George Fox University

Undergraduate Programs

2017-18

GEORGE FOX
UNIVERSITY

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GEORGE FOX UNIVERSITY

2017-18 Undergraduate Programs

Academic Programs ____ *5*

Undergrad Academic Departments ____ *6*

Art and Design Department ____ **7**

Bachelors (BA) in Art & Design ____ 8
Bachelors (BA) in Interdisciplinary Studies: Art ____ 13
Art Minor ____ 14
Art History Minor ____ 15
Interior Design Minor ____ 16
Design Project Management Minor ____ 17

Biology and Chemistry Department ____ **18**

Bachelors (BS) in Biochemistry ____ 19
Bachelors (BS) in Biology ____ 21
Bachelors (BA) in Biology ____ 25
Bachelors (BS) in Chemistry ____ 29
Biology Minor ____ 31
Chemistry Minor ____ 32

Business and Economics Department ____ **33**

Bachelors (BA) in Accounting ____ 34
Bachelors (BA) in Business ____ 36
Bachelors (BA) in Economics ____ 38
Bachelors (BA) in Entrepreneurship ____ 40
Bachelors (BA) in Finance ____ 42
Bachelors (BA) in Global Business ____ 44
Bachelors (BA) in Management ____ 46
Bachelors (BA) in Marketing ____ 48
Accounting Minor ____ 50
Business Administration Minor ____ 51
Economics Minor ____ 52
Entrepreneurship Minor ____ 53
Finance Minor ____ 54
Global Business Minor ____ 55
Management Minor ____ 56
Marketing Minor ____ 57

College of Christian Studies ____ **58**

Bachelors (BA) in Biblical Studies ____ 59
Bachelors (BA) in Christian Ministries ____ 60
Bachelors (BA) in Philosophy ____ 62
Bachelors (BA) in Interdisciplinary Studies: Biblical Studies ____ 65
Bachelors (BA) in Interdisciplinary Studies: Christian Ministries ____ 66
Bachelors (BA) in Interdisciplinary Studies: Religion ____ 67
Biblical Studies Minor ____ 68

Camping: Administrative Minor 69
Camping: Programming Minor 70
Christian Ministries: Cross-Cultural Ministry Minor 71
Philosophy Minor 72
Quaker Studies Minor 73
Religion Minor 74
Christian Ministries: Theology and Vocation Minor 75
Christian Ministries: Youth Ministry Minor 76

Communication Arts Department 77
Bachelors (BA) in Cinema and Media 78
Bachelors (BA) in Communication Arts 81
Bachelors (BA) in Journalism 83
Bachelors (BA) in Organizational Communication 85
Cinema and Media Communication Minor 87
Communication Arts Minor 88

Computer Science Department 89
Bachelors (BS) in Computer Science 90
Bachelors (BS) in Information Systems 92
Computer Science Minor 93
Information Systems Minor 94

Teacher Education Department 95
Bachelors (BS) in Elementary Education 99
BA (Post Baccalaureate) in American Culture and Language 101

Engineering Department 102
Bachelors (BS) in Applied Science 103
Bachelors (BS) in Engineering 105

English and Theatre Department 109
Bachelors (BA) in English 110
Bachelors (BA) in Theatre 112
Bachelors (BA) in Interdisciplinary Studies: Theatre 114
Literature Minor 115
Theatre Minor 116
Women's Studies Minor 117
Writing Minor 118

Health and Human Performance Department 119
Bachelors (BSAT) in Athletic Training 120
Bachelors (BS) in Exercise Science 123
Bachelors (BS) in Health and Human Performance 125
Bachelors (BS) in Interdisciplinary Studies: Health and Human Performance 128
Coaching Minor 129
Health Minor 130
Health Teaching Minor 131
Recreation Minor 132

History Department 133
Bachelors (BA) in History 134
History Minor 135

International Studies Department 136

Bachelors (BA) in International Studies 137
International Experience Certificate 139
International Studies Minor 140

Mathematics Department 141
Bachelors (BS) in Mathematics 142
Mathematics Minor 143

Music Department 144
Bachelors (BA) in Music 145
Bachelors (BA) in Music Education 149
Bachelors (BA) in Interdisciplinary Studies: Music 153
Music Minor 154
Music Theatre Minor 155
Worship Arts Minor 156

Nursing Department 157
Bachelors (BS) in Nursing 159

Politics Department 161
Bachelors (BA) in Politics 162
Politics Minor 164
Peace Studies Minor 165
Certificate in Conflict Management 166

Psychology Department 167
Bachelors (BS) in Cognitive Science 168
Bachelors (BA) in Psychology 170
Bachelors (BS) in Psychology 172
Psychology Minor 174

Social Work Department 175
Bachelors (BSW) in Social Work 176
Social Welfare Minor 178
Criminal Justice Minor 179

World Languages, Sociology and Cultural Studies 180
Bachelors (BA) in Sociology 181
Bachelors (BA) in Spanish 183
Sociology Minor 185
French Minor 186
Romance Languages Minor 187
Spanish Minor 188
TESOL Minor 189

Course Descriptions 190

Degrees and Minors 378

Major and Minor Requirements 379

Majors and Minors Listing 381

Preprofessional Programs 388

Degrees Offered 390

General Education Program ____ *391*

General Education Requirements ____ 391

Honors Program ____ *400*

Alternative Credit ____ *402*

Course Numbering System ____ *404*

Academic Opportunities ____ *405*

Academic Success Program ____ 406

Consortium Visitor Program ____ 407

English Language Institute (ELI) ____ 408

Juniors Abroad ____ 409

Semesters Off Campus ____ 411

Semesters Off Campus: Course Disciplines ____ 412

Undergraduate Admissions ____ *414*

Basis of Undergraduate Admission ____ 415

Admission Procedures for Freshmen ____ 416

Admission Procedures and Policies for Transfer Students ____ 417

Readmission of Former Students ____ 418

High School Nongraduates ____ 419

Advanced Placement ____ 420

International Students ____ 421

Special Students-High School ____ 422

Special Students-Conventional ____ 424

Adults 62 and older ____ 426

Spouse Enrollment Program ____ 428

Notes about use of catalogs

These catalogs are 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 these catalogs 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 on this website and in the schedule of classes.

Academic Programs

- Undergrad Academic Departments
- Course Descriptions
- Degrees and Minors
- Degrees Offered
- Major and Minor Requirements
- Graduation Requirements
- General Education Program
- Honors Program
- Alternative Credit
- Course Numbering System
- Preprofessional Programs
- Transfer Credit Policies
- Academic Opportunities

Undergrad Academic Departments

- Art and Design
- Biology and Chemistry
- Business and Economics
- College of Christian Studies
- Communication Arts
- Computer Science
- Engineering
- English and Theatre
- Health and Human Performance
- History, Politics and International Studies
- Math
- Music
- Nursing
- Psychology
- Social Work
- Teacher Education
- World Languages, Sociology and Cultural Studies

Art and Design Department

Majors

- BA in Art & Design
    - Graphic Design
    - Interior Design
    - Studio Arts
- BA in Art: Interdisciplinary

Minors

- Art
- Art History
- Design Project Management
- Interior Design

More information about programs and faculty of the art and design department can be found on the Art and Design Degree Program page.

Bachelors (BA) in Art & Design

The art major offers a 48- to 52-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, interior design, communications, ministry and the visual arts. Students are required to earn a minimum grade of C- in all courses taken for the major.

The Art and Design Department prepares students to live extraordinary lives of personal fulfillment and professional contributions by offering majors and minors in visual art and design disciplines. There are several avenues in which to pursue your creativity and passions in the arts. As an undergraduate art major, you will be given strong foundational skills and instruction in your specific area of interest. Along with our core art classes, George Fox offers concentrations in studio arts, graphic design and interior design. The art and design faculty believe that skills can be taught and they can be learned. They believe that the most important skills for the art and design student, and any artist, must transcend the newest technologies, media and processes. The criteria of art and design within society and academia has changed from the role of highly aesthetic to design as a part of everyday life as innovation, and as a means to solve problems.

Faculty

The versatile faculty is made up of artists and designers who actively produce and exhibit their creative work - artists who are leaders in their various fields of discipline. They love to teach because they love what they teach. Our faculty is equipped to motivate, inspire and nurture; they become true mentors to their students. The faculty of the Department of Art and Design believe it is necessary for students to become leaders rather than followers, to become the next generation of gifted creative artists and designers and to become art professionals in the ever-growing number of contemporary art and art-related careers.

More information about the art major can be found on the art major admissions page.

Art and Design: Studio Arts Concentration

Art majors concentrating in studio arts can specialize in painting, ceramics, drawing, photography, mixed media or printmaking. We also feature a ceramics and sculpture facility that allows students to explore pottery and various sculpture mediums. Seniors have the opportunity to set up their own studio space in the art annex, and there is access to an anagama kiln where students get to practice the ancient process of wood-firing ceramics. Our art major students also have opportunities to work with distinguished guest artists from the Northwest and around the country.

Art Core (15 hours)

ARTS 101 Basic Design 2-D	3
ARTS 102 Basic Design 3-D	3
ARTS 111 Drawing I	3
ARTS 217 Art History Survey from 1450	3
ARTS 460 Art and Christ	3

Good Standing Requirement

All art and design students must complete the four following requirements annually before class registration each spring.

- Art museum visit (minimum of one per year)
- First Thursday or First Friday visit each semester (minimum of two visits per year)
- Art-related community service (minimum of one per year)
- Submit artworks for juried George Fox art student exhibition

In addition, complete two additional from either the first list or from the list below:

- Guest lecture(s)
- Art-related community events
- Design-related community events: grand openings or open houses (optional for interior and graphic design majors)
- Professional association events (required for interior and graphic design majors)

Art and Design Professional Network - Must be taken a minimum of 5 semesters.
Junior Portfolio Review – Submit portfolio and collateral for faculty review.
Senior Portfolio Review – Specific requirement listed under each concentration

Studio Arts (33 hours)

Studio Arts Core (18 hours)

ARTS 112 Drawing II	3
ARTS 216 Art History Survey to 1450	3
ARTS 355 Topics in Art History	3
ARTS 382 Twentieth-Century Art	3
ARTS 384 Contemporary Art Forms	3
ARTS 491 Senior Thesis I	1.5
ARTS 492 Senior Thesis II	1.5

Electives

Students must choose 15 semester hours from ARTS (General Art) or ARTD (Design) courses (must include courses from three separate studio disciplines).

Senior Thesis Exhibition

Art and Design: Design Concentrations (Graphic and Interior)

These concentrations feature a unique interdisciplinary approach to design preparation, involving studio work as well as academic investigation. The core of the curriculum integrates theory, design, and technology, adhering to the highest industry standards. Classes emphasize application over theory and help you to develop a strong portfolio to launch your career.

Art Core (15 hours)

ARTS 101 Basic Design 2-D	3
ARTS 102 Basic Design 3-D	3
ARTS 111 Drawing I	3
ARTS 217 Art History Survey from 1450	3

ARTS 460 Art and Christ 3

Good Standing Requirement

All art and design students must complete the four following requirements annually before class registration each spring.

- Art museum visit (minimum of one per year)
- First Thursday or First Friday visit each semester (minimum of two visits per year)
- Art-related community service (minimum of one per year)
- Submit artworks for juried George Fox art student exhibition

In addition, complete two additional from either the first list or from the list below:

- Guest lecture(s)
- Art-related community events
- Design-related community events: grand openings or open houses (optional for interior and graphic design majors)
- Professional association events (required for interior and graphic design majors)

Art and Design Professional Network - Must be taken a minimum of 5 semesters.

Junior Portfolio Review – Submit portfolio and collateral for faculty review.

Senior Portfolio Review – Specific requirement listed under each concentration

Students must choose one of the following three concentrations:

Graphic Design (37 hours)

The Graphic Design concentration provides professional education within a Christian liberal arts environment. Students learn the craft and technology of graphic design. They will also learn the vocabulary, visual perception, methods, and processes that are directed toward specialized courses in print design, advertising, computer graphics, illustration, web design, package design and special topic courses. Students will address current design issues and problems.

Design Core (19 hours)

ARTD 100 Project Management and Design 3
ARTD 210 Creative Suite I 3
ARTD 307 Color Theory for Designers 3
ARTD 310 Design Foundations 3
ARTD 311 Architectural Graphics 3
ARTD 491 Professional Development 2
ARTD 492 Portfolio Development 2

Graphic Design Core (18 hours)

ARTS 112 Drawing II 3
ARTD 350 Typography 3
ARTD 360 Illustration 3
ARTD 363 History of Visual Communications 3
ARTD 450 3D Modeling: Maya 3
ARTD 460 Marketplace Graphics 3

Senior Portfolio and Culmination Presentation

Graphic Design Professional Designation (15 hours)

ARTD 417 The Business of Design	3
ARTD 431 CAD for Interiors	3
ARTD 451 Motion Graphics: Flash/AfterEffects	3
CMCO 250 Digital Multimedia Production	3
Choose one course from the list below:	
ARTD 415 Professional Design Collaboration	3
ARTD 475 Design Internship	3

Suggested Optional Electives for Graphic Design

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
BUSN 110 Introduction to Business	3
MKTG 260 Principles of Marketing	3
MKTG 420 Marketing Communications	3
MKTG 450 Marketing Research and Decision Making	3

Interior Design (37 hours)

The Interior Design concentration features the analysis and design to meet clients' needs in living and working environments that are both functionally efficient and aesthetically satisfying. This perspective integrates function and aesthetics into the design process and the generation of design solutions for residential, commercial, hospitality, institutional and educational environments. Technical skill-building and studio coursework will offer you opportunities to gain understanding of the elements and principles of residential and commercial design, manual and computer-based skills, written, visual, and oral communication skills, and be informed of industry certification exams and registration.

Design Core (19 hours)

ARTD 100 Project Management and Design	3
ARTD 210 Creative Suite I	3
ARTD 307 Color Theory for Designers	3
ARTD 310 Design Foundations	3
ARTD 311 Architectural Graphics	3
ARTD 491 Professional Development	2
ARTD 492 Portfolio Development	2

Interior Design Core (18 hours)

ARTD 230 Sewn Products Development	3
ARTD 300 History of Architecture and Apparel	3
ARTD 303 Textiles Foundations	3
ARTD 330 Interior Foundations	3
ARTD 430 Informed Interior Design	3

ARTD 431 CAD for Interiors	3
Senior Portfolio and Culmination Presentation	
Interior Design Professional Designation (12 hours)	
ARTD 415 Professional Design Collaboration	3
ARTD 417 The Business of Design	3
ARTD 440 Kitchen and Bath Design	3
ARTD 475 Design Internship	3
Strongly Encouraged Electives for Interior Design Concentration	
ARTS 112 Drawing II	3
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
BUSN 110 Introduction to Business	3
MKTG 260 Principles of Marketing	3
MKTG 420 Marketing Communications	3
MKTG 450 Marketing Research and Decision Making	3

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.

Required courses for an art interdisciplinary major are:

ARTS 101 Basic Design 2-D
ARTS 111 Drawing I
ARTS 216 Art History Survey to 1450
ARTS 217 Art History Survey from 1450

The remaining 12 credits are selected with approval of the art department chair.

Art Minor

21 credit hours

Minor Requirements

ARTS 101 Basic Design 2-D †	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 George Fox 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 3-D for ARTS 101 Basic Design 2-D.

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 Topics in Art History (select two different Art History topics)	3
ARTS 382 Twentieth Century Art	3
ARTS 383 History of Visual Communications	3
ARTS 384 Contemporary Art Forms	3

Interior Design Minor

21 credit hours

Minor Requirements

ARTD 100 Project Management and Design (3)
ARTD 300 History of Architecture and Apparel (3)
ARTD 303 Textiles Foundations (3)
ARTD 307 Color Theory for Designers (3)
ARTD 311 Architectural Graphics (3)
ARTD 330 Interior Foundations (3)
ARTD 430 Informed Interior Design (3)

Design Project Management Minor

The project management minor is a 23-hour course of study that provides students the entry-level education needed to sit for the Certified Associate Project Management (CAPM) exam, according to the Project Management Institute®. A project manager is accountable for the success or failure of a project. They plan, execute and close projects. Skills will be developed in managing teams, aligning expectations with projects goals, driving communication and providing creative problem solutions. Students are required to earn a minimum grade of C- in all courses taken for the minor.

23 credit hours

Minor Requirements

ARTD 100 Project Management & Design (3)
ARTD 415 Professional Design Collaboration (3)
ARTD 417 The Business of Design (3)
ARTD 491 Professional Development (2)
BUSN 110 Introduction to Business (3)
MGMT 260 Principles of Management (3)
MGMT 300 Leading and Managing People (3)
MGMT 480 Organizational Behavior (3)

Biology and Chemistry Department

The following majors and minors are offered by the biology and chemistry department at George Fox University.

Majors

- BA in Biology
- BS in Biology
- BS in Biochemistry
- BS in Chemistry

Minors

- Biology minor
- Chemistry minor

More information about programs and faculty of the biology and chemistry department can be found on the Biology and Chemistry Program page.

