate for making George Fox University a place that welcomes difference and individuality.

George Fox University fosters diversity through the belief that awareness and knowledge of diversity and the ability to operate in a pluralistic society are important hallmarks of a quality liberal arts education. The multicultural experiences on and off campus prepare students to serve the Lord across the globe. Education in the multicultural arena, by following teachings of the gospel, encourages the development of a distinctively Christian worldview in the context of habits of lifelong learning.

A multicultural presence helps all students better understand the challenges and rewards of living in a diverse climate. Day-to-day dialogue among students, faculty, and administrators, crucial to the teaching-learning process, is enhanced by diversity in a campus community where heterogeneity, whether cultural, racial, or economic, gives voice to a wider range of perspectives and worldviews.

Standards of Conduct

When enrolling at George Fox University, students agree to respect the expectations and appointed leadership of the institution. All expectations are designed to allow the fullest liberty consistent with efficient work, while at the same time promoting the welfare of the entire campus community.

The university admits students with the understanding they will comply with these expectations in every respect and conduct themselves as responsible citizens. All students are expected to uphold certain standards of behavior, which includes conforming to state and local laws.

Any student whose behavior is dishonest, destructive, unethical, or immoral, or whose conduct is detrimental to the total welfare of the community, shall be subject to disciplinary action that may warrant appropriate consequences, with the most severe possibly resulting in suspension or dismissal.

In accordance with Christian convictions honoring the body as the temple of the Holy Spirit, the university community accepts a lifestyle that forbids immoral sexual behavior and the use, possession, or distribution of illegal drugs. Obscene or pornographic materials or literature, including pornography via the Internet, also are unacceptable. Students are expected to maintain these lifestyle standards both on and off campus. Responsiblities and expectations for traditional undergraduate students can be found in the Student Handbook.

Financial Information

George Fox University maintains high educational standards at the lowest possible cost. A portion of the cost is underwritten by gifts from alumni, friends, churches, businesses, and institutions. An extensive financial aid program assists students in meeting university costs.

The board of trustees reserves the right to adjust charges at any time, after giving due notice. No changes will be made during a semester, nor, unless special circumstances make such action necessary, will changes be made during a given academic year.

Student Financial Services
The Student Financial Services office awards scholarships, grants, loans, and other forms of financial assistance, and it bills students for tuition, fees, room and board, and other expenses related to attending college. Information about tuition and fees (including archived information from previous years), financial aid, billing, satisfactory academic progress for financial aid eligibility, and other policies and procedures are available on the office web site at: sfs.georgefox.edu

Veterans Affairs Assistance

The university is listed with the U.S. government as a recognized graduate school for the training of veterans. All prospective students eligible for VA assistance should review information provided by the Registrar's Office about VA-approved programs and follow procedures required by the Veterans Affairs for transfer of training to George Fox University. To be recommended for VA assistance, the student must continue as a bona fide registrant throughout the semester. Those receiving VA assistance must meet the minimum academic standards of the university for enrollment and progress toward degree completion and to enroll must have an approved VA benefits voucher authorizing payment. The Montgomery GI Bill is considered a resource against all aid sources except for the subsidized Stafford loan.

Academic Personnel

These lists were current at the time this catalog was published.

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Stephen M. Tatone, Canby, Oregon, President and CEO, Aldrich Kilbride & Tatone LLC
Kent L. Thornburg, Portland, Oregon, University Professor of Medicine (Cardiology), Oregon Health & Science University, School of Medicine
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Executive Leadership Team

Faculty Directory

(Faculty members with positions less than half time may not be included in this list. However, they may be included on individual department pages. Use the search feature on the top right to search for someone not included below).

Adams, Wayne, Professor of Psychology. BA, Houghton College; MA, PhD, Syracuse University. George Fox University 1999-

Addleman, Rebecca, Assistant Professor of Education. BA, Cornerstone University; MS, University of New England; EdD, Seattle Pacific University. George Fox University 2006-

Allen, Greg, Assistant Professor of Organizational Leadership. BS, MBA, George Fox University. George Fox University 2005-

Anderson, Paul, Professor of Biblical and Quaker Studies. BA, Malone College; BA, Trinity Lutheran Seminary; MDiv, Earlham School of Religion; PhD, Glasgow University. George Fox University 1989-98, 1999-

Ankeny, Becky, Professor of English. BA, George Fox University; MA, PhD, University of Oregon. George Fox University 1988-

Arnold, Ron, Assistant Professor of Education. BA, Idaho State University; MA, College of Idaho. George Fox University 2008 -

Ashford, Robin, Associate Librarian, Reference and Distance Services. BA, George Fox University; MLS, University of Illinois at Urbana-Champaign. George Fox University 2007-

Austin, Christine, Assistant Professor of Education. BA, Portland State University; MAT, Willamette University. George Fox University 2010-

Ayala, Heather, Assistant professor of biology. BA, Azusa Pacific University; PhD, University of Notre Dame. George Fox University 2011-

Badley, Ken, Professor of Education. BA, University of Saskatchewan; BEd, MEd, University of Regina; MCS, Regent College; PhD, University of British Columbia.