Bachelors (BS) in Biochemistry

The biochemistry major offers a 66-semester-hour course of study. The major is designed for students who plan to enter a variety of careers, including teaching, chemical and biochemical 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.

Degree Outcomes

Graduates with a BS in biochemistry will:

- Demonstrate fundamental principles and applications in the major sub-disciplines of chemistry
- Critically analyze a breadth of chemical problems and experimental results
- Execute chemical experiments utilizing modern methods, instrumentation, computer applications, and the scientific method of investigation
- Properly utilize chemical information systems
- Communicate technical material effectively both orally and in writing

Major Requirements

Chemistry, Biology and Biochemistry Requirements (43 hours)

CHEM 211 General Chemistry I	4
CHEM 212 General Chemistry II	4
BIOL 211 General Biology I	4
BIOL 212 General Biology II	4
CHEM 310 Analytical Chemistry	4
CHEM 331 Organic Chemistry I	4
CHEM 332 Organic Chemistry II	4
CHEM 341 Biochemistry I	4
CHEM 342 Biochemistry II	4
CHEM 440 Thermodynamics	4
CHEM 461 Chemistry Seminar	1
CHEM 462 Experimental Chemistry	2

Mathematics (8 hours)

MATH 201 Calculus I	4
MATH 202 Calculus II	4

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

Chemistry and Biology Electives

Students must choose one course from CHEM and one course from BIOL (7 hours)

Chemistry

CHEM 320 Advanced Inorganic Chemistry	3
CHEM 380 Advanced Organic Chemistry	3
CHEM 450 Quantum Chemistry	3

Biology

BIOL 350 Genetics	4
BIOL 410 Molecular Biology	4
BIOL 420 Cell Biology	4

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.

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.

Bachelors (BS) in Biology

This major offers a 53- or 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, 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.

Degree Outcomes

Graduates with a BS in biology will:

- Understand, interpret and communicate scientific information
- Demonstrate a broad understanding of field biology, biodiversity, systems-level biology and cell/molecular biology
- Understand the basic forms of scientific inquiry
- Evaluate the compatibility of science and faith in their worldview

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 (3 to 4 hours)

Students must choose one of the following courses:

CSIS 201 Introduction to Computer Science I	3
MATH 201 Calculus	4
MATH 240 Statistical Procedures	3

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 333 Advanced Physiology	4
BIOL 335 Neuroscience	4
BIOL 340 Plant Physiology	4
BIOL 450 Advanced Human Anatomy	4
Students must choose one of the following cell/molecular courses:	
BIOL 335 Neuroscience	4
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 333 Advanced Physiology	4
BIOL 335 Neuroscience	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 333 Advanced Physiology	4
BIOL 420 Cell Biology	4
Students must choose one of the following courses:	
BIOL 322 Comparative Vertebrate Anatomy	4
BIOL 450 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 cell/molecular courses:

BIOL 335 Neuroscience	4
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 333 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 cell/molecular courses:

BIOL 335 Neuroscience	4
BIOL 350 Genetics	4
BIOL 370 Microbiology	4
BIOL 410 Molecular Biology	4
BIOL 420 Cell Biology	4

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.

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.

Bachelors (BA) in Biology

This major offers a 55- to 65-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 to 14 semester hours in core biology courses, 8 to 12 hours in chemistry, 3 hours in mathematics, 20 hours of biology electives, and 14 to 16 hours of courses based on a selected liberal arts emphasis.

Degree Outcomes

Graduates with a BA in biology will:

- Understand, interpret and communicate scientific information
- Demonstrate knowledge and competency of field biology, biodiversity, systems-level biology and cell/molecular biology
- Understand the basic forms of scientific inquiry
- Evaluate the compatibility of science and faith in their worldview

Major Requirements

Biology (10-14 hours)

BIOL 490 Biological Exploration	2
Students must choose one of the following sequences of courses:	
BIOL 211 General Biology I *and*	8
BIOL 212 General Biology II	
(Alternative) BIOL 221 Human Anatomy and Physiology I,	12
BIOL 222 Human Anatomy and Physiology II, *and*	
BIOL 211 General Biology I	

Chemistry (8-12 hours)

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

Mathematics (3 hours)

MATH 180 - College Algebra or above	3

*MATH 240 Statistics required if MATH GE Requirement is waived

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 300 Evolution	2
BIOL 322 Comparative Vertebrate Anatomy	4
BIOL 367 Essentials of Microbiology **or** 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 333 Advanced Physiology	4
BIOL 335 Neuroscience	4
BIOL 340 Plant Physiology	4
BIOL 450 Advanced Human Anatomy	4
Students must choose one of the following cell/molecular courses:	
BIOL 335 Neuroscience	4
BIOL 350 Genetics	4
BIOL 367 Essentials of Microbiology **or** BIOL 370 Microbiology	4
BIOL 410 Molecular Biology	4
BIOL 420 Cell Biology	4
Upper-division BIOL electives	4-9

Liberal Arts Emphasis (14-16 hours)

Art (15 hours)

ARTS 101 Basic Design 2-D	3
Students must choose 12 hours of electives from the following courses:	
Drawing: ARTS 111, 112	3
Painting: ARTS 201, 301, 401	3
Sculpture: ARTS 221, 321, 421	3
Photography: ARTS 230, 330, 430	3
Graphic Design: ARTS 250, 350, 450	3
Illustration: ARTS 360	3
Field Experience: ARTS 475 (up to 3 credit hours)	3

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*	16

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

Option 2

Students must choose one of the following sequences of courses:

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

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
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 Affairs	3
PSCI/INTL 303 International Conflict and Peace	3
PSYC 353 Culture and Psychology	3
RELI 330 Introduction to the World Christian Movement	3
RELI 360 Cross-Cultural Christian Outreach	3
RELI/INTL 440 World Religions	3
SOCI 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 Professional Writing	3
WRIT 330 Magazine and Feature Writing	3
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
Other Academic Disciplines (15 hours)	

**Permission for this option should be sought before a significant amount of course work has been undertaken. The field should have a logical connection to biology.*

Introductory course taken by majors in the field	3
12 upper-division elective hours, as agreed upon by department chair of chosen discipline and biology department head.	12

Bachelors (BS) in Chemistry

The chemistry major offers a 55- or 56-semester-hour course of study. 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.

Degree Outcomes

Graduates with a BS in chemistry will:

- Understand the fundamental principles and applications in the major sub-discipines of chemistry
- Critically analyze a breadth of chemical problems and experimental results
- Execute chemical experiments utilizing modern methods, instrumentation, computer applications, and the scientific method of investigation
- Properly utilize chemical information systems
- Communicate technical material effectively both orally and in writing

Major Requirements

Chemistry Requirements (33 hours)

CHEM 211 General Chemistry I	4
CHEM 212 General Chemistry II	4
CHEM 310 Analytical Chemistry	4
CHEM 320 Advanced Inorganic Chemistry	3
CHEM 331 Organic Chemistry I	4
CHEM 332 Organic Chemistry II	4
CHEM 440 Thermodynamics	4
CHEM 450 Quantum Chemistry	3
CHEM 461 Chemistry Seminar	1
CHEM 462 Experimental Chemistry	2

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

Chemistry Electives (3-4 hours)

Students must select one of the following courses:

CHEM 341 Biochemistry I	4

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.

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.

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 221 Human Anatomy & Physiology I *and*	8
BIOL 222 Human Anatomy & Physiology II	
Biology (BIOL) coursework (300-level or above)	12

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	3
CHEM 341 Biochemistry I	4
CHEM 342 Biochemistry II	4
CHEM 380 Advanced Organic Chemistry	3
CHEM 440 Thermodynamics	4
CHEM 450 Quantum Chemistry	3

Business and Economics Department

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

Majors

- BA in Accounting
- BA in Business Administration
- BA in Economics
- BA in Entrepreneurship
- BA in Finance
- BA in Global Business
- 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
- Business Administration
- Economics
- Entrepreneurship
- Finance
- Global Business
- Management
- Marketing

More information about programs and faculty of the business and economics department can be found on the Business and Economics Degree Program page.

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, 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.

Degree Outcomes

Graduates with a BA in accounting will:

- Be a technically competent accountant
- Develop and enhance students' ethical decision-making ability and demonstrate the ability to integrate a biblical worldview in the accounting profession
- Engage in experiential learning opportunities where students can integrate technical knowledge and professional acumen
- Evaluate the pressures, benefits and challenges of the globalization of accounting

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 493 Senior Capstone - Strategy, Planning and Implementation	3
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 Business Administration

This major offers a 48-semester-hour course of study, intended to engage students in developing the business knowledge and skills needed to be effective workers within a variety of businesses and industries. 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, as well as two additional courses, as selected by the student. Students are required to obtain a minimum grade of C- in all major courses.

Students who major in the Business Administration major will not be permitted to double major in any other business discipline.

Degree Outcomes

Graduates with a BA in business administration will:

- Develop an understanding of the role of each of the primary business disciplines in today's organizations
- Communicate orally and in writing with effectiveness
- Understand the principles of effective leadership
- Demonstrate effective skill as a team member who serves both locally and globally
- Demonstrate the ability to identify ethical dilemmas and responsible courses of action

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, Planning and Implementation	3
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

Choose 2 of the following courses: (6 hours)

BUSN 303 Personal Finance	3
MGMT 300 Leading and Managing People	3

MKTG 300 Consumer Behavior	3
ENPR 300 Entrepreneurship I: New Venture Feasibility	3
FINC 300 Intermediate Financial Management	3
ARTD 240 Graphic Design/Visual Communication for Non-Majors	3

Bachelors (BA) in Economics

Economics is the study of how human societies coordinate to meet needs. It is thus a science concerned with decision making, allocation, social customs and political realities. It draws upon philosophy, mathematics, history and other social sciences to study such issues as individual and household choice making, the behavior of firms and industries, the allocative and regulatory roles of government, and the social challenges of economic growth, distribution, unemployment, inflation, globalization and environmental issues. In keeping with the university's mission and objectives, the faculty examine economic topics from the perspectives of faith, emphasizing such themes as service, stewardship and justice.

The economics major offers a 42-semester-hour course of study, enabling students to prepare for careers as economists in business, government or education, as well as offering an undergraduate social science major of interest to students anticipating graduate study in business administration, law, public policy, public administration, or advanced studies in economics. Like other majors in the Department of Business and Economics, it requires completion of general core classes, and specialized selected courses. Students are required to obtain a minimum grade of C- in all courses taken for the major. Field experiences and internships are strongly encouraged.

Degree Outcomes

Graduates with a BA in economics will:

- Articulate and apply economic models and reasoning to choice making in multiple settings: individual personal finance, managerial and organizational decision making, and at the level of public policy
- Demonstrate analytical skills involved in gathering and evaluating economic data and applying economic research to problem solving
- Demonstrate effective writing and presentation skills with respect to economic topics
- Examine economic issues and controversies with an informed awareness of the history of economic thought, the nature of political economy, and the perspectives of faith
- Develop an understanding of global realities, differences, institutions, challenges and opportunities

Major Requirements

Economics Core (21 hours)

BUSN 240 Statistics for Business and Economics	3
ECON 201 Principles of Microeconomics	3
ECON 202 Principles of Macroeconomics	3
ECON 301 Intermediate Microeconomics	3
ECON 302 Intermediate Macroeconomics	3
ECON 410 Introduction to Applied Econometrics	3
ECON 490 Economics Senior Seminar	3

Electives (21 hours)

Students must choose 15 semester hour from the following courses:

ECON 340 Public Economics	3
ECON 370 Global Political Economy	3
ECON 461 International Trade	3
ECON 462 International Finance	3
ECON 475 Field Experience	3
ECON 485 Selected Topics	3
FINC 340 Financial Markets and Institutions	3

Students must choose 6 semester hours from the following courses:

BUSN 290 Business Ethics or PHIL 180 Ethics	3
GSCI 485 Selected Topics: History and Philosophy of Science	3
MATH 201 Calculus I	4
MATH 202 Calculus II	4
MATH 301 Calculus III	3
MATH 311 Differential Equations with Linear Algebra	4
MATH 411 Advanced Linear Algebra	3
PHIL 312 History of Philosophy II: Modern and Postmodern	3
PHIL 280 Introduction to Political Philosophy	3
PHIL 285 Selected Topics	3
PHIL 320 Agrarian Philosophy: Life and Land	3
PHIL 332 Virtue Philosophy	3
PHIL 373 Social Theory	3
PHIL 485 Selected Topics	3

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 College of Business, it requires completion of the general business core, as well as specialized courses.

Degree Outcomes

Graduates with a BA in entrepreneurship will:

- Recognize the entrepreneurial potential within themselves and others by appreciating the role of entrepreneurship within society
- Develop an appreciation for venture opportunity, how to recognize it, and how to evaluate and appraise the nature of creative new business concepts that can be turned into sustainable business ventures
- Identify the ways in which entrepreneurship manifests itself, including start-up contexts, corporate contexts, social contexts and public-sector contexts
- Understand bootstrapping, angel and venture capital environments and assess venture risk and evaluation methodologies

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 493 Senior Capstone - Strategy, Planning and Implementation	3
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
Students must choose three of the following courses:	
ENPR 475 Field Experience	3
MKTG 420 Marketing Communications	3
MKTG 450 Marketing Research and Decision Making	3
ARTD 240 Graphic Design/Visual Communication for Non-Majors	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, 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.

Degree Outcomes

Graduates with a BA in finance will:

- Be technically competent in financial analysis, financial strategy and tool and software use
- Demonstrate an understanding of the macro economic factors that impact financial decision making
- Be competent leaders and managers to be servants for the world, specifically leaders who are ethically grounded, globally engaged and socially responsible
- Engage in real-time and experiential learning opportunities where he/she can integrate technical knowledge and professional acumen
- Evaluate the pressures, benefits and challenges of the globalization of finance
- Integrate a biblical worldview in the finance profession

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 493 Senior Capstone - Strategy, Planning and Implementation	3
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 years. Students are also required to complete an internship with a global business or company. Like other majors in the College of Business, it requires completion of the general business core, as well as specialized courses.

Degree Outcomes

Graduates with a BA in global business will:

- Articulate global business and international management theories, concepts, principles, skills and practices, including comparative economic and political systems as these define business practices in a particular geography
- Develop and enhance the student's own intercultural awareness and the impact that international differences in economic, political, cultural and technological systems may have on business and management practices
- Evaluate the pressures, benefits and challenges of globalization and develop the ability to identify ongoing global trends that need to be taking into consideration for effective business decision making across borders
- Evaluate, analyze and integrate information from a variety of sources and develop the ability to find relevant cross-border information that may not be readily accessible
- Demonstrate effective writing and presentation skills in a multicultural setting

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 493 Senior Capstone - Strategy, Planning and Implementation	3
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
GBSN 470 Global Strategy	3
INTL 230 Introduction to International Affairs	3
MGMT 440 International Management	3
Students must choose one of the following courses:	
GBSN 399 Cross-Cultural Study	3
GBSN 475 Field Experience	3
COMM 420 Intercultural Communication	3
ECON 370 Global Political Economy	3
SOCI 310 Cultural Anthropology	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
COMM 420 Intercultural Communication	3
ECON 370 Global Political Economy	3
SOCI 310 Cultural Anthropology	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, 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.

Degree Outcomes

Graduates with a BA in management will:

- Develop an understanding of the role of management theories and behaviors in today's organization
- Communicate orally and in writing with effectiveness
- Understand the principles of effective leadership
- Demonstrate effective skill as a team member who serves both locally and globally
- Demonstrate the ability to identify ethical dilemmas and responsible courses of action

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 493 Senior Capstone - Strategy, Planning and Implementation	3
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:	
BUSN 303 Personal Finance	3
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
Additional course as approved by faculty advisor	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 complementary 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 College of Business, it requires completion of the general business core, 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.

Degree Outcomes

Graduates with a BA in marketing will:

- Critically evaluate each of the major steps in the marketing research process and to design, analyze and conduct a market-research project for an organization
- Demonstrate analytical skills through gathering and assessing relevant information, and by coming to well-reasoned conclusions and solutions
- Display strong interpersonal abilities in writing, through presentations, and via business networking opportunities
- Appreciate the contribution of consumer behavior to developing good marketing practice and understand consumer and business decsion making, along with consumption activities and experiences
- Evaluate the effectiveness of marketing communications and to design, implement and effectively communicate marketing communication plans

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 493 Senior Capstone - Strategy, Planning and Implementation	3
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 360 Digital 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
ARTD 240 Graphic Design/Visual Communication for Non-Majors	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

Business Administration Minor

21 credit hours

The business administration minor is designed to provide students, in majors outside the College of Business, the opportunity to gain an understanding of business principles that they can apply to their primary discipline.

Minor Requirements

ACCT 271 Principles of Financial Accounting	3
BUSN 110 Introduction to Business	3
BUSN 240 Business Statistics	3
ECON 202 Principles of Macroeconomics	3
FINC 260 Business Finance	3
MGMT 260 Principles of Management	3
MKTG 260 Principles of Marketing	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

Entrepreneurship Minor

18 credit hours

The entrepreneurship minor is designed to provide students in other majors a deeper understanding of business creation and operation.