Baldwin, Clint, Director of the Center for Global Studies, Assistant Professor of International Studies. BA, Asbury College; MA, Western Michigan University; MA, Asbury Theological Seminary. George Fox University 2010-

Barram, Dirk, Dean, School of Business, Professor of Business & Economics. BA, Gordon College; MEd, Kent State University; PhD, Michigan State University. George Fox University 1986-

Beals, Corey, Associate Professor of Philosophy and Religion. BA, George Fox University; MAR, Yale University Divinity School; MA, PhD, Fordham University. George Fox University 2003-

Bearden, Steve, Assistant Professor of Counseling. BA, Olivet Nazarene University; MDiv, MA, Fuller Theological Seminary; PhD, Oregon State University. George Fox University 1996-

Berardi, Anna Anita, Professor of Marriage and Family Therapy. BA, Millersville State University; MA, Azusa Pacific University; MA, PhD, Fuller Theological Seminary. George Fox University 1996-

Berho, Debbie, Associate Professor of Spanish. BA, Northwest Nazarene College; MA, PhD, University of New Mexico. George Fox University 1997-

Bevis, Michael, Associate Professor of English as a Second Language, Director of the English Language Institute. BSW from University of North Texas and MSEd from Quincy University. George Fox University 2009-

Birch, Rodney, Associate Librarian, Reference Librarian. BA, Vennard College, MA University of Missouri. George Fox University 2011-

Birky, Ginny, Professor of Education. BS, Goshen College; MS, The Ohio State University; PhD, Oregon State University. George Fox University 2000-

Boehr, Terrie, Associate Professor of Family and Consumer Sciences, Chair of the Department of Family and Consumer Sciences. BS, Oregon State University; MA, Linfield College. George Fox University 1985-

Bohall, Robert, Associate Librarian, Reference Librarian. BA, Virginia Polytechnic Institute and State University; MA, University of North Carolina, Greensboro. George Fox University 2011-

Bonner, Robert, Assistant Professor of Education. BA, MTh, Harding University; MAT, EdD, George Fox University. George Fox University 2009-

Boyd, Bryan, Associate Professor of Theatre. BA, George Fox University; MFA, University of Portland. George Fox University 2002-

Brazo, Carol, Associate Professor of Education, Director of Master of Arts in Teaching Community-Portland Campus. BA, California Baptist University; MEd, George Fox University. George Fox University 2004-

Bredemeier, Robert, Assistant Professor of Art. BS, University of Oregon, George Fox University 2006-

Brendlinger, Irv, Professor of Religion. BA, Asbury College; MDiv, Asbury Theological Seminary; MEd, University of Oklahoma; PhD, University of Edinburgh. George Fox University 1993-

Bronkey, Kristi, Assistant Professor of Education. BA, Biola University; MA, Concordia University. George Fox University 2008-

Brown, Davida, Assistant Professor of Chemistry. BA, George Fox University; Phd, Stanford University. George Fox University 2011-

Brunner, Dan, Professor of Church History and Pastoral Studies. BA, Northwest Christian College; MDiv, Fuller Theological Seminary; PhD, University of Oxford. George Fox University 1996-

Buchanan, Thomas, Assistant Professor of Education. BA, Columbia Christian College; MS, Portland State University; EdD George Fox University. George Fox University 2009-

Bufford, Rodger, Professor of Psychology, Director of Integration for the Graduate Department of Clinical Psychology. BA, The King's College; MA, PhD, University of Illinois. George Fox University 1990-

Buhler, Gary, Assistant Professor of Art. BS, Western Oregon State College; MFA, University of Arizona. George Fox University 1989-90, 2000-

Buhrow, Jr., William, Director of Health and Counseling Services, Assistant Professor of Psychology. AA, Baptist Bible College; BA, Cedarville College; MA, Dallas Theological Seminary; MA, PsyD, George Fox University. George Fox University 1994-

Byrtek, George, Associate Professor of Organizational Leadership. BS, University of Wisconsin, Stevens Point; MS, National-Louis University; PhD, Walden University. George Fox University 1991-

Campbell, Doug, Professor of Art, Director of the Roger and Mildred Minthorne Gallery. BA, Florida State University; MFA, Pratt InstitutePhD, The Ohio University. George Fox University 1990-

Carlton, Mark, Assistant Professor of Education, Director of Administrative Licensure. BA, MA, Pepperdine University; EdD, University of Oregon/Portland State University. George Fox University 2004-

Carpenter, Jan, Assistant Professor of Education, Director of Full-time MAT Program. MAT, BA, George Fox University. George Fox University, 2005-

Casey, Rae, Assistant Professor of Organizational Leadership. BS, George Fox; MS, George Fox. George Fox University, 2007-

Celentano, Eileen, Assistant Professor of Family and Consumer Sciences. BA, University of California, Los Angeles; MFA, California State University, Long Beach. George Fox University 2009-

Cevallos, Tatiana, Assistant Professor of Education. BA, Catholic University of Ecuador; MS, Western Oregon University. George Fox University 2006-

Chamberlain, Paul, Professor of Chemistry, Director of the Juniors Abroad Program. BA, Point Loma College; PhD, University of Nevada, Reno. George Fox University 1977-

Chambers, Carlisle, Professor of Chemistry, Chair, Department of Biology and Chemistry. BS, Milligan College; PhD, Emory University. George Fox University 1994-

Chang, Kelly, Assistant Professor of Psychology. BA, Linfield College; MA, PhD, University of Hawaii. George Fox University 2006-

Cheshire, Diana, Director of Institutional Assessment. BS, Indiana University - Bloomington; MA University of California San Diego; PhD, Indiana University - Bloomington. George Fox University 2011-

Choi, Charles, Assistant Professor of Communication Arts. BA, Biola University; MA, Louisiana State University; PhD, University of California Santa Barbara. George Fox University 2010-

Conniry, Chuck, Vice President and Dean, George Fox Evangelical Seminary. BA, American Christian School of Religion; MDiv, Bethel Theological Seminary West; PhD, Fuller Theological Seminary. George Fox University 1998-

Cordill, Elisabeth, Instructor of Education. BS, Western Oregon University; MAT, Lewis and Clark College. George Fox University 2009-

Corneaux, Isabelle, Visiting Assistant Professor of French. MA, Heritage University, University of Burgundy. George Fox University 2011-

Corning, Caitlin, Professor of History. BA, Seattle Pacific University; MA, PhD, University of

Leeds. George Fox University 1996-

Cox, Michelle, Assistant Professor of Counseling. BS, Western Oregon University; MA George Fox University. George Fox University 2006-

Dee, Amy, Assistant Professor of Education. BA, San Jose State University; MA, University of San Francisco, EdD, George Fox University. George Fox University 2008-

Defferding, Viki, Assistant Professor of Spanish. BA, University of Oregon; MA, Portland State University. George Fox University 1989-

DeKruyf, Lorraine, Associate Professor of Counseling, Clinical Director of School Counseling. BA, Dordt College; MEd, Western Washington University. George Fox University 2002-

Delamarter, Steve, Professor of Old Testament. AA, Wenatchee Valley College; BA, Seattle Pacific University; MAR, MDiv, Western Evangelical Seminary; MA, PhD, Claremont Graduate School. George Fox University 1996-

Dempsey, Keith, Assistant Professor of Counseling. BS, MS, PhD, Oregon State University. George Fox University, 2007-

Dixon, Kristen, Assistant Professor of Education. BS, MEd, Oregon State University. George Fox University 2004-

Doak, Brian, Assistant Professor of Biblical Studies. BS,Evangel University; MA, Missouri State University; Phd, Harvard University. George Fox University 2011-

Doherty, Gloria, Director of Hybrid Learning, Assistant Professor. BA, Minnesota State University; MDiv, Fuller Theological Seminary. George Fox University 2006-

Duerr, Jeffrey, Associate Professor of Biology. BA, BS, Whitworth College; MS, Portland State University; PhD, University of Hawaii. George Fox University 1999-

Espinor, Debra, Assistant Professor of Education. BA, MA, EdD, Seattle Pacific University. George Fox University 2010-

Fisher, Robert, Assistant Professor of Education. BA, University of La Verne; MA, California State University; EdD, University of Southern California. George Fox University 2004-

Foster, Jim , Dean of the School of Behavioral and Health Sciences; Chair, Department of Psychology; Professor of Psychology. BS, Seattle Pacific University; MA, PhD, The Ohio State University. George Fox University 1980-

Foster, Michael, Assistant Professor of Mechanical Engineering. BS, Messiah College; MS, PhD, Drexel University. George Fox University 2007-

Gallagher, Sarita, Assistant Professor of Religion. BA, Wheaton College; MA, Wheaton College Graduate School; PhD, Fuller Theological Seminary. George Fox University 2010-

Gathercoal, Kathleen, Professor of Psychology. AB, Franklin & Marshall College; MA, PhD, Case Western Reserve University. George Fox University 1993-

Gibson, Sarah Reid, Assistant Professor of Media Communications. BS, Abilene Christian University; MFA, North Texas State University. George Fox University 2009-

Goldman, Bethany, Assistant Professor of Health & Human Performance, Director of Athletic Training Education Program . BA, Vanguard University of Southern California; MS, Arizona School of Health Sciences. George Fox University 2007-

Goodworth, Marie-Christine, Assistant Professor of Clinical Psychology. BA and MA, Wheaton college; PhD, Arizona State University. George Fox University 2010-

Gowan, Marcella, Assistant Professor of Nursing. BSN, Walla Walla College; MPH, Loma Linda University. George Fox University 2007-

Graham, Jeannine, Associate Professor of Religious Studies. BA, Whitworth College; MDiv, Fuller Theological Seminary; PhD, University of Aberdeen. George Fox University 2006-

Grant, Steve, Associate Professor of Health and Human Performance; Associate Athletic Director; Chairperson of the Health and Human Performance Department; Master Coach of Volleyball. BA, Biola University; MEd, Linfield College. George Fox University 1982-

Gray, Joanne, Assistant Professor of Education. BS, Oregon Health Sciences University; MAT, George Fox University. George Fox University 2009-

Gregor, Joel, Assistant Professor of Psychology, Director, George Fox University Behavioral Health Clinic. BA, Willamette University; MMFT, Fuller Theological Seminary; MA and PsyD, George Fox University. George Fox Universityi 2010-

Hagen, Carla, Director, Department of Nursing; Assistant Professor of Nursing. BS, Eastern Oregon State College; BSN, MPH, Oregon Health Sciences University. George Fox University 2006-

Haigh, Justine, Associate Profesor of Marketing. BS, MA, PhD, University of Huddersfield. George Fox University 2009-

Hall, Mark, Herbert Hoover Distinguished Professor of Political Science. BA, Wheaton College; MA, PhD, University of Virginia. George Fox University 2001-

Halley, Ryan, Associate Profesor of Finance, Chair, Undergraduate Business Department. BA, Mount Vernon Nazarene University; MBA, The Ohio State University, Fisher College of Business; PhD, Texas Tech University. George Fox University 2009-

Hamilton, Elizabeth, Assistant Professor of Psychology. BA, Vanderbilt University; MS, Tulatne University; MA UCLA; PhD, UCLA. George Fox University 2008-

Hamilton, Robert, Professor of Physics. BS, University of Puget Sound; PhD, University of California, Los Angeles. George Fox University 2003-

Hansen, David, Associate Professor of Computer Science. BS, Oral Roberts University; MS, Washington State University; PhD, Oregon Graduate Institute of Science and Technology. George Fox University 1998-99, 2003-

Harder, Bob, Professor of Mechanical Engineering; Director of Engineering Program; Chairperson, Math, Computer Science, and Engineering Department. BSME, MSME, Michigan Technological University; PhD, Oregon Graduate Institute of Science and Technology. George Fox University 1988-

Harrison, Suzanne, Assistant Professor of Education. BA, MEd, Central Washington University; PhD, Gonzaga University. George Fox University 2004-

Harwood, Corban, Assistant Professor of Mathematics. BS, Whitworth University; PhD, Washington State University. George Fox University 2011-

Head, Tom, Professor of Economics, Chair of the International Studies Program. BS, MS,

University of Oregon; MA, University of California, Berkeley. George Fox University 1971-74; 1976-79; 1983-

Headley, Scot, Professor of Education, Chair of Educational Foundations and Leadership. BS, MEd, Colorado State University; PhD, The Ohio State University. George Fox University 1994-

Heininge, Kathy, Associate Professor of English. BA, MA, California State University Hayward; PhD, University of California Davis. George Fox University 2004-