Minor Requirements

BUSN 110 Introduction to Business	3
MKTG 260 Principles of Marketing	3
MGMT 260 Principles of Management	3
ENPR 300 Entrepreneurship I	3
ENPR 400 Entrepreneurship II	3

Students must choose one of the following:

ENPR 410 Entrepreneurship III	3
ENPR 475 Field Experience	3
MKTG 420 Marketing Communications	3
MKTG 450 Marketing Research	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

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†	6

†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

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 Affairs	3
Additional Business and Economics coursework†	6

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

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

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†	6

†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

MKTG 260 Principles of Marketing	3
Students must choose three of the following courses:	
MKTG 300 Consumer Behavior	3
MKTG 360 Digital 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†	6

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

College of Christian Studies

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: Cross-Cultural Ministry
- Christian Ministries: Theology and Vocation
- Christian Ministries: Youth Ministries
- Philosophy
- Quaker Studies
- Religion

More information about programs and faculty of the religious studies department can be found on the Religious Studies Degree Program page.

Bachelors (BA) in Biblical Studies

The biblical studies major offers a 37- or 38-semester-hour course of study designed to provide students a good foundation for some church ministries, work with youth and parachurch organizations, teach Bible in Christian school settings, and pursue 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).

Degree Outcomes

Graduates with a BA in biblical studies will:

- Demonstrate seminary-ready (beginner–intermediate) competency in classical Biblical Hebrew at a first-year level or New Testament Greek at a second-year level
- Explain the historical-social circumstances of the books within both the Hebrew Bible/Old Testament and the Christian New Testament
- Create a scholarly argument that incorporates a historical and theological perspective as well as the students' knowledge of Hebrew or Greek
- Articulate basic content knowledge of the Christian Bible and explain how biblical concepts, theories and skills interact with the content of disciplines outside of biblical studies

Major Requirements

BIBL 290 Biblical Interpretation	3
BIBL 490 Biblical Theology	3
RELI 380 Christian Beliefs	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 Christian Ministries

The Christian ministries major offers a 46-semester-hour course of study 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.

Degree Outcomes

Graduates with a BA in Christian ministries will:

- Demonstrate a seminary-ready competency in church history and basic doctrines of orthodox Christianity
- Demonstrate basic hermeneutical skills for study and teaching of the Bible
- Articulate their faith and theological convictions effectively in writing and speaking
- Apply biblical and doctrinal understanding of ministry concepts in internships and field experience

Major Requirements

Required Core Courses (30 hours)

BIBL 290 Biblical Interpretation	3
CHMN 130 Christian Discipling	3
CHMN 341 World Christianity: Theology and Practice	3
CHMN 360 Perspectives in Christian Education	3
CHMN 390 Theological Foundations of Christian Ministry	3
CHMN 420 Speaking as Ministry	3
CHMN 441 Contemporary Issues of the Church	3
RELI 350 Spiritual Formation	3
RELI 380 Christian Beliefs	3
RELI 440 World Religions	3

Concentrations (16 hours)

Theology and Vocation (16 credits)

CHMN 391 Theological Praxis I: Foundations of Self	3
CHMN 392 Theological Praxis II: Christian Community	3
CHMN 491 Theological Praxis III: Study of Theology	3
CHMN 492 Theological Praxis IV: Critical Issues	3
CHMN 475 Field Experience	4

Cross-Cultural Ministry (16 credits)

CHMN 475 Field Experience	4
COMM 420 Intercultural Communication	3
RELI 330 Introduction to the World Christian Movement	3

RELI 360 Cross-Cultural Christian Outreach	3
RELI 460 Issues in Contemporary Missions	3
Youth Ministry (16 credits)	
CHMN 240 Youth Ministry: Youth Culture	2
CHMN 241 Youth Ministry: Methods and Practice	2
CHMN 330 Youth Ministry: Theology and Philosophy of Ministry	2
CHMN 381 Counseling	3
CHMN 475 Field Experience	4
HHPE 380 Experiential Learning	3

Bachelors (BA) in Philosophy

The philosophy major offers a 39-40-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.

Degree Outcomes

Graduates with a BA in philosophy will:

- Understand important concepts, theories and skills of philosophy and describe how they interact with the content of disciplines outside of philosophy
- Demonstrate effective writing skills in philosophical essays and in on-the-job internship situations
- Apply critical skills from the philosophy curriculum to make decisions and solve problems
- Analyze, evaluate and integrate ideas from a variety of sources both in written essays and speech

Major Requirements

Philosophy Core (27 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 311 History 1: Ancient and Medieval Philosophy	3
PHIL 312 History 2: Modern and Postmodern Philosophy	3
PHIL 490 Philosophy Capstone	3
Students must complete the following colloquium courses:	
PHIL 214 Philosophy Colloquium	1
PHIL 314 Philosophy Colloquium	1
PHIL 414 Philosophy Colloquium	1
Students much choose one of the following courses:	
PHIL 415 Contemporary Philosophers	3
PHIL 435 Contemporary Problems	3

Specialization Tracks (12-13 hours)

Students must choose one of the specializations below and take the courses associated with it. Possible electives to meet the total 12-13 semester hours are listed below the tracks.

Creation Care

GSCI 120 Environmental Science	4
PHIL 320 Agrarian Philosophy: Life and the Land	3
Philosophy (PHIL) coursework electives	6

Graduate School

PHIL 270 Philosophy of the Arts	3
PHIL 332 Virtue Philosophy	3
Philosophy (PHIL) coursework electives	6

Pre-Law

PHIL 280 Introduction to Political Philosophy	3
PHIL 330 Religion and Reason	3
PSCI 260 Introduction to Law	3
Philosophy (PHIL) coursework elective	3

Pre-Med

PHIL 330 Religion and Reason	3
Students must choose one of the following courses:	
PHIL 331 Ethical Issues	3
PHIL 332 Virtue Philosophy	3
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
Philosophy (PHIL) coursework elective	3

Pre-Seminary

PHIL 310 Christian Apologetics	3
RELI 380 Christian Beliefs	3
Students must choose one of the following courses:	
PHIL 331 Ethical Issues	3
PHIL 332 Virtue Philosophy	3
Philosophy (PHIL) coursework elective	3

Social Justice

Students must choose one of the following courses:	
PHIL 331 Ethical Issues	3
PHIL 332 Virtue Philosophy	3
Students must choose one of the following courses:	
PHIL 313 Feminist Philosophy	3
PHIL 320 Agrarian Philosophy: Life and Land	3
PHIL 373 Social Theory	3
PHIL 380 Gender Theory	3
Students must choose one of the following courses:	
BIBL 390 Biblical Basis for Peacemaking	3

PHIL 280 Introduction to Political Philosophy	3
PHIL 300 American Political Theory	3
PHIL 475 Field Experience (The student will work in an appropriate social service setting)	3

Specialized

Electives determined in consultation with department†	12

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

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 hours as specified below and 24 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 Interdisciplinary Studies: Christian Ministries

An interdisciplinary studies major may be elected through application and approval of the Christian 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 hours as specified below and 24 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	6

- 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

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. Details are available from the Christian Studies Degree Program page.

Bachelors (BA) in Interdisciplinary Studies: Religion

An interdisciplinary studies major may be elected through application and approval of the Christian 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

20 credit hours

Minor Requirements

ACCT 271 Principles of Financial Accounting	3
BUSN 110 Introduction to Business	3
CHMN 230 The Christian and the Outdoors	3
CHMN 370 Camp Programming and Counseling	3
CHMN 440 Camp Administration	2
CHMN 475 Field Experience	3
MGMT 260 Principles of Management	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: Cross-Cultural Ministry Minor

18 credit hours

Minor Requirements

CHMN 130 Christian Discipling	3
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 341 World Christianity: Theology and Practice	3
RELI 380 Christian Beliefs	3

Philosophy Minor

18 credit hours

Minor Requirements

PHIL 150 Introduction to Philosophy	3
PHIL 180 Ethics	3
PHIL 277 Spirituality and the Intellectual Life Students	3
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 214 Philosophy Colloquium	1
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 313 Feminist Philosophy	3
PHIL 314 Philosophy Colloquium	1
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 380 Gender Theory	3
PHIL 399 Cross-Cultural Study	3
PHIL 414 Philosophy Colloquium	1
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 two of the following courses or sequences (6 credit hours):	
PHIL 330 Philosophy 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: Theology and Vocation Minor

18 credit hours

Minor Requirements

CHMN 130 Christian Discipling	3
CHMN 391 Theological Praxis I: Foundation of Self	3
CHMN 392 Theological Praxis II: Christian Community	3
CHMN 491 Theological Praxis III: Study of Theology	3
CHMN 492 Theological Praxis IV: Critical Issues	3
Students must choose one of the following two courses:	
RELI 380 Christian Beliefs	3
CHMN 341 World Christianity	3

Christian Ministries: Youth Ministry Minor

18 credit hours

Minor Requirements

CHMN 130 Christian Discipling	3
CHMN 240 Youth Ministry: Youth and Culture	2
CHMN 241 Youth Ministry: Methods and Practice	2
CHMN 330 Youth Ministry: Theology and Philosophy of Ministry	2
CHMN 381 Counseling	3
CHMN 475 Field Experience	3
Students must choose one of the following two courses:	
CHMN 341 World Christianity: Theology and Practice	3
RELI 380 Christian Beliefs	3

Communication Arts Department

The following majors and minors are offered by the communication arts department at George Fox University.

Majors

- BA in Cinema and Media Communication
- BA in Communication Arts
- BA in Journalism
- BA in Organizational Communication

Minors

- Cinema and Media Communications
- Communication Arts

More information about the programs and faculty of the communication arts department can be found on the Communication Arts Degree Programs page.

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.

Degree Outcomes

Graduates with a BA in Cinema and Media Communication will:

- Apply communication concepts and theories as related to cinema and media
- Apply their knowledge and skill to complete significant projects in digital media production
- Apply writing skill for media production, such as script writing
- Recognize and practice ethical behavior and communication in relation to cinema and media production

Major Requirements

Theory Core (9 hours)

CMCO 160 History of U.S. Cinema (3) or CMCO 220 History of International Cinema (3)
COMM 230 Mass Media and Popular Culture (3)
CMCO 280 Film Theory and Criticism (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) or CMCO 320 Dramatic Scriptwriting (3)
CMCO 350 Editing Video (3)
CMCO 475 Field Experience (2) or 1 credit of CMCO 475 Field Experience plus 1 credit of CMCO 474 Corporate Video Production
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 15 semester hours of coursework at the Contemporary Music Center Program in Martha's Vineyard.

Film and Video 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):

Students must choose 12 hours of electives from CMCO offerings or THEA 370 Directing for Theatre

-- OR --

Up to 15 semester hours of course work at the Los Angeles Film Studies Center

Film Studies

The study of the moving image incorporates cinema history, media criticism and elements of hands-on film production.

Required (6 hours):
CMCO 160 Introduction to Film Studies (3) or CMCO 220 International Film Studies (3) (both must be taken, regardless of which is counted toward the CMCO core requirement)
CMCO 333 Camera and Lighting (3)

Electives (15 hours):
Students must choose 12 hours of electives from CMCO and COMM offerings

-- OR --

Up to 15 semester hours of course work at the Los Angeles Film Studies Center

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 (9 hours):
CMCO 360 Animation I (3)
CMCO 363 Motion Graphics and Special Effects (3)
CMCO 460 Advanced Animation (3)

Electives (9 hours):
ARTS 230 Beginning Photography (3) ARTS
330 Intermediate Photography (3) ARTS 350
Graphic Design II: Typography (3)
ARTS 370 Design Applications I: Photoshop/Illustrator (3)
ARTS 450 Design Applications II: InDesign/Maya (3)
CMCO 333 Camera and Lighting (3)
CMCO 355 Event Video Production (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.

Bachelors (BA) in Communication Arts

The communication arts major offers a 45-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.

Degree Outcomes

Graduates with a BA in communication arts will:

- Understand core communication concepts and theories
- Practice ethical communication
- Apply speaking skills in public contexts
- Evaluate the messages that they hear as well as the messages they give
- Describe a plan to become a person of influence in a diverse society and world

Major Requirements

Performance Core (18 hours)

COMM 100 Introduction to Communication	3
COMM 190 Introduction to Communication Research Methods	3
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 Professional Writing	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 Professional Writing	3
WRIT 330 Magazine and Feature Writing	3
Communication arts (COMM) coursework at 200-level or above	3-12
Cinema and media communication (CMCO) coursework	3-12

Bachelors (BA) in Journalism

The journalism major offers a 42-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.

Degree Outcomes

Graduates with a BA in journalism will:

- Understand relevant concepts of reporting
- Demonstrate skills in written and oral communication, as well as skills in inquiry and analysis
- Prepare and communicate information in multimedia platforms
- Understand ethical communication in speaking and listening
- Formulate a plan to become a person of influence in a diverse society and world

Major Requirements

Core Requirements (24 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 340 Media Law and Ethics (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 250 Digital Multimedia Production (3)
CMCO 370 Broadcast News II (3)
JOUR 320 Introduction to Public Relations (3)

Students must choose one of the following courses:
CMCO 333 Camera and Lighting (3)
CMCO 350 Video Editing (3)
CMCO 355 Event Video Production (3)
CMCO 371 Documentary Production I (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 250 Digital Multimedia Production (3)
JOUR 320 Introduction to Public Relations (3)
JOUR 310 Professional Writing (3)
JOUR 330 Magazine and Feature Writing (3)

Bachelors (BA) in Organizational Communication

The 42-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, fundraising 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.

Degree Outcomes

Graduates with a BA in organizational communication will:

- Understand core communication concepts and theories
- Practice ethical communication
- Speak effectively in public contexts
- Analyze, synthesize and evaluate problems within organizational processes
- Formulate a plan to become a person of influence in a diverse society and world

Major Requirements

Core Courses (30 hours)

BUSN 110 Introduction to Business (3)
COMM 190 Introduction to Communication Research Methods (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 (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

MGMT 260 Principles of Management (3)
MGMT 480 Organizational Behavior (3)

Students must choose one of the following courses:
COMM 380 Advanced Organizational Communication (3)
COMM 390 Small Group Communication (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)

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 History of U.S. Cinema (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

21 credit hours

Minor Requirements

COMM 200 Persuasive Communication	3
COMM 210 Interpersonal Communication	3
COMM 230 Mass Media and Popular Culture	3
Students must choose one of the following courses:	
COMM 300 Communication Theory	3
COMM 400 Critical Approaches to Communication	3
Students must choose one of the following courses:	
COMM 410 Gender Communication Across Cultures	3
COMM 420 Intercultural Communication	3
Students must choose two courses from the following options:	
COMM 190 Introduction to Communication Research Methods	3
COMM 270 Introducation to Organizational Communication	3
COMM 310 Conflict Resolution	3
COMM 320 Introducation to Public Relations	3
COMM 324 Argumentation and Critical Thinking	3
COMM 380 Advanced Organizational Communication	3
COMM 390 Small Group Communication	3

Computer 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 Department of Computer Science at George Fox University.

Majors

- BS in Computer Science
- BS in Information Systems

Minors

- Computer Science
- Information Systems

More information about programs and faculty of the computer and information science department can be found on the Computer and Information Science Degree Program page.

Bachelors (BS) in Computer Science

The computer science major offers a 54-semester-hour core course of study with an optional 29-semester-hour cyber security concentration. Students are required to obtain a minimum grade of C- in all courses taken for the major.

Degree Outcomes

Graduates with a BS in computer science will:

- Demonstrate problem-solving competency through programming and software development
- Understand applications of discrete structures and algorithms
- Apply theoretical and practical system implementations (architecture, operating systems, networking, database)
- Apply professional/ethical responsibility to their work
- Understand cultural influences within the technical industry

Major Requirements

Computer Science Core (45 hours)

CSIS 201 Introduction to Computer Science I (3)
CSIS 202 Introduction to Computer Science II (3)
CSIS 310 Data Structures (3)
CSIS 321 Software Engineering (3)
CSIS 340 Database Systems (3)
CSIS 360 Computer Architecture and Assembly Language (3)
CSIS 370 Object-Oriented Analysis and Design (3)
CSIS 420 Structures of Programming Languages (3)
CSIS 430 Analysis of Algorithms (3)
CSIS 460 Operating Systems (3)
ENGR 381 Servant Engineering I (2)
ENGR 382 Servant Engineering II (2)
ENGR 481 Senior Design I (1)
ENGR 482 Senior Design II (3)
MATH 201 Calculus I (4)
MATH 260 Discrete Mathematics (3)

Electives (9 hours)

Students must complete an additional 9-semester-hours from the following options:
Computer Science (CSIS) coursework (5-9)
ENGE 220 Digital Logic Design (4)

Cyber Security Concentration Option

In addition to the Computer Science Core course requirements students can elect to add a Cyber Security Concentration and complete an additional 29-hours of course work. The 9-hour elective requirement required in the Computer Science Core can be met by the courses required to complete the Cyber Security Concentration.