Helsabeck, Hank, Dean of the School of Arts and Sciences. BA, Culver Stockton College; MA, MA, PhD, University of Missouri. George Fox University 1978-

Hockett, Eloise, Assistant Professor of Education; Director of TSPC Licensure; Director, Master of Education Program. BAA, BM, University of Minnesota; MEd, George Fox University. George Fox University 2001-

Huffman, Terry, Professor of Education. BA, University of South Dakota; MA, Marshal University; PhD, Iowa State University. George Fox University 2003-

Hulbert, Melanie, Associate Professor of Sociology. BA, Western Washington University; MA, PhD, University at Albany, State University of New York. George Fox University 2003-

Hunter, Marty, Associate Professor of Health and Human Performance; Head Coach, Baseball. BA, Linfield College; Med, Linfield College. George Fox University, 2003-

Hutchinson, Carol, Assistant Professor of Adult Degree Programs. BA, Western Washington University; MA, Canadian Theological Seminary; PhD, George Fox Evangelical Seminary. George Fox University 2011-

Hutchison, Marcey Keefer, Assistant Professor of Physical Therapy. BA, Willamette University; MA, Pacific University George Fox University 2011-

Iancu, Martha, Associate Professor of English as a Second Language. BA, MA, University of Oregon. George Fox University 1989-

Irish, Kerry, Professor of History. BA, George Fox University; MA, PhD, University of Washington. George Fox University 1993-

Isaak, Dale, Assistant Professor of Health and Human Performance, Head Athletic Trainer. BS, Willamette University; MEd, University of Minnesota; MS, Indiana State University. George Fox University 1995-

Jaffe, Clella, Professor of Communication Arts, Chair, Department of Communication Arts. BA, Seattle Pacific University; MEd, PhD, Oregon State University. George Fox University 1995-

Johnson, Craig, Professor of Leadership Studies, Director, Doctor of Business Administration Program. BA, Luther College; MA, Wheaton College; PhD, University of Denver. George Fox University 1988-

Johnson, John, Associate Professor of Mathematics. BS, Northwest Nazarene College; MS, Kansas State University. George Fox University 1984-

Johnson, Mary, Assistant Professor of Education; Director, Master of Arts in Teaching at Night Program. BA, Luther College; MEd, George Fox University. George Fox University 2004-

Johnson, Merrill, University Librarian, Associate Professor. BA, Seattle Pacific University; MLS, University of Oregon. George Fox University 1980-

Jolliff, Bill, Professor of English. BS, Central Michigan University; MA, Ashland Theological Seminary; PhD, The Ohio State University. George Fox University 1994-

Jones, Kevin, Associate Professor of Communication Arts. BA, Biola University; MA, California State University; PhD, Louisiana State University. George Fox University 2008- k

Kamilos, Charles, Senior Librarian, Portland Center Librarian, Assistant Professor. BA, Northwest Christian College; MDiv, Brite Divinity School-Texas Christian University; MA, University of Iowa. George Fox University 1997-

Kays, Kristina, Assistant Professor of Psychology. BA, George Fox University; MA, Western Conservative Baptist Seminary; PsyD, George Fox University. George Fox University 2005-

Keeney, Judy, Assistant Professor of Education, Director of the Master of Education Program. BA, MA, University of Oregon. George Fox University 2004-

Kerr, David, Assistant Professor of Art. BA, Judson Baptist College; MA, California State University. George Fox University 2002-

Kilburg, Gary, Professor of Education. BS, Eastern Oregon State College; PhD, Oregon State University. George Fox University 1992-

King, Esther, Professor of Nursing. BSN, MSN, Oregon Health Sciences University. George Fox University 2006-

Kluge, Alan, Professor of Business, MBA Oregon Director. BS, MBA, PhD, Oregon State University. George Fox University 1996-

Koch, Chris, Professor of Psychology. BS, Pennsylvania State University; MS, PhD, University of Georgia. George Fox University 1993-

La Force, Beth, Professor of Education. BS, Malone College; MA, Western Michigan University; PhD, Michigan State University. George Fox University 1987-

Liu, David Ming, Assistant Professor of Management. BSB, Western Oregon University; MBA, Willamette University; DBA, City University of Hong Kong. George Fox University 2010-

Lloyd, Carl, Professor of Management. BA, Columbia Christian College; MA, Eastern New Mexico University; MS, Oregon State University; MSS.W., PhD, University of Texas at Arlington. George Fox University 1994-

Luedtke, Rhett, Associate Professor of Theatre. BA, Valparaiso University; MFA, Illinois State University. George Fox University 2003-

Lutz, Amy, Assistant Professor of Education. BA, Grand Valley State University; MA, George Fox University. George Fox University 2008-

MacLeod, Michael, Assistant Professor of Political Science. BA, MA, Queen's University; PhD, George Washington University. George Fox University 2009-

Macy, Margi, Associate Professor of Education. BA, George Fox University; MEd, Wichita State University, PhD, Walden University. George Fox University 1991-

Magill, Mike, Professor of Mechanical Engineering. BS, MS, PhD, Oklahoma State University. George Fox University 2002-

Manock, David, Associate Professor of Counseling. BS, Western Oregon University; MDiv, San

Francisco Theological Seminary; MS, PhD, Fuller Theological Seminary. George Fox University 2006-

McChesney, Ken, Assistant Professor of Education. BA, University of Montana; MS, Wester Oregon University. George Fox University 2011-

McCloskey, MaryJo, Head Women's Golf Coach, Assistant Professor. BA, University of Oregon; MBA, University of Portland. George Fox University 2006-

McLeod-Harrison, Mark, Professor of Philosophy. BRE, Briercrest Bible College; BA, Westmont College; MA, Trinity Evangelical Divinity School; PhD, University of California. George Fox University 1999-

McMinn, Lisa, Professor of Sociology. BA, George Fox College; MS, PhD, Portland State University. George Fox University 2006-

McMinn, Mark, Professor of Psychology, Director of Integration. BS, Lewis and Clark College; PhD Vanderbilt University. George Fox University 1984-1993, 2006-

Meade, Christopher P., Assistant Professor of Management, Coordinator of Community Service Consultant Projects. BA, MAOL, George Fox University; MA Northwest Nazarene University; PhD, University of Idaho. George Fox University 2008-

Meek, Michael, Head Women's Basketball Coach, Assistant Professor. BS, Eastern Oregon University; MAT, Grand Canyon University. George Fox University 2010-

Melendy, Robert, Assistant Professor of Mathematics and Physics. BS, Oregon State University (Mechanical Engineering); MS, Oregon State University (Mechanical Engineering); MS, Oregon State University (Electrical Engineering); PhD, Oregon State University (Mathematics and Mathematics Education). George Fox University 2008-

Meyer, Matt, Associate Professor of Media Communications. BA, University of Oregon's Honor College; MFA, University of Southern California. George Fox University 2005-

Michael, Rand, Associate Professor of Marriage and Family Therapy, Clinical Director of Marriage and Family Therapy. BA, Northwest Nazarene College; MDiv, Nazarene Theological Seminary; DMin, Midwestern Baptist Theological Seminary. George Fox University 1996-

Mize, Darcy, Assistant Professor of Nursing. BS, Michigan State University; MA, University of Illinois. George Fox University 2008-

Mock, Melanie, Associate Professor of English; Chair, English Department. BA, George Fox University; MA, University of Missouri; PhD, Oklahoma State University. George Fox University 1999-

Mock, Ron, Associate Professor of Political Science and Peace Studies. BA, George Fox University; M.P.A., Drake University; JD, University of Michigan. George Fox University 1985-

Molitor, Kristina, Assistant Professor of Education. BA, Western Montana College; MA, University of Portland. George Fox University 2008-

Moore, Terah, Assistant Professor of Education; Director, Boise Master of Arts in Teaching program. BA, Idaho State University, MA, Boise State University. George Fox University 2007-

Morse, Mary Kate, Professor of Leadership and Spiritual Formation. BS, Longwood College;

MA, MDiv, Western Evangelical Seminary; PhD, Gonzaga University. George Fox University 1996-

Morton, Brenda, Assistant Professor of Education. BS, Portland State University; MA, George Fox University. George Fox University 2009-

Nam, Roger, Assistant Professor of Biblical Studies. BA, UCLA; MDiv, General Assembly Presbyterian Theological Seminary; ThM, Fuller Theological Seminary; PhD, UCLA. George Fox University 2008-

Natzke, John, Associate Professor of Electrical Engineering. BSEE, Milwaukee School of Engineering; MSEE, Marquette University; PhDEE, University of Michigan. George Fox University 1995-

Nava, Robert, Assistant Professor of Education. BS, Oregon State University; MAT, George Fox University. George Fox University 2005-

Nelson, Jerrie, Assistant Professor of Nursing. AA, Lane Community College; BS, OHSU; MS, University of Portland. George Fox University 2008-

Nemetz, Annette, Assistant Professor of Managment. BS, Rensselaer Polytechnic Institute; MBA, Stanford University; DMgt (in progress), George Fox University. George Fox University 2009-

Newell, Roger, Professor of Religious Studies. BA, Westmont College; MDiv, Fuller Theological Seminary; PhD, University of Aberdeen. George Fox University 1997-

Newell, Susan, Assistant Professor of Social Work; Field Director. BA, Westmont College; MSW., Portland State University. George Fox University 1999-

Ninteman, Neal, Assistant Professor of Engineering and Mathematics, Head Men's Tennis Coach. BS, California Polytechnic State University; MS, Stanford University. George Fox University 2000-

Ocker, Mark, Assistant Professor of Organizational Leadership. BA, George Fox University; MAT, Alaska Pacific University. George Fox University 1998-

O'Donnell, Sue, Associate Professor of Psychology. BS, MA, PhD, University of Minnesota. George Fox University 2001-

Olson, Mary, Assistant Professor of Management; Director, Boise MBA program. BA, MA, Pacific Lutheran University. PhD, University of Idaho. George Fox University 1999-

Orton, Val, Assistant Professor of Nursing. BSN, Seattle Pacific University; MA, University of Portland. George Fox University 2011-

Otto, Paul, Professor of History, Chair,Department of History and Political Science. BA, Dordt College; MA, Western Washington University; PhD, Indiana University. George Fox University 2002-

Overbay, Devorah, Assistant Professor of Nursing. BSN, University of Washington; MSN, Yale University. George Fox University 2006-

Peach, Nate, Assistant Professor of Economics. BA, MA, Messiah College; Phd, at Colorado State. George Fox University 2011-

Peng, Thomas, Assistant Professor of Intercultural Studies; Director of China and East Asia Student and Scholars Programs. BA, Hunan Normal University; MACS, George Fox University;

Master of Linguisitics and Applied Linguistics, Xi'an Jiaotong University; PhD, Biola University. George Fox University 2007-

Peterson, Mary, Associate Professor of Clinical Psychology; Director, Graduate Department of Clinical Psychology. BA, MA, University of Cincinnati; MA, PhD, California School of Professional Psychology. George Fox University 2004-

Powers, Don, Professor of Biology. BS, Biola University; MS, San Diego State University; PhD, University of California, Davis. George Fox University 1989-

Rahschulte, Tim, Associate Professor of Business; BA, MBA, Thomas More College; PhD, Regent University. George Fox University 2007-

Ray, Patrick, Assistant Professor of Engineering. MA, Phd, Tufts University. George Fox University 2011-

Rine, Abigail, Assistant Professor of English; Director of Forensics. BA, George Fox University; PhD, University of St. Andrews in Scotland. George Fox University 2011-

Rolfe, Alexander, Technical Services Librarian; Systems Administrator; Assistant Professor. BA, Whitman College; MA, University of Washington; MLIS, University of Washington. George Fox University 2001-