Cyber Security Concentration (29 hours)

Students must complete the following courses:
ENGE 220 Digital Logic (4)
CSIS 350 Data Communications and Networks (3)
CSIS 380 Secure Software (3)
CSIS 390 Cellular and Mobile Technologies (3)
CSIS 412 Computer Security and Digital Forensics (3)
CSIS 413 Advanced Cyber Security (3)
CSIS 434 Parallel and Distributed Computing (3)
CSIS 450 Network Administration (3)
CSIS 451 Cyber Defense (4)

Bachelors (BS) in Information Systems

The information systems major offers a 59-semester-hour course of study. Students are required to obtain a minimum grade of C- in all courses taken for the major.

Major Requirements

Business Core (15 hours):

BUSN 110 Introduction to Business (3)
BUSN 240 Statistics for Business and Economics (3)
BUSN 290 Business Ethics (3)
MGMT 260 Principles of Management (3)

Students must complete one of the following courses:
ECON 201 Principles of Microeconomics (3)
ECON 202 Principles of Macroeconomics (3)

Computer Science Core (38 hours):

CSIS 201 Introduction to Computer Science I (3)
CSIS 202 Introduction to Computer Science II (3)
CSIS 304 Web-Based Programming (3)
CSIS 314 Client-Server Systems (3)
CSIS 321 Software Engineering (3)
CSIS 330 Human-Computer Interaction (3)
CSIS 350 Data Communications and Networks (3)
CSIS 412 Computer Security and Digital Forensics (3)
CSIS 450 Network Administration (3)
ENGR 381 Servant Engineering I (2)
ENGR 382 Servant Engineering II (2)
ENGR 481 Senior Design I (1)
ENGR 482 Senior Design II (3)
MATH 260 Discrete Mathematics (3)

Electives (6 hours):

Students are required to complete an additional 6-hours of electives from the following subject areas:
ACCT, BUSN, CSIS, MGMT, or MKTG coursework (6)

Computer 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 (3)

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

Information Systems Minor

18 credit hours

Minor Requirements

CSIS 201 Introduction to Computer Science I (3)
CSIS 202 Introduction to Computer Science II (3)
MGMT 260 Principles of Management (3)
BUSN 240 Statistics for Business and Economics (3)

Students must choose 6 additional semester hours of upper-division computer science and information systems (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 (Elementary and Music)

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, EDUC260 Teaching, Schooling and Learning (4), generally taken the fall of the sophomore year by elementary and music education majors. Students enrolled in EDUC260 Teaching, Schooling and Learning 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. iPads are required by fall semester of the junior year.

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 260 Teaching, Schooling and Learning (4) *(fingerprints and Character Question Form are required)*
EDUC 270 Intercultural Communications (2)
EDUC 324 Trends and Methods in Early Childhood Education (4)
EDUC 343 Adventures in Math and Science I (4)
EDUC 344 Adventures in Math and Science II (4)
EDUC 346 The Inclusive Classroom in a Diverse Society (4)
EDUC 354 Pedagogy of Health, Human Performance and the Arts (4)
EDUC 371 Curriculum Design with ESOL (4)
EDUC 375 Practicum I (4)
EDUC 381 Classroom Management (2)
EDUC 412 Literature for Children and Adolescents (2)
EDUC 413 Reading and Writing Methods (4)
EDUC 414 Reading and Writing with the Common Core Subjects (4)
EDUC 461 Applied English Linguistics and Second language Acquisition (4)
EDUC 462 Classroom Assessment: Assessing and Planning for all Learners (4)
EDUC 475 Practicum II (10)
EDUC 480 Classroom Assessment: Assessing and Planning for All Learners (4)
EDUC 490 Senior Seminar (2)
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 260 Teaching, Schooling and Learning (4) *(fingerprints and Character Question Form are required)*
EDUC 371 Curriculum Design with ESOL (4)
EDUC 381 Classroom Management (2)
EDUC 375 Practicum I (4)
EDUC 475 Practicum II (10)
EDUC 490 Senior Seminar (2)

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:

1. Examination and/or demonstration of competence. The student may demonstrate competence in written or verbal ways or in the execution of specific tasks.
2. 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.
3. 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.

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

Bachelors (BS) in Elementary Education

The elementary education major offers a 80-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. This degree includes an endorsement in ESOL and requires an iPad to enter the program. 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.

Degree Outcomes

Graduates with a BS in elementary education will:

- Understand how learners grow and develop within and across the cognitive, linguistic, social, emotional and physical areas and design appropriate and challengiing learning experiences for all learners
- Understand individual differences and diverse cultures and communities and apply this knowledge to creating environments that support individual and collaborative learning on behalf of student achievement
- Use a variety of instructional strategies to support every student in meeting rigorous learning goals
- Understand the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and create learning experiences that make these aspects of the discipline accessible and meaningful for learners to assure mastery of the content
- Use multiple methods of assessment to engage learners in their own growth, to monitor learner progress, and to guide the teacher's and learner's decision making
- Engage in ongoing professional learning and use evidence to continually evaluate his/her practice and adapt practice to become more effective

Major Requirements

Prerequisite Courses (14 hours)

EDUC 260 Teaching, Schooling and Learning (4)
EDUC 270 Intercultural Communications (2)
MATH 211 Foundations of Elementary Mathematics I (4)
MATH 212 Foundations of Elementary Mathematics II (4)

Psychology and History Requirement (6 hours)

PSYC 150 General Psychology (3)

Students must complete one of the following history courses:
HIST 151 United States to 1865 (3)
HIST 152 United States from 1865 (3)

Education Core (60 hours)

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

EDUC 324 Trends and Methods in Early Childhood Education (4)
EDUC 343 Adventures in Math and Science I (4)
EDUC 344 Adventures in Math and Science II (4)
EDUC 346 The Inclusive Classroom in a Diverse Society (4)
EDUC 354 Pedagogy of Health, Human Performance and the Arts (4)
EDUC 371 Curriculum Design with ESOL (4)
EDUC 375 Practicum I (4)
EDUC 381 Classroom Management (2)
EDUC 412 Literature for Children and Adolescents (2)
EDUC 413 Reading and Writing Methods (4)
EDUC 414 Reading and Writing with the Common Core Subjects (4)
EDUC 461 Applied English Linguistics and Second language Acquisition (4)
EDUC 475 Practicum II (10)
EDUC 480 Classroom Assessment: Assessing and Planning for All Learners (4)
EDUC 490 Senior Seminar (2)

Optional: Middle-Level Authorization (5 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 353 Trends and Issues in Middle-Level Education (4)
EDUC 376 Student Teaching I for Middle-Level Authorization (1)

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.

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; 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 16 semester hours completed in residence prior to student teaching.

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 major 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 international students 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

†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.

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

More information about programs and faculty of the engineering department can be found on the Engineering Degree Program page.

Bachelors (BS) in Applied Science

This major offers a 60-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.

Degree Outcomes

Graduates with a BS in applied science will:

- Apply knowledge of mathematics, science, and applied sciences to their work
- Design and conduct experiments and analyze and interpret data
- Design systems, processes and programs to meet specified needs of the discipline
- Function effectively on multidisciplinary teams
- Identify and solve applied science problems using the techniques, skills and modern scientific tools necessary for professional practice
- Understand and act according to the field's professional and ethical standards
- Communicate effectively
- Use their broad education to impact solutions in global and societal contexts
- Understand contemporary issues in the field

Major Requirements (60 hours)

CHEM 211 General Chemistry I (4)
CHEM 212 General Chemistry II (4)
ENGE 250 Electric Circuit Analysis (4)
ENGM 211 Statics (3)
ENGM 212 Dynamics (3)
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 311 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 (3)
ENGM 312 Applications of Engineering Thermodynamics (2)
ENGM 320 Mechanics of Materials (3)
ENGM 330 Fluid Mechanics (3)

Students must choose 6-semester hours from the following:
MATH 312 Numerical Methods (3)
MATH 331 Probability (3)
MATH 411 Advanced Linear Algebra (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 440 Thermodynamics (4) and CHEM 450 Quantum Chemistry (3) 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 97-98-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. The George Fox Engineering Program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.

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. There is also a sequence for courses in the major.

Program Outcomes

George Fox engineering graduates will have:

- An ability to apply knowledge of mathematics, science and engineering
- An ability to design and conduct experiments, as well as to analyze and interpret data
- An ability to design a system, component or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability and sustainability
- An ability to function on multi-disciplinary teams
- An ability to identify, formulate and solve engineering problems
- An understanding of professional and ethical responsibility
- An ability to communicate effectively
- The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
- A recognition of the need for and an ability to engage in life-long learning
- A knowledge of contemporary issues
- An ability to use techniques, skills and modern engineering tools necessary for engineering practice

Major Requirements

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

Economics Requirement (3 hours)

Students must complete one of the following courses:
ECON 201 Principles of Microeconomics (3)
ECON 202 Principles of Macroeconomics (3)

Mathematics and Natural Science (27 hours)

CHEM 211 General Chemistry I (4)
MATH 201 Calculus I (4)
MATH 202 Calculus II (4)
MATH 301 Calculus III (3)
MATH 311 Differential Equations with Linear Algebra (4)
PHYS 211 General Physics with Calculus I (4)
PHYS 212 General Physics with Calculus II (4)

Engineering Core (14 hours)

ENGR 151 Engineering Principles I (3)
ENGR 152 Engineering Principles II (3)
ENGR 381 Servant Engineering I (2)
ENGR 382 Servant Engineering II (2)
ENGR 481 Senior Design I (1)
ENGR 482 Senior Design II (3)

Additional graduation requirement:
Engineering Seminar Series (15 sessions)

Concentrations (53-54 hours)

Civil Engineering

ENGC 210 Site Development w/ AutoCAD and Civil 3D (2)
ENGC 220 Engineering Surveying (2)
ENGC 310 Environmental Engineering (3)
ENGC 330 Structural Analysis and Design (3)
ENGC 340 Geotechnical Engineering (4)
ENGC 350 Water Resources Engineering (4)
ENGC 360 Engineering Economics (2)
ENGC 370 Transportation Engineering (3)
ENGC 360 Engineering Economics (2)
ENGC 450 Construction Management and Professional Practice (2)

ENGM 211 Statics (3)
ENGM 212 Dynamics (3)
ENGM 320 Mechanics of Materials (3)
ENGM 321 Mechanics of Materials Lab (1)
ENGM 330 Fluid Mechanics (3)
ENGR 250 Principles of Materials Science (3)

MATH 330 Engineering Statistics (3)

Students must choose one of the following courses:
ENGE 260 Circuits and Instrumentation (4)
ENGM 311 Engineering Thermodynamics (3)

Students must choose 6 hours from the following courses:
ENGC 430 Reinforced Concrete Design (3)
ENGC 460 Design of Steel Structures (3)

Computer Engineering

ENGE 220 Digital Logic Design (4) ENGE 250
Electrical Circuit Analysis (4) ENGE 270
Electrical Power Systems (3) ENGE 311
Electronic Devices and Circuits (4)
ENGE 312 Applications of Electronic Devices (4)
ENGE 320 Microprocessor Architecture (4)
ENGE 330 Electrical Signals and Networks (3)
ENGE 420 Microprocessors (3)
ENGE 480 Digital Signal Processing (3)

CSIS 202 Introduction to Computer Science II (3)
CSIS 310 Data Structures and File Processing (3)
CSIS 350 Data Communications and Networks (3)
CSIS 430 Analysis of Algorithms (3)
CSIS 460 Operating Systems (3)

MATH 260 Discrete Mathematics (3)

Students must choose one additional math or science elective from the following list:
MATH 312 Numerical Methods (3)
MATH 330 Engineering Statistics (3)
MATH 331 Probability (3)
BIOL 100 Foundations of Biology (4)
BIOL 211 General Biology I (4)
BIOL 212 General Biology II (4)
BIOL 221 Human Anatomy and Physiology I (4)
CHEM 212 General Chemistry II (4)
ENGR 250 Principles of Materials Science (3)

Electrical Engineering

ENGE 220 Digital Logic Design (4) ENGE 250
Electrical Circuit Analysis (4) ENGE 270
Electrical Power Systems (3) ENGE 311
Electronic Devices and Circuits (4)
ENGE 312 Applications of Electronic Devices (4)
ENGE 320 Microprocessor Architecture (4)
ENGE 330 Electrical Signals and Networks (3)
ENGE 360 Electromagnetic Fields and Waves (3)
ENGE 420 Embedded System Design (3)
ENGE 480 Digital Signal Processing (3)

CSIS 202 Introduction to Computer Science II (3)

Students must complete the following courses:
ENGE 430 Communication Systems (3)
ENGE 460 Microwave Engineering and Applications (3)
ENGE 470 Power Electronics and Renewable Energy (3)

Students must choose one of the following courses:
MATH 312 Numerical Methods (3)
MATH 330 Engineering Statistics (3)

MATH 331 Probability (3)

Students must choose one additional math or science elective from the following list:
MATH 260 Discrete Mathematics (3)
MATH 312 Numerical Methods (3)
MATH 330 Engineering Statistics (3)
MATH 331 Probability (3)
BIOL 100 Foundations of Biology (4)
BIOL 211 General Biology I (4)
BIOL 212 General Biology II (4)
BIOL 221 Human Anatomy and Physiology I (4)
CHEM 212 General Chemistry II (4)
ENGR 250 Principles of Materials Science (3)

Mechanical Engineering

ENGM 211 Statics (3)
ENGM 212 Dynamics (3)
ENGM 220 Materials and Processes in Manufacturing (3)
ENGM 311 Engineering Thermodynamics (3)
ENGM 312 Applications of Engineering Thermodynamics (2)
ENGM 320 Mechanics of Materials (3)
ENGM 321 Mechanics of Materials Lab (1)
ENGM 330 Fluid Mechanics (3)
ENGM 350 Machine Dynamics and Vibrations (3)
ENGM 360 Finite Elements and Computer Modeling (3)
ENGM 380 Heat Transfer (3)
ENGM 381 Energy Lab (1)
ENGM 400 Mechanical Engineering Design (3)
ENGM 480 Control Systems Engineering (3)

ENGE 260 Circuits and Instrumentation (4)
ENGR 250 Principles of Materials Science (3)

Students must choose 6 semester hours from the following courses:
ENGM 420 Biomechanics (3)
ENGM 450 Fundamentals of Flight Dynamics (3)
ENGM 470 Energy Systems Engineering (3)

Students must choose one of the following courses:
MATH 312 Numerical Methods (3)
MATH 330 Engineering Statistics (3)
MATH 331 Probability (3)

English and Theatre Department

Majors

- BA in English
- BA in Theatre
- BA in Theatre: Interdisciplinary

Minors

- Literature
- Theatre
- Women's Studies
- Writing
- Music Theatre is offered through the Music Department

More information about programs and faculty of the English department can be found on the English Degree Program page.

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.

Degree Outcomes

Graduates with a BA in English will:

- Analyze and explain rhetorical situations
- Critique and discuss literary scholarship
- Apply literary theories to particular problems related to literary texts
- Compose an imaginative creative work using appropriate literary techniques
- Identify where their faith concerns interact with and inform their writing and thinking
- Describe how their reading of texts informs their understanding of common human experience
- Demonstrate a broad familiarity with important literary works in the British and American tradition and with world literatures in English

Students may select a literature or a 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 Advanced Studies in British Literature*	3

*Students must complete a minimum of two literture sequence courses before enrolling in LITR 335 or LITR 365.

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 6
   LITR 238 Contemporary World Literature 6
2. LITR 326 American Literature to 1865
   LITR 327 American Literature, 1865-1914
   LITR 328 American Literature, 1914-Present
3. LITR 376 British Literature to 1660
   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 240 Technical Writing	3
WRIT 310 Professional Writing	3

Students must choose three of the following courses:

ARTD 310 Design Foundations	3
CMCO 250 Digital Multimedia Production	3
CMCO 260 Scriptwriting for Media	3
COMM 320 Introduction to Public Relations	3
WRIT 230 Introduction to Journalism	3

Preparation for Graduate Studies in English (15 hours)

Students must choose two out of the three courses listed for the Literature Sequence not previously taken for the Literature Core.	6
LITR 379 Shakespeare	3
One additional literature course	3
One additional writing course	3

Teacher Preparation for Secondary Teachers of English (17 hours)

Students must choose two out of the three courses listed for the Literature Sequence not previously taken for the Literature Core.	6
LITR 379 Shakespeare	3
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.

Bachelors (BA) in Theatre

The theatre major offers a 48-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.