Roberts, Arthur, Professor-at-Large. BA, George Fox University; MDiv, Nazarene Theological Seminary; PhD, Boston University. George Fox University 1953-

Rosenbohm, Clifford, Assistant Professor of Social Work; Director of Social Work Program; Chair, Social Work Department. BA, Louisiana College; MSW, Southern Baptist Theological Seminary. George Fox University 2002-

Russell, Amber, Director of the Portland MBA Program. MS, Oregon State University. George Fox University 2006-

Samek, Linda, Dean of the School of Education. BA, Oregon State University; MA, Portland State University; EdD, Portland State University. George Fox University 2008 -

Schmitt, John, Associate Professor of Biology. BS, Pacific University; PhD, Oregon Health and Science University. George Fox University 2005-

Scott, Jane, Public Services Librarian; Assistant Professor. BA, University of Oregon; MLS, Emporia State University. George Fox University 2006-

Seegobin, Winston, Associate Professor of Clinical Psychology. BTh, Jamaica Theological Seminary; BA Bethel College; MA, Wheaton College Graduate School; MA, Central Michigan University; PsyD, Central Michigan University. George Fox University 2009-

Sehorn, Gary, Assistant Professor of Education. BS, Western Oregon University; MAT, Lewis and Clark College; DEd, Bethel University. George Fox University 2010-

Sepich, Debora, Assistant Professor of Management and Marketing. BS, MBA, George Fox University. George Fox University 2005-

Shaw, Richard, Associate Professor of Marriage and Family Therapy. BS, University of Nebraska at Kearney; MA, Asbury Theological Seminary; DMFT, Fuller Theological Seminary. George Fox University 1996-

Shelton, Larry, Richard B. Parker Professor of Wesleyan Theology. BA, Pfeiffer College; MDiv,

ThM, Asbury Theological Seminary; Th.D., Fuller Theological Seminary. George Fox University 1996-

Shelton, Marc, Professor of Education. BS, MA, EdD, University of South Dakota. George Fox University 2000-

Shelton, Paul, Assistant Professor of Management. PhD, Colorado State University; MBA Azusa Pacific University. George Fox University 2010-

Shenk, Byron, Professor of Health and Human Performance; Athletic Trainer. BA, Goshen College; MA, University of Oregon; EdD, University of Virginia. George Fox University 1990-

Shepard, Bruce, Visiting Assistant Professor of Accounting. BS, University of Pennsylvania; MBA, University of Oregon. George Fox University 2011-

Sherwood, Steve, Assistant Professor of Christian Ministries, Director of the Young Life Partnership. MATS, Fuller Seminary; DMin, George Fox University. George Fox University 2004-

Shew, Paul, Assistant Professor of Physical Therapy, Academic Coordinator of Clinical Education. BA, Southern Oregon University; DPT, Pacific University. George Fox University 2011-

Sikkema, Seth, Assistant Professor of Accounting; BS, George Fox University; MBA, Boise State University. George Fox University, 2007-

Simmons, Laura, Professor of Christian Ministries. BA, University of California, Davis; MA, PhD, Fuller Theological Seminary. George Fox University 2001-

Simpson, Robert, Assistant Professor of Counseling, Clinical Director of School Psychology. BA, MA, San Jose State University; PhD, California School of Professional Psychology in San Francisco. George Fox University 2005-

Sjogren, Anne, Assistant Professor of Education. BA, Westmont College; MA, University of Minnesota. George Fox University 2008-

Smart, James, Assistant Professor of Biology. BS, University of Western Montana; PhD, Oregon Health and Science University. George Fox University 2009-

Smith, John, Head Cross Country and Track & Field Coach; Assistant Professor of Health and Human Performance. BS, George Fox University; MA, United States Sports Academy. George Fox University 2006-

Smith, Lauri, Assistant Professor of Family and Consumer Sciences. BA, George Fox University; MOL, Woodbury University. George Fox University 2007-

Smith, Phil, Professor of Philosophy, Chair, Department of Religious Studies. BA, George Fox University; MA, Fuller Theological Seminary; PhD, University of Oregon. George Fox University 1982-

Song, Steve, Assistant Professor of Education. BA, MAT ESL, University of Illinois Urbana-Champaign; MEd, EdD, Harvard University. George Fox University 2010-

Spivey, Gary, Associate Professor of Electrical Engineering. BSEE, University of Arizona; MSEE, PhD, University of Maryland. George Fox University 2003-

Steeg, Susanna, Assistant Professor of Education. BA, Cedarville University; MA, PhD, Arizona

State University. George Fox University 2011-

Steele, Jim, Associate Professor of Management. BA, Trinity Lutheran College; MA, Marylhurst University; EdD, George Fox University. George Fox University 2006-

Sundquist, Mark, Assistant Professor of Health and Human Performance, Head Coach, Men's Basketball. BA, Seattle Pacific University; MS, Portland State University. George Fox University 2000-

Sweeney, Daniel, Professor of Counseling; Clinical Director of Counseling; Director of the Northwest Center for Play Therapy. BA, San Jose State University; BA, San Jose Bible College; MA, Azusa Pacific University; PhD, University of North Texas. George Fox University 1996-

Taloyo, Carlos, Assistant Professor of Clinical Psychology, Director of Clinical Training. BA, University of California Irvine; MA, MATS, PhD, Fuller Theological Seminary. George Fox University 2011-

Tandy, Gary, Professor of English. BA, Oklahoma Christian University; MA, The University of Tennessee; PhD, The University of Tulsa. George Fox University 2009-

Taylor, Craig, Associate Professor of Health and Human Performance, Director of Athletics. BS, George Fox University; MEd, Linfield College. George Fox University 1975-78; 1980-

Terry, Mark, Associate Professor of Art; Chair, Department of Visual Arts. BS, Willamette University; MS, Western Oregon State University. George Fox University 1997-