Degree Outcomes

Graduates with a BA in theatre will:

- Analyze a broad range of dramatic genres and performance texts from vaious historical periods and cultural backgrounds
- Research, conceptualize and produce a critical approach to theatrical design
- Function safely, effectively and collaboratively to solve specific production challenges as technicians, designers, actors or directors
- Apply skills in acting to support a stage production
- Evaluate how their faith concerns interact with and inform their work as theatre artists
- Demonstrate a discerning critique of self, peers, process and product as they solve specific artistic challenges

Major Requirements

Theory Core (21 hours)

LITR 379 Shakespeare	3
THEA 100 Acting 1: Fundamentals	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
THEA 160/360 Improvisational Theatre Workshop	3
THEA 285/485 Selected Topics	3
THEA 350 Music Theatre Performance	3
THEA 380 Costume Design	3
THEA 390 Playwriting	3

Practicum (6 hours)

Practicum Requirements: Students must complete the following two courses:

THEA 105: Technical Theatre Practicum	1
THEA 305: Technical Theatre Practicum	1

Practicum Electives: Students must choose 4 semester hours from the following courses:

THEA 105/305: Technical Theatre Practicum	1-3
THEA 115/315: Acting Practicum	1-3
THEA 135/335: Design Practicum	1-3
THEA 145/345: Management Practicum	1-3
THEA 155/355: Directing Practicum	1-3
THEA 165/365 George Fox University Players: Drama Touring Troupe	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 135 Design Practicum	1
THEA 335 Design Practicum	2
THEA 330 Stage Lighting and Sound	3
THEA 380 Costume Design	3
THEA 430 Scenic Design	3

Design/Technology Portfolio Review Benchmark: Students are required to present their design/technology portfolio to theatre faculty their senior year.

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).

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

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
THEA 105/305 Technical Theatre Practicum	1

Electives (6 hours)

Students must choose 6 semester hours from the following courses:

THEA 105/305 Technical Theatre Practicum	1-3
THEA 115/315 Acting Practicum	1-3
THEA 135/335 Design Practicum	1-3
THEA 145/345 Management Practicum	1-3
THEA 155/355 Directing Practicum	1-3
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 240 Understanding Drama	2
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 380 Costume Design	3
THEA 390 Playwriting	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

Women's Studies Minor

18 credit hours

Minor Requirements	
LITR 280 Literary Foundations of Women's Studies	3
LITR 480 International Women's Voices	3
Students must take one of the following courses:	
BIBL 315 Biblical Studies: Women and the Bible	3
LITR 380 Gender Theory	3
PHIL 313 Feminist Philosophy	3
Students must choose 9 semester credits from the following:	
ARTS 355 Topics in Art History: Women in Art	3
COMM 410 Gender Communication Across Cultures	3
RELI 215 Religion and Theology: Women's Voices in Contemporary Theology	3
RELI 215 Religion and Theology: Women in Church History	3
SOCI 220 Men and Women in Society	3
SOCI 223 Sociology of Families	3

Selected Topic courses offered with the appropriate objectives, such as RELI 215, will only fulfill the requirements if they are offered under the titles listed above, or are otherwise approved by the Women's Studies faculty advisor.

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

Health and Human Performance Department

Majors

- BS in Exercise Science
- BS in Health and Human Performance
- BS in Health and Human Performance: Interdisciplinary
- Bachelor of Science in Athletic Training (BSAT)

Minors

- Coaching
- Health
- Health Teaching
- Recreation

More information about programs and faculty of the Department of Health and Human Performance can be found on the Health and Human Performance Degree Program page.

Bachelors (BSAT) in Athletic Training

The Athletic Training Program is accredited by the Commission on Accreditation for Athletic Training Education (CAATE). The athletic training major offers a 65-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 Athletic Training Program 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 25 observational hours in the athletic training room to be eligible for acceptance in the Athletic Training Program.

Students make formal application for admission to the Athletic Training Program through the program director in the spring of their freshman year. Application must be made by April 1 of the semester prior to formal entry into the Athletic Training Program. A maximum of 20 qualified students will be accepted into the Athletic Training 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, HHPE 390, and HLTH 233); two written recommendations; two written essays; a minimum predicted college GPA of 2.75 using the George Fox admission and financial aid standards; meeting technical standards as described in the *Athletic Training Program Policies and Procedures Manual*; good standing with student life as described in the George Fox University *Student Handbook*; and submission of the formal application no later than April 1. Generally, any application submitted after April 1 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 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 Athletic Training Program Policies and Procedures Manual. Guidelines covering transfer credit are stated in the Athletic Training Website. Transfer credit generally will not be granted for practicum (sequence courses: HHPE 374 through HHPE 379).

Generally, continuation in the Athletic Training 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 Athletic Training Program Policies and Procedures Manual. 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.

Degree Outcomes

Graduates with a BSAT in athletic training will:

1. Competently perform the role of an entry-level athletic trainer in the five domains of athletic training.
    a. Collaborate with other allied health care professionals
    b. Communicate effectively and respectfuly with individuals/groups, professionals, and society
    c. Demostrate recognition, evaluation, treatment and management of injuries and illness in an active population
    d. Engage in clinical educational experiences within a vareity of populations, work settings, and allied health care professionals
    e. Apply the NATA code of ethics and abide by Standards of Practice
    f. Achieve 70% first-time pass rate on the BOC exam
2. Demonstrate that each individual is unique in terms of anatomic, physiologic, emotional, social, and spiritual dimensions.
    a. Value and understand the role of faith in the practice of whole person healthcare
    b. Value the principles of patient-centered care (patient values, needs, emotional support, education, and family and friends) as a central piece in whole person healthcare
3. Develop competence in evidence-based practice.
    a. Describe the concepts and components of evidence-based practice.
    b. Demostrate the ability to search the medical literature for published research
    c. Define an appropriate clinical question to direct patient care
    d. Employ and integrate the best available evidence into clinical practice
    e. Appreciate the value and best interest of the patient in making clinical decisions
4. Develop lifelong learning and professional development.
    a. Invest in the profession of athletic training
    b. Define professional development in athletic training
    c. Develop skills in leadership and service in the profession of athletic training
    d. Attend local, state, and national athletic training meetings

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

Major Requirements (65 hours)

BIOL 221 Human Anatomy and Physiology I	4
BIOL 222 Human Anatomy and Physiology II	4
HHPE 228 Principles of Conditioning	2
HHPE 363 Organization and Administration of 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 401 Physical Exam of the Lower Extremities in Athletic Training	3
HHPE 402 Physical Exam of the Spine and Upper Extremities in Athletic Training	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 150 General Psychology	3
PSYC 240 Statistical Procedures	3

Bachelors (BS) in Exercise Science

Exercise Science offers a 58- to 59-semester-hour interdisciplinary course of study, designed to prepare students for work in the field of physical therapy and the exercise science fields. The major includes strong emphasis on science and health and human performance fields. Students are also prepared for fields outside of physical therapy and exercise science. This major can assist students seeking advanced degrees in the fields of occupational therapy, chiropractic and the physician assistant profession.

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

Degree Outcomes

Graduates with a degree in exercise science will:

- Develop a passion for learning about the human body and have a greater appreciation for its development, function and spiritual nature
- Use scientific research processes effectively to ask relevant questions, collect data, present results and evaluate results
- Demonstrate proficiency in the scientific constructs and application of principles to lead clients to better health
- Possess the requisite knowledge to work in science-related fields related to exercise and physical activity
- Have readiness to pursue advanced educational training in exercise science or to enter professional schools in the health sciences

Major Requirements

Core Requirements (49 hours)

BIOL 221 Human Anatomy & Physiology I	4
BIOL 222 Human Anatomy & Physiology II	4
CHEM 211 General Chemistry I	4
CHEM 212 General Chemistry II	4
COMM 100 Introduction to Communication	3
PHYS 201 General Physics I	4
PHYS 202 General Physics II	4
PSYC 150 General Psychology	3
MATH 240 Statistical Procedures OR PSYC 240 Statistical Procedures	3
HHPE 390 Care and Prevention of Athletic Injuries	3
HHPE 394 Kinesiology	3
HHPE 430 Exercise Physiology	3
HHPE 470 Motor Development and Motor Skill Learning	3
HHPE 475 HHP Field Experience: Exercise Science	3
HHPE 490 Senior Seminar	1

Biology Elective (4 hours)

*Students must choose **one** course from the following:*

BIOL 211 General Biology I	4
BIOL 322 Comparative Vertebrate Anatomy	4
BIOL 333 Advanced Physiology	4
BIOL 335 Neuroscience	4

Additional Elective Requirements (5-6 hours)

*Students must choose **two** courses from the following:*

HHPE 228 Principles of Conditioning	2
HHPE 401 Physical Exam of the Lower Extremities in Athletic Training	3
HHPE 402 Physical Exam of the Spine and Upper Extremities in Athletic Training	3
PSYC 310 Lifespan Human Development	3
PSYC 312 Adult Development	3
PSYC 314 Adolescent Development	3
PSYC 320 Neuroscience	3
PSYC 420 Abnormal Psychology	3

Optional Electives

Choices of the following are dependent upon the direction the student has previously selected with regard to graduate school or profession. However, a student isn't required to take any of these courses. Some courses listed below are only offered every other year. Plan accordingly.

HHPE 366 General Medical Conditions in Athletic Training	2
HHPE 384 Pharmacology in Athletic Training	1
HHPE 413 Therapeutic Exercise	2
HHPE 414 Therapeutic Modalities	2
HHPE 420 Exercise Prescription	3
HHPE 480 Tests and Measurements in Physical Education	2
HLTH 300 Nutrition	3

Bachelors (BS) in Health and Human Performance

The health and human performance major offers a 48- to 56-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.

Degree Outcomes

Graduates with a BS in health and human performance will:

- Understand the role of physical activity in personal health and wellness
- Apply scientific concepts toward assessing, promoting or enhancing physical health, fitness or performance
- Communicate, both orally and in writing effectively
- Analyze, evaluate and integrate information from physical education research

Major Requirements

Core Requirements (11 hours)

BIOL 221 Human Anatomy and Physiology I	4
BIOL 222 Human Anatomy and Physiology II	4
PSYC 150 General Psychology	3

Concentrations

Fitness Management (42-43 hours)

HHPA 130 Aquatics†	1
HHPE 200 History and Principles of Physical Education	2
HHPE 223 Tumbling/Gymnastics	1
HHPE 228 Principles of Conditioning	2

HHPE 360 Organization and Administration of Sport and Physical Education	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 HHP Field Experience: Fitness Management	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 401 Physical Exam of the Lower Extremities in Athletic Training	3
HHPE 402 Physical Exam of the Spine and Upper Extremities in Athletic Training	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 Sport and Physical Education	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 223 Sociology of Families	3
PSYC 240 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 Sport and Physical Education	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 Principles of Conditioning	2
HHPE 370 Camp Programming and Counseling	2
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

Coaching Minor

21 credit hours

Minor Requirements

HHPE 300 Coaching Theory and Practice	2
HHPE 360 Organization and Administration of Sport and Physical Education	2
HHPE 390 Care and Prevention of Athletic Injuries	3
HHPE 430 Exercise Physiology	3
HHPE 470 Motor Development and Motor-Skill Learning	3
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 223 Sociology of Families (3)
HLTH 230 First Aid and Safety (1)
HLTH 240 Stress Management (3)
HLTH 300 Nutrition (3)
HLTH 320 Contemporary Health Issues (3)
HLTH 485 Special Topics (3)

Health Teaching Minor

21-23 credit hours

Minor Requirements

HLTH 210 Drug Education (2)
HLTH 223 Sociology of Families (3)
HLTH 230 First Aid and Safety (1)
HLTH 240 Stress Management (3)
HLTH 300 Nutrition (3)
HLTH 320 Contemporary Health Issues (3)

Students must choose 2 of the following courses:
BIOL 221 Human Anatomy and Physiology I (4)
BIOL 222 Human Anatomy and Physiology II (4)
HHPE 430 Exercise Physiology (3)
PSYC 311 Child Development (3)

Recreation Minor

17 credit hours

Minor Requirements

HHPA 130/330 Aquatics (1)
HHPE 200 History and Principles of Physical Education (2)
HHPE 370 Camp Programming and Counseling (2)
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:

1. Choose 3 courses from the following:
   HHPA 103/303 Backpacking (1)
   HHPA 109/309 Ballroom Dance (1)
   HHPA 122/322 Survival Techniques (1)
   HHPA 126/326 Skiing/Snowboarding (1)
2. HHPE 485 Selected Topics (3)

History Department

Majors

- BA in History

Minors

- History

More information about programs and faculty of the history department can be found on the History Degree Program page.

Bachelors (BA) in History

The history 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.

Degree Outcomes

Graduates with a BA in history will:

- Have a heightened appreciation of the history, culture and context of all peoples
- Articulate how the Christian faith can inform the study of history
- Analyze primary and secondary historical literature, various forms of historic media, and material culture
- Apply advanced research skills to develop independent conclusions and effectively argue these conclusions
- Think, write and speak analytically

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	24

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
- International Experience Certificate

Bachelors (BA) in International Studies

The International Studies program prepares students to think and act as citizens of the world. The program integrates insights from multiple disciplines – economics, politics, geography, and religion, among others – in order to provide a rigorous education in the complex dynamics of an increasingly interdependent world. Graduates will be equipped with the skills necessary to effectively engage the world and its multitude of cultures, with foreign language capabilities, cross-cultural awareness and experience, and critical thinking and analysis.

The international studies major offers a 48- to 50-semester-hour course of study, preparing students for internationally focused careers in business, government, education, non-governmental organizations and church-related work such as missions. It also provides excellent preparation for graduate study in a variety of disciplines, including international relations, diplomacy and development, among others. The major includes a strong international fieldwork emphasis, with required cultural immersion and internship components. Students are required to obtain a minimum grade of C- in all courses taken for the major.

Degree Outcomes

Graduates with a BA in international studies will:

- Understand and explain the complexity of international affairs
- Communicate about global issues with Christian insight and wisdom
- Demonstrate preparedness to work, serve and learn in international contexts with sufficient global awareness
- Able to live skillfully and act sensitively in multicultural environments
- Act as people of influence in global spheres

Major Requirements

COMM 220/420 Intercultural Communications	3
INTL 200 Cultural Geography and Global Relations	3
INTL 230 Introduction to International Affairs	3
INTL 260 Global Awareness Proseminar	1
INTL 330 Politics of the Developing World	3
INTL 370 Global Political Economy	3
INTL 375 Cultural Immersion	8
INTL 440 World Religions	3
INTL 475 Internship	3
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:	
HIST 290 Introduction to Historical Studies	3
PSCI 290 Political Science Research and Writing	3
PSYC 391 Research Methods	3

SOCI 390 Research Methods	3
Students must choose two courses from one of the following tracks:	
Global	
ECON 461 International Trade	3
ECON 462 International Finance	3
GBSN 300 Global Business	3
LITR 238 Contemporary World Literature	3
LITR 480 International Women's Voices	3
PSCI 303 International Conflict and Peace	3
PSCI 383 International Organizations and International Law	3
RELI 330 Introduction to the World Christian Movement	3
RELI 360 Cross-Cultural Christian Outreach	3
Regional	
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 422 Europe 1890-Present	3
PSCI 253 Comparative Government	3
SPAN 340 Spanish Culture and Civilization	3
SPAN 350 Latin American Culture and Civilization	3

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 Christian 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 Experience Certificate

15-16 credit hours

This certificate recognizes a student's interest in the international sphere by including a mixture of required courses and either an internationally focused internship **or** a foreign cultural immersion experience. Students have a choice of two options. **Option 1** (15 credits) emphasizes cultural immersion. **Option 2** (16 credits) emphasizes a heavier academic component and an internationally focused internship in the United States.

Certificate Requirements

Option 1	
INTL 200 Cultural Geography and Global Relations	3
INTL 230 Introduction to International Affairs	3
INTL 260 Global Awarenes Proseminar	1
INTL 375 Cultural Immersion	8
Option 2	
INTL 200 Cultural Geography and Global Relations	3
INTL 230 Introduction to International Affairs	3
INTL 260 Global Awarenes Proseminar	1
INTL 330 Politics of the Developing World	3
INTL 370 Global Political Economy	3
INTL 475 Internship	3

International Studies Minor

21 credit hours

Minor Requirements

INTL 200 Cultural Geography and Global Relations	3
INTL 230 Introduction to International Affairs	3
INTL 330 Politics of the Developing World	3
INTL 370 Global Political Economy	3
INTL 440 World Religions	3
Students must choose two courses from one of the following tracks:	
Global	
ECON 461 International Trade	3
ECON 462 International Finance	3
GBSN 300 Global Business	3
LITR 238 ContemporaryWorld Literature	3
LITR 480 International Women's Voices	3
PSCI 303 International Conflict and Peace	3
PSCI 383 International Organizations and International Law	3
RELI 330 Introduction to the World Christian Movement	3
RELI 360 Cross-Cultural Christian Outreach	3
Regional	
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 422 Europe 1890-Present	3
PSCI 253 Comparitive Government	3
SPAN 340 Spanish Culture and Civilization	3
SPAN 350 Latin American Culture and Civilization	3

Mathematics Department

Majors

- BS in Mathematics

Minors

- Mathematics

More information about programs and faculty of the math department can be found on the Math Degree Program page.

Bachelors (BS) in Mathematics

The math major offers a 43- to 44-semester-hour course of study. Students are required to obtain a minimum grade of C- in all courses taken for the major.