Thurston, Nancy, Professor of Psychology. BA, Hope College; MA, PhD, Central Michigan University. George Fox University 1999-

Tiffin, Gary, Associate Professor of Education. BA, San Jose Christian College; BA, UCLA; MA, UCLA; PhD, Stanford University. George Fox University 2008-

Timmerman, Tim, Professor of Art. BA, Biola University; MFA, Washington State University. George Fox University 2003-

Todd, D. Elizabeth, Assistant Professor of English as a Second Language. BA, George Fox University; MEd, Oregon State University. George Fox University 2002-

Tran, Yune, Assistant Professor of Education. BS, University of Texas; MA, California State University Long Beach, MEd, Texas State University; PhD, University of Texas. George Fox University 2011-

Tsohantaridis, Tim, Associate Professor of Religious Studies; Head Coach, Men's Soccer. BA, Barrington College; MA, Ashland Theological Seminary; PhD, University of Athens. George Fox University 1985-90; 1993-

Turpen, Katy, Assistant Professor of Education. BA, MAT, George Fox University. George Fox University 2011-

Vandehey, Patrick, Assistant Professor of Music, Instrumental Music Director. BM, University of Washington; BA, University of Washington; MS, Portland State University. George Fox University 2003-

VandenHoek, Jeff, Assistant Professor of Business; Director of Full-time MBA program. BA, George Fox College; MA, Azusa Pacific University. George Fox University 2007-

Vargason, Jeff, Associate Professor of Chemistry. BS, Evangel University; PhD, Oregon State

University. George Fox University 2006-

Weaver, Brent, Associate Professor of Music. BA, Goshen College; MM, DMA, University of Oregon. George Fox University 2001-

Weber, Larry, Assistant Professor of Education. BS, MS, Portland State University. George Fox University 2002-

Weinert, Mark, Associate Professor of History. BA, Anderson College; MDiv, Western Evangelical Seminary; MA, University of Portland; PhD, Vanderbilt University. George Fox University 1982-

Weiss, Kathleen, Assistant Professor of Biology. BS, University of Washington; MD, University of Southern California. George Fox University 2006-

Wenz, Loren, Associate Professor of Music; Chair, Department of Performing Arts. BA, Whitworth College; MA, Eastern Washington University. George Fox University 2002-

White, Waneen, Assistant Professor of Education. BA, Bob Jones University; MA, University of Connecticut. George Fox University 2009-

Willis, Nicholas, Associate Professor of Mathematics. BA, George Fox University; MS, Texas Tech University; PhD, Texas Tech University. George Fox University 2009-

Willson, Kenn, Professor of Music. BA, George Fox University; MMus, University of Portland; DA, University of Northern Colorado. George Fox University 1987-90; 1992-

Wilson, Brent, Associate Professor of Computer Science. BA, Western Oregon State University; MAT, Oregon State University. George Fox University 1994-

Woodley, Randy, Distinguished Associate Professor of Faith and Culture. BA, Colorado Christian University; MDiv, Palmer Seminary (Eastern University); PhD, Asbury Theological Seminary. George Fox University 2010-

Worden, Debra Drecnik, Professor of Business and Economics. BA, Westminster College; MS, PhD, Purdue University. George Fox University 1994-

Wortman, Shary, Assistant Professor of Education. BS, Oregon State University; MEd, Oregon State University. George Fox University 2005-

Wuest, Leslie, Assistant Professor of Social Work. BA, Occidental College; MSW, University of Georgia; PhD, Portland State University. George Fox University 2010-

Yinger, Kent, Professor of New Testament. BA, Wheaton College; MDiv, Gordon-Conwell Theological Seminary; PhD, Sheffield University. George Fox University 2001-

Zhang, Chengping, Assistant Professor of Finance. BS, changchun University of Science and Technology; MS, Beijing Institute of Technology; MS, PhD, Washington State University. George Fox University 2010-

Faculty Emeriti

Allen, Michael A., Professor Emeritus of Sociology. BS, MS, Illinois State University. George Fox University 1976-2002.

Allen, Richard E., Associate Professor Emeritus of Management/Director of Professional Studies. BS, Seattle Pacific University; MS, University of Oregon. George Fox University 1969-2002.

Beebe, Ralph K., Professor Emeritus of History. BA, George Fox University; MEd, Linfield College; MA, PhD, University of Oregon. George Fox University 1955-57; 1974-97.

Buckler, Bob, Professor Emeritus of Psychology. AB, University of California, Los Angeles; MPH, Johns Hopkins University; MD, Georgetown University School of Medicine. George Fox University 1990-2011

Colwell, Wayne E., Professor Emeritus of Psychology. BS, John Brown University; MDiv, Grace Theological Seminary; MEd, University of Arkansas; PhD, Arizona State University. George Fox University 1990-98.

Dillon, Gerald W., Professor Emeritus of Pastoral Ministry. AB, Kletzing College; BS, Asbury Theological Seminary; MA, State University of Iowa; DD, Azusa Pacific University.

Fawver, Gary K., Professor Emeritus of Outdoor Ministries. BA, Wheaton College; MDiv, Gordon-Conwell Theological Seminar; DMin, Western Seminary. George Fox University 1974-2003.

Gilmore, Robert D., Director Emeritus of Instructional Media. BA, Azusa Pacific University; BD, California Baptist Theological Seminary; MSEd, University of Southern California. George Fox University 1964-67; 1968-95.

Green, William D., Vice President and Dean Emeritus of the College, Professor of Religion. ThB, Malone College; AB, Taylor University; MA, Case Western Reserve University; EdD, University of Tennessee; LHD, George Fox University. George Fox University 1972-89.

Hagen, Dennis B., Professor Emeritus of Music. BA, Whitworth College; MMusEd, Indiana University; BD, Western Evangelical Seminary; PhD, Indiana University. George Fox University 1964-2003.