Degree Outcomes

Graduates with a BS in mathematics will:

- Demonstrate computational competency including appropriate uses of technology
- Understand and appreciate applications of mathematics
- Be prepared for graduate study in mathematics
- Apply mathematical theory, concepts and methods of inquiry to advanced topics
- Understand the development of a mathematical system

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 490 Senior Seminar	2
Students must choose 3 of the following sequences:	
MATH 311 Differential Equations with Linear Algebra	4
MATH 312 Numerical Methods	3
MATH 331 Probability	3
MATH 332 Mathematical Statistics	3
MATH 411 Advanced Linear Algebra	3
MATH 412 Algebraic Structures	3
MATH 421 Real Analysis I	3
MATH 422 Real Analysis II	3
Additional Math (MATH) coursework that is 300-400 level, excluding MATH 330 Engineering Statistics.	6

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

Music Department

Majors

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

Minors

- Worship Arts
- Music
- Music Theatre

More information about programs and faculty of the performing arts department can be found on the Performing Arts Degree Program page.

Bachelors (BA) in Music

The music major offers a 42.5- to 55-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.

Degree Outcomes

Graduates with a BA in music education will:

- Understand the role of the music educator and the components of an effective school music program
- Demonstrate pedagogical competency on all wind, string and percussion instruments as well as competency in vocal pedagogy and production
- Demonstrate the basic skills of conducting, including basic meters, compound meters, mixed meters, cueing, cut-offs, dynamics, tempos and fermatas
- Explore the nuance and artistry of advanced conducting
- Apply their knowledge of elementary music curriculum and methods in the music classroom
- Apply their knowledge of secondary curriculum and methods in the secondary classroom

Major Requirements

Music Core (42.5-43 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
Applied Music and Ensemble Requirements (see details below)	8
Students must choose one of the following courses:	
MUSI 200 Basic Conducting	1.5
MUSI 460 Advanced Conducting (with permission)	2

Additional Requirements

Piano Proficiency

Students are also required to pass a piano proficiency examination **prior** to their junior or half-recital hearing. Students are required to register for MUSA 105/305 Applied Piano (0.5-1) or MUSI 135 Class Piano (1) in the piano proficiency specific sections until the proficiency has been met.

Ensemble Requirement

Music majors must be enrolled in a major ensemble each semester (George Fox University Symphony Orchestra, Concert Choir, Chorale, Keyboard Ensemble or Symphonic Band is required in addition to other ensembles).

Applied Music Jury and Upper Division Standing

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 recitals, but only students who have advanced to upper-division study levels will be permitted to present a half or full recital. (For additional information, please see Applied Lessons Policy below.)

Credit for Applied Lessons and Ensemble Courses

Applied lessons: Students must enroll for one 60-minute applied lesson per week for 1 credit, with 13 lessons per semester. Although individual applied instructors' studio policies vary, a minimum of ten hoursof practice per week is assumed.

Ensemble courses: Students may enroll for ensembles for credit as follows:

- Major ensembles (Concert Choir MUSA125C/325C, Symphonic Band MUSA145B/345B and George Fox University Symphony Orchestra MUSA155/355) may be taken for 0, 1 or 2 credits. These ensembles rehearse between 120 and 300 minutes per week and have substantial involvement outside of class time.
- Other ensembles may be taken for 0 or 1 credit. These ensembles rehearse less time per week and have less out-of-class involvement.
- The zero-credit option is available so that students can participate in ensembles and still have it show on their college transcripts.

Recital requirement and Upper Division Standing

A solo recital and achievement of upper-division standing is required of all students. The recital is given in the junior or senior year after the student has been granted upper-division standing and has passed a recital hearing given before the applied music faculty.

Concentrations

Students must select one of the following concentrations:

Composition (12 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

Full Degree Recital performed with up to 50 minutes of original music

General (5 hours)

Students must take 5 semester hours of music theory and literature (MUSI) courses, at least 3 of which must be upper division. 5

Half Recital/Project performed during junior or senior year

Performance

Half Recital performed during junior year

Full Degree Recital performed during senior year

Professional Development Requirement to be completed over a four-year program

- Professional Masterclass in performance area (one per year)
- Bosendorfer Series (one per year – on campus)
- Studio Masterclass/Performance Class (two per year – four are offered)
- Students in Recital (four per year – attend all and perform in at least one per semester)
- Audition for the Honors Recital at least two times in four years

Preteaching (11 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

Half Recital performed during junior or senior year

Professional Development Requirement to be completed over a four-year program

- Conferences (attend a minimum of two – State or Regional/NW)
- On-campus activities (serve at two every year – Choral Symposium, Choral Festival, Band Festival and Band Clinic)
- OSAA State Choir or Band Festival/Clinic (serve at one event)
- Workshops/Festivals (attend three approved events – may substitute an ensemble officer position for one event)
- Field Supervision – STRONGLY recommended (one full semester experience which includes classroom observation and a K-12 school concert)
- Membership and active participation in CMENC activities

Applied Lessons Policy

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:

- Thirteen 60-minute lessons
- The one-hour applied lesson must be taken on the student's major instrument or voice. Splitting this requirement into two 30-minute lesson would not fulfill the NASM requirement.

- A jury (on the Monday of each final exam week)
- 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.
- Incomplete grades will only be given for applied lessons with instructor approval. (Further instruction fees may apply.)

Students are charged an additional instructional fee each semester per credit. Each half-credit reflects 13 30-minute lessons.

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 during the withdraw period. However, 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.

The transfer student and/or a current GFU student who change to a Music major in their sophomore or junior year will still need to complete the 8-hours of applied lesson requirement, in order to prepare for the degree recital(s) and must be enrolled in ensemble(s) immediately.

Bachelors (BA) in Music Education

The music education major offers a 81.5- to 84-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.

Major Requirements

Music Core (40 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 and Ensemble Requirements	8

Applied Music, Ensembles and Proficiencies

Applied Music Jury and Upper Division Standing

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 recitals, but only students who have advanced to upper-division study levels will be permitted to present a half recital. *(For additional information, please see Applied Lessons Policy below.)*

Ensemble Requirement

MUSA 105/305 Applied Music (eight consecutive semesters)

MUSA Major Ensemble coursework (seven consecutive semesters of George Fox University Symphony Orchestra, Concert Choir, Chorale, Keyboard Ensemble or Symphonic Band is required in addition to other ensembles)

Credit for Applied Lessons and Ensemble Courses

Applied lessons: Students may enroll for either one 60-minute applied lesson per week for 1 credit, with 13 lessons per semester. Although individual applied instructors' studio policies vary, a minimum of three hours practice per week is assumed.

Ensemble courses: Students may enroll for ensembles for credit as follows:

- Major ensembles (Concert Choir MUSA125C/325C, Symphonic Band MUSA145B/345B and George Fox University Symphony Orchestra MUSA155/355) may be taken for 0, 1 or 2 credits. These ensembles rehearse between 120 and 300 minutes per week and have substantial involvement outside of class time.
- Other ensembles may be taken for 0 or 1 credit. These ensembles rehearse less time per week and have less out-of-class involvement.
- The zero-credit option is available so that students can participate in ensembles and still have it show on their college transcripts.

Recital requirement and Upper Division Standing

A solo recital and achievement of upper-division standing is required of all students. The recital is given in the junior or senior year after the students has been granted upper-division standing and has passed a recital hearing given before the applied music faculty. Music education majors may not perform their recital during their student teaching.

Professional Development Requirement – To be completed over a four-year program.

- Conferences (attend a minimum of two – State or Regional/NW)
- On-Campus Activities (serve at two every year – Choral Symposium, Choral Festival, Band Festival and Band Clinic
- OSAA State Choir or Band Festival/Clinic (serve at one event)
- Workshops/Festivals (attend three approved events – may substitute an ensemble officer position for one event)
- Field Supervision – STRONGLY recommended (one full semester experience which includes classroom observation and a K-12 school concert)
- Membership and active participation in CMENC activities
- Lab Ensembles (conducting and participation is required a total of three times with one in the freshman, sophomore and junior years

Professional Courses (39-41 hours)

EDUC 260 Teaching, Schooling and Learning	4
EDUC 371 Curriculum Design	4
EDUC 375 Practicum I	2-4
EDUC 381 Classroom Management	2
EDUC475 Practicum II	10
EDUC 490 Senior Seminar	2
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 150 General Psychology	3
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

Applied Music Policy

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 60-minute lessons
2. The one-hour applied lesson must be taken on the student's major instrument or voice. Splitting this requirement into two 30-minute lesson would not fulfill the NASM requirement.
3. A jury (on the Monday of each final exam week)
4. 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.
5. Incomplete grades will only be given for applied lessons with instructor approval. (Further instruction fees may apply.)

Students are charged an additional instructional fee each semester per credit. Each half-credit reflects 13 30-minute lessons.

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 during the withdraw period. However, 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.

The transfer student and/or a current GFU student who change to a Music major in their sophomore or junior year will still need to complete the 8-hours of applied lesson requirement, in order to prepare for the degree recital(s) and must be enrolled in ensemble(s) immediately.

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 biblical studies, or music and Christian ministries.

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: Ensemble (MUSA 115 or above) coursework	2-4

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
THEA 105/305 Technical Theatre Practicum	1

Electives (3 hours)

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

Worship Arts 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 Creating, Planning and Leading Worship	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:	2 2

1. *Keyboard specialists*
   MUSI 380 Keyboard Improvisation and Service Playing
2. *Non-keyboard specialists*
   Music theory and literature (MUSI) coursework

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 prerequisite 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

Additional requirements upon admission to the nursing major include:

1. Criminal Background Check
2. Drug Testing
3. Health Certification Requirements - Immunization following CDC guidelines for healthcare workers
4. CPR Certification - American Heart Association - Healthcare Providers

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

Once admitted to George Fox University, freshmen students pursuing a Bachelor of Science in Nursing who meet the following expectations of academic and personal achievement during their freshman and sophomore 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, Chemistry 151 & 152, Anatomy & Physiology BIOL 221 & 222 and Microbiology BIOL 367
3. Meet other nursing application criteria including the TEAS Exam, an essay, and letters of reference
4. Demonstrate evidence of good citizenship and responsibility while on campus
5. Maintain full-time student status at George Fox University
6. Students whose GPA falls 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.
7. 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 2.0 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

More information about programs and faculty of the nursing department can be found on the Nursing Degree Program page.

Bachelors (BS) in Nursing

The nursing major offers a 100-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.

All nursing majors are required to pass 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.

Degree Outcomes

Graduates with a BS in nursing will:

- Synthesize theories and concepts from a Christian liberal arts education to build and understand the human experience in nursing practice
- Demonstrate knowledge, skills and attitudes in leadership, quality improvement and patient safety in the provision of excellent nursing care within complex organizational systems
- Use evidence generated by research as a foundation for nursing practice
- Use information and technology to communicate, manage knowledge, mitigate error and support decision making
- Demonstrate basic knowledge of health care policy, finance, and regulatory environments, including local, state, national and global health care trends
- Function effectively within nursing and inter-professional teams, fostering open communication, mutual respect, shared decision making and conflict resolution to achieve quality patient care
- Assess determinants of health, including genetics, which influence the well being of individuals, families, groups and communities to promote health, prevent disease and reduce health disparities
- Demonstrate a commitment to promoting health with excellence and integrity and as imitators of Christ through caring with compassion and hope

Major Requirements

Required Course for Nursing Majors (34 hours)

BIOL 221 Human Anatomy and Physiology I*	4
BIOL 222 Human Anatomy and Physiology II*	4
BIOL 367 Essentials of Microbiology	4
CHEM 151 General, Organic, and Biological Chemistry I*	4
COMM 100 Introduction to Communications*	3
HUMA 205 Philosophy and Literature	3
MATH 180 College Algebra*	3
PSYC 150 General Psychology*	3
PSYC 240 Statistical Procedures	3
PSYC 310 Lifespan Human Development	3

*Prerequisite courses for admission into the nursing program.

Nursing Core Coursework (66 hours)

NURS 201 Nursing Fundamentals	5
NURS 204 Introduction to Nursing Professional Practice	2
NURS 210 Health Assessment	2
NURS 301 Nursing Care of Adults with Acute Conditions	7
NURS 302 Nursing Care of Adults with Complex Conditions	7
NURS 311 Pathophysiology	3
NURS 312 Pharmacology	3
NURS 313 Nutrition Essentials for Nursing Practice	3
NURS 324 Evidence-based Nursing for Clinical Practice	2
NURS 370 Nursing Care of the Child-rearing Family	3
NURS 411 Mental Health Nursing	5
NURS 421 Nursing Care of the Childbearing Family	6
NURS 430 Population Health Nursing	6
NURS 442 Nursing Leadership and Management	3
NURS 450 Application of Clinical Genetics in Nursing Practice	2
NURS 452 Gerontological Nursing	2
NURS 490 Nursing Capstone	4
Nursing Elective Course	1

Successful completion of Junior Nursing Proficiency Milestone and Senior Nursing Content Mastery Milestone.

Politics Department

Majors

- BA in Politics

Minors

- Peace Studies
- Politics

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

More information about programs and faculty of the politics department can be found on the Politics Degree Program page.

Bachelors (BA) in Politics

The politics 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.

Degree Outcomes

Graduates with a BA in politics will:

- Have a deep understanding of American politics, international relations, comparative politics, political theory and peace studies
- Think critically about the relationship of faith and politics
- Critically analyze data
- Communicate orally and in writing effectively

Major Requirements

PSCI 150 Introduction to Political Science	3
PSCI 275/475 Field Experience†	3-6
PSCI 290 Political Science Research and Writing	3
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 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 354 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

International Relations

PSCI 230 Introduction to International Affairs	3
PSCI 303 International Conflict and Peace	3
PSCI 343 Environmental Politics and Policies	3
PSCI 380 American Foreign Policy	3
PSCI 383 International Organizations and International Law	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 (6-9 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 240 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.

Politics Minor

18 credit hours

Minor Requirements

PSCI 150 Introduction to Political Science	3
PSCI 290 Political Science Research and Writing	3
Political science (PSCI) coursework†	12

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

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 further information on peace and justice curricula and programs, visit the Center for Peace and Justice website or contact the director.

Minor Requirements

Students are required to complete at least one of the following courses:	
INTL/PSCI/SOCI 303 International Conflict and Peace	3
PSCI 460 Peace Theory	3
Students are required to complete 5-6 of the following courses:	
BIBL 390 Biblical Basis for Peacemaking	3
COMM/PSCI 310 Conflict Resolution	3
ECON/SOCI 370 Global Political Economy	3
HIST/PSCI 363 War and Conscience in the United States	3
INTL/PSCI 230 Introduction to International Relations	3
PSCI 383 International Organizations and International Law	3
PSCI 410 Community Mediation	3
PSCI 475 Field Experience	3

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

More information about programs and faculty of the psychology department can be found on the Psychology Degree Program page.

Bachelors (BS) in Cognitive Science

This major offers a 45-50-semester-hour course of study, students select from one of three concentrations. 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.

Major Requirements

Psychology Core Courses (19 hours)

PSYC 150 General Psychology	3
PSYC 240 Statistical Procedures	3
PSYC 320 Neuroscience	3
PSYC 370 Cognition	3
PSYC 391 Research Methods	3
PSYC 392 Advanced Research Methods	3
PSYC 490 Senior Seminar	1

Concentration (25-31 hours)

General Concentration (30-31 hours)

Students must choose one BIOL series from the following:

BIOL 211 & 212 General Biology I & II	8
BIOL 221 & 222 Anatomy and Physiology I & II	8

Students must complete the following courses:

BIOL 335 Neuroscience	4
CSIS 201 Intro to Computer Science I	3
CSIS 202 Intro to Computer Science II	3
PHIL 150 Intro to Philosophy	3
PHIL 335 Knowledge & What There Is	3

Students must select one of the following math courses:

MATH 201 Calculus I	4
MATH 260 Discrete Mathematics	3

Electives (select one of the following):

COMM 340 General and Cultural Linguistics	3
CSIS 440 Artificial Intelligence*	3
MATH 290 Intro to Proofs	3
PHIL 250 Thinking Well: Logic & Life	3
PSYC 311 Child Development	3
PSYC 360 Learning	3
PSYC 410 Sensation & Perception	3
SOCI 310 Cultural Anthropology	3

Neuroscience Concentration (26-28 hours)

Students must choose one BIOL series from the following:

BIOL 211 & 212 General Biology I & II	8
BIOL 221 & 222 Anatomy and Physiology I & II	8

Students must complete the following courses:

BIOL 335 Neuroscience	4
CHEM 211 General Chemistry I	4
CHEM 212 General Chemistry II	4

Elective (select two of the following):

BIOL 333 Advance Physiology	4
BIOL 420 Cell Biology*	4
BIOL 450 Advanced Human Anatomy*	4
CHEM 341 Biochemistry*	4
PSYC 311 Child Development	3
PSYC 360 Learning	3
PSYC 410 Sensation & Perception	3

Human and Artificial Intelligence Concentration (25-27 hours)

Students must complete the following courses:

CSIS 201 Intro to Computer Science I	3
CSIS 202 Intro to Computer Science II	3
CSIS 310 Data Structures & File Processing	3
CSIS 440 Artificial Intelligence	3
MATH 201 Calculus I	4
MATH 260 Discrete Mathematics	3

Electives (select two of the following):

BIOL 221 Anatomy & Physiology I	4
BIOL 335 Neuroscience	4
CSIS 330 Human Computer Interaction	3
PSYC 311 Child Development	3
PSYC 400 Psychological Testing	3
PSYC 410 Sensation & Perception	3

**** Has additional prerequisites not included in the major.***

Bachelors (BA) in Psychology

This major offers a 50-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.