Higgins, Ed, Professor Emeritus of Writing and Literature. BA, LaVerne College; MA, California State College at Fullerton; PhD, Union Graduate School. George Fox University 1971-2011

Hobbs, Julia H., Professor Emerita of Christian Educational Ministries. BA, Hope College; BD, MTh, Winona Lake School of Theology; PhD, University of Pittsburgh. George Fox University 1975-91.

Howard, David J., Associate Professor Emeritus of Music. BA, Simpson College; BA, MA, San Francisco State College; DMA, Southern Baptist Theological Seminary. George Fox University 1968-85; 1988-2001.

Kimberly, Dwight, Associate Professor Emeritus of Biology. BA, George Fox University; MS, Oregon State University. George Fox University 1994-2011

Landis, Patricia A., Professor Emerita of Education, Director of Undergraduate Teacher Education. BA, Seattle Pacific University; MA, University of Washington. George Fox University 1984-99.

Lauinger, Robert E., Associate Professor Emeritus of Music. Bs, Portland State University; MM, Indiana University; DMA, University of Arizona. George Fox University 1967-2002.

Macy, Howard, Professor Emertius of Religion and Biblical Studies. BA, George Fox University; MA, Earlham School of Religion; PhD, Harvard University. George Fox University 1990-2011

Munn, Hector J., Professor Emeritus of Chemistry. BS, Seattle Pacific University; MA, PhD, Oregon State University. George Fox University 1958-62; 1966-94.

Odell, Allen C., Professor Emeritus of Ministry. BA, Cascade College; MDiv, Western Evangelical Seminary; DMin, Western Conservative Baptist Seminary.

Orkney, G. Dale, Professor Emeritus of Biology. BA, Northwest Nazarene University; MS and PhD, University of Idaho. George Fox University 1964-2002.

Schroeder, Mel L., Associate Professor Emeritus of Drama. BA, Northwest Nazarene University; MA, San Jose State University. George Fox University 1978-83; 1987-2002.

Stiefel, Al, Professor Emeritus of Counseling. BA, Eastern Nazarene College; BD, Nazarene Theological Seminary; STM, Boston University School of Theology; PhD, Boston University.

Academic Calendar 2011-2012

Fall Semester

Fall Semester Begins	August 29, 2011
Last Date for Adding Classes Online (without Instructor Approval)	September 2, 2011
Last Date for Audit or Special Student Class Registration	September 2, 2011
Labor Day (non-Newberg locations only)	September 5, 2011
Serve Day	September 7, 2011
Last Day to Change Registration (Add/Drop)	September 11, 2011
Census Date	September 13, 2011
Degree Completion Portfolio Due Date (Fall Commencement Participation)	5:00 pm, September 15, 2011
Last Day to Exercise Pass/No Pass Option	September 23, 2011
Last Day to Submit Application for Degree (Fall Commencement Participation)	5:00 pm, September 30, 2011
Mid-Semester Holiday (Newberg only)	October 14, 2011
Mid-Semester Grade Entry	October 26-28, 2011
Last Day to Withdraw from Class without Grade Responsibility	November 6, 2011
Thanksgiving Holiday	November 24-25, 2011
Transfer Credit Transcript Due Date (Fall Commencement Participation)	5:00 pm, December 2, 2011
Dissertation Signed Approval Sheets Due (Fall Commencement Participation)	5:00 pm, December 2, 2011
Study Day (Traditional Undergraduate)	December 12, 2011
Final Exams (Traditional Undergraduate)	December 13-16, 2011
Fall Semester Ends	December 16, 2011
Mid-year Commencement	December 17, 2011
Christmas/New Year's Holiday	December 18, 2011-January 2, 2012
Final Grade Entry Deadline	December 23, 2011

Spring Semester

Spring Semester Begins	January 9, 2012
Last Date for Adding Classes Online (without Instructor Approval)	January 13, 2012
Last Date for Audit or Special Student Class Registration	January 13, 2012
Martin Luther King Jr. Holiday	January 16, 2012
Last Day to Change Registration (Add/Drop)	January 22, 2012
Census Date	January 24, 2012
Degree Completion Portfolio Due Date (Spring Commencement Participation)	5:00 pm, February 1, 2012
Last Day to Exercise Pass/No Pass Option	February 3, 2012
Degree Completion Portfolio Due Date (Boise Commencement Participation)	5:00 pm, March 1, 2012
Mid-Semester Grade Entry	March 7-9, 2012
Last Day to Withdraw from Class without Grade Responsibility	March 18, 2012
Spring Break (all locations)	March 24-April 1, 2012
Good Friday Holiday	April 6, 2012
Transfer Credit Transcript Due Date (Spring Commencement Participation)	5:00 pm, April 13, 2012
Dissertation Signed Approval Sheets Due (Spring Commencement Participation)	5:00 pm, April 13, 2012
Study Day (Traditional Undergraduate)	April 23, 2012
Final Exams (Traditional Undergraduate)	April 24-27, 2012
Spring Semester Ends	April 27, 2012
Spring Commencement	April 28, 2012
Transfer Credit Transcript Due Date (Boise Commencement Participation)	5:00 pm, May 1, 2012
Final Grade Entry Deadline	May 4, 2012

Summer Semester/May Term

Summer Semester/May Term Begins	April 30, 2012
Last Day to Change May Term Registration (Add/Drop)	May 1, 2012
Last Day to Withdraw from May Term Class without Grade Responsibility	May 3, 2012
Census Date for May Term	May 7, 2012
Last Day to Change Registration (Add/Drop)	May 13, 2012
May Term Ends	May 18, 2012
May Term Final Grade Entry Deadline	May 25, 2012
Memorial Day Holiday	May 28, 2012

Boise Commencement ..... TBD
Census Date for Summer ..... July 1, 2012
Independence Day Holiday ..... July 4, 2012
Last Day to Withdraw from Summer Class without Grade Responsibility ..... July 8, 2012
Summer Semester Ends ..... August 17, 2012
Final Grade Entry Deadline ..... August 24, 2012

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