Degree Outcomes

Graduates with a BA in psychology will:

- Understand the major concepts, theoretical perspectives, empirical findings and historical trends in psychology
- Apply basic research methods in psychology, including research design, data analysis and interpretation
- Apply critical and creative thinking, skeptical inquiry, and the scientific approach to solve problems related to behavior and mental processes
- Apply psychological principles to personal, social and organizational issues
- Weigh evidence, tolerate ambiguity, act ethically, and reflect other values that are the underpinnings of psychology as a discipline
- Reflect on their personal faith and explain how it interacts with the discipline of psychology

Major Requirements

PSYC 150 General Psychology	3
PSYC 220 Biological Psychology	3
PSYC 240 Statistical Procedures	3
PSYC 290 Professional Seminar	1
PSYC 350 Social Psychology	3
PSYC 370 Cognition	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 331 Positive Psychology	3
PSYC 353 Culture and Psychology	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 one course from the following:	
PSYC 320 Neuroscience	3
PSYC 360 Learning	3
PSYC 410 Sensation and Perception	3
Students must choose one course from the following:	
PSYC 475 Field Experience	3
PSYC 495 Individualized Study	3
Psychology (PSYC) coursework	12

Bachelors (BS) in Psychology

This major offers a 50-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.

Degree Outcomes

Graduates with a BS in psychology will:

- Understand the major concepts, theoretical perspectives, empirical findings and historical trends in psychology
- Apply basic research methods in psychology, including research design, data analysis and interpretation
- Apply critical and creative thinking, skeptical inquiry, and the scientific approach to solve problems related to behavior and mental processes
- Apply psychological principles to personal, social and organizational issues
- Weigh evidence, tolerate ambiguity, act ethically, and reflect other values that are the underpinnings of psychology as a discipline
- Reflect on their personal faith and explain how it interacts with the discipline of psychology

Major Requirements

PSYC 150 General Psychology	3
PSYC 220 Biological Psychology	3
PSYC 240 Statistical Procedures	3
PSYC 290 Professional Seminar	1
PSYC 350 Social Psychology	3
PSYC 370 Cognition	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 331 Positive Psychology	3
PSYC 353 Culture and Psychology	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 one courses from the following:	
PSYC 320 Neuroscience	3
PSYC 360 Learning	3
PSYC 410 Sensation and Perception	3
Psychology (PSYC) coursework	12

Psychology Minor

18 credit hours

Minor Requirements

PSYC 150 General Psychology	3
Upper-division psychology (PSYC) coursework†	15

†Students interested in declaring a psychology minor should meet with a psychology faculty member to discuss upper-division course options.

Social Work Department

Major

- Bachelor of Social Work (BSW)

Minor

- Criminal Justice
- Social Welfare

More information about programs and faculty of the sociology department can be found on the Social Work Department Program page.

Bachelors (BSW) in Social Work

The bachelor of social work degree offers a 126-semester-hour course of study, 57 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 like the Master of Social Work (MSW) program at George Fox University. Students are required to obtain a minimum grade of C in all courses taken for the major.

Degree Outcomes

Graduates with a BSW in social work will:

- Acquire the social work ethics, values, skills and knowledge needed to analyze and understand the development and interrelationship of diverse world views, issues in social justice, and basic human needs
- Demonstrate knowledge, skills and values necessary to understand and affect the interrelationship between an individual and his/her environment at the macro, mezzo and micro levels
- Work effectively within diverse social contexts, structures and change processes in their practice
- Understand how their personal faith integrates with social work and apply that to their practice
- Be prepared for graduate social work education and will be committed to continual development in their professional field

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 2.25 prior to filing an application to the program
3. Complete the following pre-entry courses with a GPA of at least 3.0 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 and recommendations) 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.

Major Requirements

PSYC 150 General Psychology	3
SOCI 150 Principles of Sociology	3
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

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 331 Crime and Deviance	3
SOCI 333 Juvenile Deliquency	3
SOCI 380 Race and Ethnicity	3
SWRK 400 Social Work with Children	3
SWRK 485 Selected Topics	1-3

Criminal Justice Minor

18 credit hours

Minor Requirements

SWRK 210 Introduction to Criminal Justice	3
SOCI 331 Crime and Deviance	3
SOCI 333 Juvenile Delinquency	3
SOCI 339 Restorative Justice	3
SWRK 420 Substance Abuse, Mental Health and Criminal Justice	3
Students must choose 3 semester hours from the following courses:	
PSCI 240 State and Local Government	3
PSCI 260 Introduction to Law	3
PSCI 353 Constitutional Law: Civil Rights and Liberties	3
PSYC 314 Adolescent Development	3
PSYC 330 Personality Theories	3

World Languages, Sociology and Cultural Studies

Majors

- BA in Sociology
- BA in Spanish

Minors

- Sociology
- Spanish
- French
- Romance Languages
- TESOL

Bachelors (BA) in Sociology

The primary mission of the sociology major (39-40 credits) is to develop students to thoughtfully engage in civic, occupational, academic, and personal endeavors from a Christian sociological perspective. The major facilitates this by preparing students to critically analyze social institutions and structures, empowering students to be change agents capable of bringing about greater social justice. Students are required to obtain a minimum grade of C- in all courses taken for the major.

Degree Outcomes

Graduates with a BA in sociology will:

- Demonstrate an understanding of the role of theory in building sociological knowledge and basic theoretical orientations
- Analyze data and learn how to apply basic sociological methods of research
- Identify and apply basic concepts in sociology and their fundamental theoretical interrelations, including culture, social change, socialization, stratification, social structure and institutions
- Evaluate the reciprocal relationships between individuals and society, and how the self develops under the influence of societal and structural factors
- Analyze the internal diversity of American society and its place in the international context, including the race, class, gender and age of its population
- Evaluate the potential usefulness of sociological theory and methods to promote peace and justice in social institutions and structures
- Integrate sociological insights with Christian commitments and calling

Major Requirements

Core Requirements (24 hours)

SOCI 150 Principles of Sociology	3
SOCI 340 Statistical Procedures	3
SOCI 363 Social Inequality	3
SOCI 373 Social Theory	3
SOCI 380 Race and Ethnicity	3
SOCI 390 Research Methods	3
SOCI 475 Field Experience (Internship)	3
SOCI 480 Senior Research Project	3

Concentrations (15-16 hours)

Students must select one of the following concentrations:

Social Justice and Communities (15 hours)

SOCI 220 Men and Women in Society	3
SOCI 223 Sociology of Families	3
SOCI 366 Social Change	3

Students must choose two of the following courses:	
SOCI 310 Cultural Anthropology	3
SOCI 339 Restorative Justice	3
SOCI 430 Sociology of Religion	3
PSCI 310 Conflict Resolution	3
PSYC 350 Social Psychology	3
ECON 201 Microeconomics	3
ECON 202 Macroeconomics	3
Global and Intercultural Studies (15-16 hours)	
COMM 220 Intercultural Communication	3
SOCI 310 Cultural Anthropology	3
SOCI 366 Social Change	3
Students must choose two of the following courses:	
SOCI 220 Men & Women in Society	3
SOCI 303 International Conflict and Peace	3
SOCI 370 Global Political Economy	3
GEOG 200 Cultural Geography & Global Relations	3
LANG 350 Introducation to TESOL	3
One semester of college-level world language study at the appropriate level	3-4
General Concentration (15 hours)	
5 electives from SOCI prefix offerings	15
Students choosing SOCI 230/430 Sociology of Religion must register for 430	

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.

Degree Outcomes

Graduates with a BA in Spanish will:

- Demonstrate “Advanced” Speaking & Listening proficiency as defined by the American Council on the Teaching of Foreign Language (ACTFL)
- Demonstrate “Advanced” Writing proficiency as defined by ACTFL
- Demonstrate “Advanced” Reading proficiency as defined by ACTFL
- Articulate their personal faith in relation to faith practices of Spanish-speaking cultures
- Identify, describe and propose a small-scale solution for a pressing issue facing Spanish speakers
- Demonstrate knowledge of Spanish-speaking cultures, including marginalized populations and the role of religion

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

Based on placement exam score, complete either:
SPAN 301 Intermediate/Advanced Spanish I (4)
SPAN 302 Intermediate/Advanced Spanish II (4)
-or-
SPAN 302 Intermediate/Advanced Spanish II (4)
SPAN 303 Spanish for Heritage Speakers (4)

Plus:
SPAN 350 Latin American Culture and Civilization (3)
SPAN 380 Splendor of Spain (4)
SPAN 420 Introduction to Latin American Literature (3)

SPAN 475 Spanish Field Experience (2)
SPAN 480 Senior Capstone (3)

After completing SPAN 301 & 302 or SPAN 302 & 303 or at least one upper division SPAN class (3-4 credits) at George Fox University, students must choose 16 semester hours in an approved study abroad program in a Spanish-speaking country (credits abroad must be at 300-level or above and taught entirely in Spanish)

Sociology Minor

21 credit hours

Minor Requirements

SOCI 150 Principles of Sociology	3
SOCI 363 Social Inequality	3
SOCI 373 Social Theory	3
Students must choose one of the following courses:	3
SOCI 220 Men 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 220 Men and Women in Society	3
SOCI 223 Sociology of Families	3
SOCI 310 Cultural Anthropology	3
SOCI 331 Crime and Deviance	3
SOCI 333 Juvenile Delinquency	3
SOCI 340 Statistical Procedures	3
SOCI 380 Race and Ethnicity	3
SOCI 390 Research Methods	3
SOCI 475 Field Experience	3-6

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 (after completion of FREN 301/302. 12 credits hours abroad must be 300-level or above, taught entirely in French in an approved program in a French-speaking country)	12-16

Romance Languages Minor

22-23 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 in an approved study abroad program in either a French- 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 two of the following courses:
   SPAN 350 Latin American Culture and Civilization (3)
   SPAN 380 The Splendor of Spain (4)
   SPAN 420 Introduction to Latin American Literature (3)
2. If student chooses to pursue study abroad in French, FREN 301 and 302 must be completed prior to study abroad. Six credits abroad must be 300-level or above and taught entirely in French. If student chooses to pursue study abroad in Spanish, SPAN 301 and 302 must be completed prior to study abroad. Six credits abroad must be 300-level or above and taught entirely in Spanish.

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

Based on placement exam score, complete either:
SPAN 301 Intermediate/Advanced Spanish I (4)
SPAN 302 Intermediate/Advanced Spanish II (4)
-or-
SPAN 302 Intermediate/Advanced Spanish II (4)
SPAN 303 Spanish for Heritage Speakers (4)

Plus:
SPAN 350 Latin American Culture and Civilization (3)
SPAN 380 Splendor of Spain (4)
SPAN 420 Introduction to Latin American Literature (3)
SPAN 475 Spanish Field Experience (2)

Option 2

Based on placement exam score, complete either:
SPAN 301 Intermediate/Advanced Spanish I (4)
SPAN 302 Intermediate/Advanced Spanish II (4)
-or-
SPAN 302 Intermediate/Advanced Spanish II (4)
SPAN 303 Spanish for Heritage Speakers (4)

After completing SPAN 301 & 302 or SPAN 302 & 303 or at least one upper-division SPAN class (3-4 credits) at George Fox University, 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 and taught entirely in Spanish).

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

LANG/COMM 340 General and Cultural Linguistics (3)
LANG 350 Introduction to TESOL (3)
LANG 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)

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
ARTD	Art and Design: Design
ARTS	Art and Design: Studio
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
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
HNRS	Honors
HUMA	Humanities
INTL	International Studies
JOUR	Journalism

Course Prefix	Subject
JPNS	Japanese
LEAD	Leadership Studies
LIBA	Liberal Arts
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: BUSN 110 (may be taken concurrently); 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 and ACCT 272 Principles of Managerial 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 Individualized Study
1-3 hours. Individual 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 to develop facility in reading and synthesizing a variety of academic texts and literary genres. Students will increase their academic vocabulary, ability to comprehend complex syntax, reading rate, and comprehension. This course prepares students for the reading required in academic graduate programs.

ACLA 482 Writing and Research for Academia
4-*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 integrating their findings into research essays by appropriately summarizing, paraphrasing, quoting and citing sources.

ACLA 483 Speech and Listening for Academia
2-3 *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 are chosen to fit the needs and interests of students.

ACLA 490 United States Culture
3 hours. In this course, students will explore U.S. culture and their home culture 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.

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. *Prerequisite: AMSL 101 American Sign Language I.*

AMSL 201 American Sign Language III
3 hours. This course builds on skills learned in American Sign Language (ASL) II, adding more complex ASL grammatical features and vocabulary, short stories, narratives, and dialogues. The course will include description of general surroundings, appropriate sequencing, temporal aspects and conditionals. *Prerequisite: AMSL 102 or instructor permission.* Lecture 3 hours per week

AMSL 202 American Sign Language IV
3 hours. This course expands on the development of American Sign Language (ASL) vocabulary and grammar, including the use of two to three character role shifts. Students describe settings, and explain or discuss everyday objects and their use, step-by-step processes, cause and effect, and culturally significant topics relating to the Deaf Community. *Prerequisite: AMSL 201 with a grade of "B" or higher, or equivalent course with instructor permission.* Lecture 3 hours per week.

AMSL 275 Field Experience
1-10 hours. Supervised experience in a situation demanding extensive use of American Sign Language. Admission and credit hours determined by instructor.

AMSL 475 Field Experience
1-10 hours. Supervised experience in a situation demanding extensive use of American Sign Language. Admission and credit hours determined by instructor.

Art & Design (ARTD) Courses

ARTD 100 Project Management and Design
3 hours. An introduction to the rationale of problem solving and critical thinking as the way to an end result. This course introduces the means by which you can observe, think, research, analyze, build and communicate your way critically and creatively through the design process. Additional course fee required.

ARTD 210 Creative Suite I
*3 hours.*This course is an introduction to 3 of the industry-standard graphic design applications, Adobe Illustrator, Photoshop and InDesign. Additional course fee is required.

ARTD 230 Sewn Products Development
*3 hours.*Students will master skills in this introductory sewing course for constructing and developing products for consumer use. The course will include industry techniques and methods that are currently being implemented in the production process. Building an understanding of accurate industry terminology is an important element that will be included in this course. Additional course fee required.

ARTD 240 Graphic Design/Visual Communication for Non-Majors
3 hours. This course provides the non-designer with an overview of the principles and practices that govern commercial visual communication. In addition to an introduction to the industry-standard Adobe software products employed in production, students will learn how to work successfully with professionals within the broader field of visual communications. Additional course fee required.

ARTD 250 Design Foundations
3 hours. The purpose of Design Foundations is to develop beginning design ability, senses, and skills through materials, methods, and graphic techniques to generate effective visual communications for commercial applications.Additional course fee is required.
Prerequisite: ARTD 100 Project Management & Design, ARTS 111 Drawing I, and ARTD 210 Creative Suite I.

ARTD 275 Design Internship
3 hours. The student will engage in career-related internships for Design which provide on-site work at an approved business or organization site.
Prerequisite: instructor's permission.

ARTD 280 Apparel: From Concept to Consumer
3 hours. An introductory course for students interested in pursuing a degree in art and design with a concentration in fashion design and development. Students will develop an understanding of the apparel industry from the initial step of concept and theme development to the point of product distribution to the consumer. The steps of this complex process will be learned and applied in projects, activities and team presentations. Some of the topics included in the course will be product development, merchandising, trend research and forecasting and history of 21st century designers. Additional course fee required.

ARTD 285 Selected Topics

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

ARTD 295 Individualized Study
1-3 hours. Designed to give emphasis 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.

ARTD 300 History of Architecture and Apparel
3 hours. From cave dwellers to the present day the materials for attire and architecture are reflected by the values of the culture in which they exist. This course will examine the sociological, historical, economical and aesthetic influences of the interconnectedness of style. Additional course fee required.
Prerequisite: ARTS 217 Art History from 1450, or instructor's permission.

ARTD 303 Textiles Foundations
3 hours. This course follows the development and history of textiles and processes, from natural and manmade fiber to yarn, yarn to weave, and weave to fabric. The end result application is influenced by use, care, color, legislation, labeling, economics and the consumer. Laboratory experience included. Open to all students. Additional course fee required.

ARTD 307 Color Theory for Designers
3 hours. This course introduces students to the aesthetic, historical, perceptual, sociological and psychological marketing aspects of color. Students will explore color through experimentation, observation and evaluation. Time will be given to in-depth study of design projects to analyze and apply color theory to the students specific area of interest. Additional course fee required.

ARTD 311 Architectural Graphics
3 hours. Explore non-digital graphic media, scaling and block lettering, while focusing on consumers in retail spaces. Students use various methods and techniques related to drawing and composition as a tool to communicate visual information, develop aesthetic and analytical skills, and expand design vocabulary which allows for critical evaluation and discussion. Additional course fee required.

ARTS 330 Interiors Foundations
3 hours. This is the first studio in a sequential series of interior courses in which students apply their skills, knowledge and understanding of the design process to living environments. Emphasis is placed on the interrelationship of design elements and principles, spatial organization and sequencing, and conceptual problem solving in three-dimensional space. Open to all students. Additional course fee required.

ARTD 350 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: ARTD 250 Design Foundations.

ARTD 360 Illustration
*3 hours.*This course is a study of personal styles and professional illustration skills in a graphic design and commercial context. Students will learn the technical processes of

research and image creation as they apply to story telling in commercial applications. Additional course fee is required.
Prerequisites: ARTS 111 Drawing I, ARTS 112 Drawing II and ARTD 250 Design Foundations or instructors permission.

ARTD 363 History of Visual Communication
*3 hours.*This course surveys graphic communication through history, and the impact of technology on the visual qualities of graphic design, advertising, fashion, media, architecture and industrial design. Beginning with prehistoric petroglyphs and concluding with the World Wide Web, this course will examine how culture shapes the practice of graphic design as well as how design shapes its corresponding culture. Additional course fee is required.

ARTD 370 Fashion Sketching and Technical Drawing
3 hours. This course will introduce the students to methods and techniques in drawing fashion figures. They will also develop skills in creating accurate technical flats that can be used for design and pattern-making tech packs. The students will become familiar with the evolution of fashion illustrating and how it is influenced by the cycle of fashion, which in turn is influenced by the economic, social and historical aspects of culture.
Prerequisite ARTS 111 Drawing I and ARTD 280 Apparel: Concept to Consumer.

ARTD 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.

ARTD 410 Creative Suite II
*3 hours.*This course will provide students opportunity to hone basic skills obtained in the core applications of Adobe's Creative Suite into professional level work. Assignments are designed for application to professional portfolios and marketplace expectations, and to prepare students for A.C.E. expert certification by Adobe in Photoshop, InDesign and Illustrator. Satisfies major elective. Additional course fee required
Prerequisite: ARTD 210 Creative Suite I and ARTD 250 Design Foundations.

ARTD 415 Professional Design Collaboration
3 hours. This is a project-based course for the purpose of collaborating with other specialties in and around the design field. Projects will be selected according to student's interest, and a body of work will be completed at professional portfolio level. Additional course fee required.
Prerequisite: ARTD 100 Project Management and Design, ARTD 210 Creative Suite I and ARTD 250 Design Foundations.

ARTD 417 The Business of Design
3 hours. This course explores standard business procedures commonly associated with the practice of design. Students will study various types of design practices, financial management and compensation, ethical practices, professional development, legal liability and issues related to licensing and certification. The management of a typical design project will be studied, including writing proposals and contracts, specifications, bidding procedures, budgets, construction schedules, vendor negotiations and collaboration, and project administration.

ARTD 430 Informed Interior Design
3 hours. This is the second studio in a sequential series of design courses. Students will be introduced to programming, specifications and code requirements as they relate to planning small commercial facilities. Emphasis is on the design process using space planning concepts and methods, problem solving, and application of design theory specific to living environments. Students are introduced to evidence-based design theory. Additional course fee required.
Prerequisite: ARTD 330 Interior Foundations.

ARTD 431 CAD for Interiors
3 hours. This course is an introduction to computer-aided drafting using Autodesk AutoCAD. Students will use CAD software effectively to create computer-generated floor plans, elevations and details that meet current industry standards. Emphasis is placed on designing from the inside out. An overview of building materials, mechanical systems, building codes, construction techniques and project sequencing as well as interpretation of detailed working drawings are discussed.
Prerequisite: ARTD 330 Interior Foundations or ARTD 311 Architectural Graphics or instructor's permission.

ARTD 440 Kitchen and Bath Design
3 hours. High demand is on the professional designer who can take an in-depth look at the complex issues impacting the design of kitchens and bathrooms. Students will examine effective work center planning strategies, equipment and fixture specifications, storage and cabinetry needs, and the selection of surfaces and finishes for performance and visual impact. Course is taught in accordance with NKBA guidelines.
Prerequisite: ARTD 311 Architectural Graphics or instructor permission.

ARTD 450 Introduction to Maya
*3 hours.*This course explores 3-D modeling with one of the design industry’s most powerful applications. Students will gain working knowledge of its capabilities as they apply to package design, modeling, rigging, animation, lighting, surface rendering, scenic development and simple animation. Additional course fee is required.
Prerequisites: ARTS 111 Drawing I, ARTS 112 Drawing II and ARTD 250 Design Foundations.

ARTD 451 Introduction to Motion Graphics and Visual Effects
*3 hours.*The course is focused on kinetic typography, basic video compositing and visual effects. It includes the primary tools, concepts, workflows and practices of digital and time-based media. Additional course fee is required.

ARTD 460 Marketplace Graphics
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 and professional development. Additional course fee is required.

ARTD 470 Pattern Development
3 hours. A pattern in sewing and fashion design is the template from which the parts of a garment are traced onto fabric before cutting out and assembling. Students will master skills for developing patterns from assigned sketches or their own designs. They will use a basic sloper set as their starting point for learning. A final project applying their own design creations is the culminating experience. Accurate industry terminology will be used and implemented into the class demonstrations and projects. Additional course fee required.

Prerequisite: ARTD 230 Sewn Products Development, ARTD 280 Apparel: From Concept to Consumer, ARTD 303 Textiles Foundations.

ARTD 473 Apparel Product Innovations
3 hours. Students will develop an understanding of the merchandising process from concept to consumer. Students will develop a company concept, branding and marketing for an apparel line as well as design and merchandise the line. Additional course fee required.
Prerequisite: ARTD 470 Pattern Development and Junior or Senior standing.

ARTD 475 Design Internship
3 hours. The student will engage in career-related internships for design which provide on-site work at an approved business or organization site. Course can be taken up to three times for a total of 9 elective credit hours.
Prerequisite: instructor permission.

ARTD 485 Selected Topics
1-3 hours. A lecture/studio class that deals with areas of interest in design. Student may need to purchase additional supplies. Additional course fee is required.

ARTD 491 Professional Development
2 hours. This course focuses on significant steps toward career goals. This will be done through self-assessment tools, exploring the chosen field of interest, interviewing professionals in the field, and utilizing alumni. You will also learn and hone leadership and organizational skills as you showcase your research skills and academic interests in anticipation of graduate school or the job market.
Prerequisite: Art major with senior status, or by permission.

ARTD 492 Portfolio Development
2 hours. This course focuses on the organization and preparation of a portfolio showcasing a student's creative work in preparation for employment in the field of design. Students will explore visual composition and organization, document assembly methods and various reproduction image management techniques. Computer photo editing and printing are used to create a paper and digital portfolio. The implications of a professional portfolio to gain employment is emphasized.
Prerequisite: Art major with senior status, or by permission.

ARTD 495 Individualized Study
1-3 hours. Designed to give emphasis 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.

Art & Design (ARTS) Courses

ARTS 101 Basic Design 2-D
3 hours. An introduction to materials, techniques and theory related to two-dimensional design. Additional course fee is required.

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

ARTS 105 Art and Design Professional Networking
*1 hours.*This seminar course will meet weekly to focus on theory, concepts and methodology of art historical study and their application by engaging students in discourse surrounding lectures of visiting professional artists. Investigations of film and writing will be a secondary approach to this course. Must be taken minimum 5 out of 8 semesters in students' program. Satisfies: core major requirement. 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. An introduction to investigating methods of additive, subtractive, assembled and cast sculptural techniques. Students will use medias such as glass, plaster, clay, wood and stone, working with the traditional sculptural subject matter of the human figure, plant and animal imagery and abstraction. Additional course fee required.

ARTS 230 Beginning Photography
3 hours. Introduction to the materials, methods and techniques used in photography. Covering the workings of a 35mm film camera, shooting, developing and printing in B&W. Discover the foundations of photography as an art form and how it came to be. Additional course fee 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. An inquiry of the essentials of combining a variety of art methods and materials, this class creates opportunities for students to integrate methods of kiln-worked glass, assemblage, painting, photography, printmaking, mosaic and sculptural techniques. Conceptually the student is challenged to have his or her artwork develop out of ideas gleaned from literature, history, poetry, their personal narrative and current events. Additional course fee 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 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 Individualized Study
1-3 hours. Designed to give emphasis 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 course that further develops the student's 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 305 Art and Design Professional Networking
*1 hours.*This seminar course will meet weekly to focus on theory, concepts and methodology of art historical study and their application by engaging students in discourse surrounding lectures of visiting professional artists. Investigations of film and writing will be a secondary approach to this course. Must be taken minimum 5 out of 8 semesters in students' program. Satisfies: core major requirement. Additional course fee is required.

ARTS 310 Watercolor I
3 hours. A studio course involving theory and practice combined with creative and technical exploration in watercolor. This course explores creative and technical aspects of drawing and painting in watercolor. The course goal is to paint multiple short- and

long-term watercolors to create a diverse and broad portfolio in a short time, resulting in a high-quality outcome. Students will also explore significant historical watercolor artists and experiment with some of their styles to gain insight and technical knowledge. Additional course fee is required.
Prerequisite: ARTS 111 Drawing I, or instructor's permission.

ARTS 311 Figure Drawing I
3 hours. This course covers practice and theory pertaining to drawing the human figure from live models. Translating the three-dimensional figure to two dimensions will be the first priority, along with exploration and study in historical and contemporary figural interpretations. Both traditional and non-traditional mediums will be explored with the intent of gaining competence and confidence in the use of figural subject content in a variety of mediums. Additional course fee is required.
Prerequisite: ARTS 111 Drawing I, or instructor's permission.

ARTS 321 Intermediate Sculpture
*3 hours.*This course continues exploration of sculptural techniques, including specific projects working with casting methods using glass, plaster, plastic, clay, and wax. Students are also at liberty to work in developing a deeper understanding of working in media such as metal, stone, wood and clay while cultivating a conceptual framework for their artwork. Additional course fee required.
Prerequisite: ARTS 221 Beginning Sculpture.

ARTS 330 Intermediate Photography
3 hours. A class that further develops the skills needed to advance in the field of photography. Students work on pushing what was learned in Beginning Photography to a higher level. They continue gaining knowledge in the "language" of image capture through the study of past and present professionals who have changed, and continue to change, the course of the craft. As this class is primarily a digital capture class, students need a digital camera. Students will learn the fundamentals of the digital file workflow using the Apple platform. Additional course fee is required.
Prerequisite: ARTS 230 Beginning Photography.

ARTS 331 Intermediate Printmaking
3 hours. This course further develops the student's 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 broadening of the student's knowledge and ability to combine methods of painting, sculpture, fiber arts, photography and other media. Students are encouraged to learn from contemporary artist's methods and techniques while building upon a variety of ideas and concepts. Additional course fee required.
Prerequisite: ARTS 240 Beginning Mixed Media.

ARTS 341 Intermediate Ceramics
3 hours. A course that further develops the student's 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 355 Topics in Art History
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 382 Twentieth-Century Art
3 hours. Art and its relationship to Western culture of the 20th century. Additional course fee is required.

ARTS 384 Contemporary Art Forms
*3 hours.*This course examines and participates in the forms and methods of art in the 21st Century. Emphasis is placed upon investigating post-modern art theory while looking at current artists of note. The genres of video, installation, conceptual, digital and performance art are explored. In addition, students create their own work of digital media and conceptual art in the progression of the class. Additional course fee 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. This class 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 410 Watercolor II
3 hours. Continued study in watercolor theory and practice with more emphasis on creative exploration. Students are given more freedom in subject and technical direction as they demonstrate competence in basic skills. Course includes study of and mastery of contemporary and historic techniques and the exploration of one's own stylistic direction in watercolor. Additional course fee is required.
Prerequisite: ARTS 310 Watercolor I, or instructor's permission.

ARTS 411 Figure Drawing II
3 hours. Upper-division students will be given more latitude in the creative application of the concepts stated in Figure Drawing I. Additional course fee is required.
Prerequisite: ARTS 311 Figure Drawing I or instructor's permission.

ARTS 421 Advanced Sculpture
*3 hours.*This course pursues rigorous development in one's sculptural methods. Students focus on a particular three-dimensional media while clarifying their conceptual framework with further research over the semester, creating a cohesive body of sculptural works. Additional course fee required.
Prerequisite: ARTS 321 Intermediate Sculpture.

ARTS 430 Advanced Photography

3 hours. The course focuses on a photographer's individual artistic development as they combine techniques and subject matter into a personal style of visual communication. Further study of must-know photographers is complemented by assembly of a professional portfolio. Additional course fee is required.
Prerequisite: ARTS 330 Intermediate Photography.

ARTS 431 Advanced Printmaking
3 hours. This class 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.*This course pursues focused creation of a body of mixed media work as the culmination of this course. Working in combined media of their choice, the student is challenged to create a series of pieces applying professional levels of artistry and technique. Methodical research of artists, media, and concept is required. Additional course fee required.
Prerequisite: ARTS 340 Intermediate Mixed Media.

ARTS 441 Advanced Ceramics
3 hours. This class 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 455 Portfolio Development
3 hours. This course is designed to assist students in the preparation, production and presentation of their culminating portfolio of work relative to each sub-discipline within the arts. Class will focus on assessment of needs, corresponding design, and execution of projects for final portfolios. Activities will center on practice of conceptual design, design development, production/fabrication, coordination, critique and presentation. Additional course fee required.
Prerequisite: junior standing

ARTS 460 Art and Christ
3 hours. This is 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 or department permission.

ARTS 465 Continuing Studies in Studio Media
1-3 hours. Guided study in studio media such as ceramics, sculpture, painting, glasswork, printmaking, photography, etc., focused on professional practice, in-depth media exploration, development of individual voice, and exploration of historical and contemporary exemplars. Course fee is required. Student may need to purchase

additional supplies. *Pre-requisites: completion of advanced course in corresponding discipline and instructor's permission.*

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 Individualized Study
1-3 hours. Designed to give emphasis 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
3 hours. This course provides an overview of the history, literature, and themes of the Christian Bible. Bible Survey is a requirement of all undergraduate students at George Fox University, including transfer students, and serves as a prerequisite to RELI 300 as well as most BIBL and RELI electives. Alternatively, students may opt to take the two-semester, 6-credit sequence of BIBL 101 and BIBL 102; this option or its equivalent (BIBL 100 + either BIBL 101 or 102) is required for Biblical Studies majors, and strongly recommended for majors in Christian Ministries 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 George Fox program. Prerequisite: Successful completion of the ELI or instructor's permission.

BIBL 215 Biblical Studies
3 hours. In this course students will be introduced to basic tools and scholarly attitudes for studying the Bible, using a particular biblical book or set of related books as a focus. Material will be studied not only for academic knowledge but also spiritual and personal growth.
Prerequisite: BIBL 100 Bible Survey, BIBL 101 Literature of Old Testament, or BIBL 102 Literature of New Testament.

BIBL 240 Wisdom Literature
3 hours. The wisdom literature of the Old Testament is investigated historically, literarily and theologically in this class. 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. This course is 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. A 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 315 Contemporary Issues in Biblical Studies
3 hours. Biblical Studies is a vibrant and dynamic academic field, with profound implications not only for communities of faith but also for the study of politics, literary studies, philosophy, history, and popular culture. This course will focus on contemporary issues relevant to the research interests and specialties of George Fox University Biblical Studies faculty and will offer an opportunity for students and faculty to collaborate in the dual process of research and personal transformation.
Prerequisite: BIBL 100 Bible Survey or BIBL 101 Literature of the Old Testament.

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. This is 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. This is 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. A 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: BIBL 290 Biblical Interpretation and at least two upper-division BIBL courses.

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

Biology (BIOL) Courses

BIOL 100 Foundations of Biology
4 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 three-hour laboratory per week. Additional course fee is required.

BIOL 220 Fundamentals of Cellular and Organismal Biology
4 hours. This course is a supplementary course to BIOL 221, 222 that provides necessary foundational training in cellular biology, genetics, plant/animal diversity and ecology needed for certain upper-division biology courses.

BIOL 221 Human Anatomy & Physiology I
4 hours. This covers 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 non-science majors. Three lectures and one laboratory per week. Additional course fee is required.

BIOL 222 Human Anatomy & Physiology II
4 hours. This covers 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 non-science majors. Three lectures and one laboratory per week. Additional course fee is required.
Prerequisites: BIOL 221 Human Anatomy and Physiology I or permission from instructor.

BIOL 275 Field Experience
1-6 hours may be earned. This course 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, this course includes content-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 221 Human Anatomy and Physiology I and BIOL 222 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 221 Human Anatomy and Physiology I and BIOL 222 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 221 Human Anatomy and Physiology I and BIOL 222 Human Anatomy and Physiology II.

BIOL 333 Advanced Physiology
4 hours. This is an investigation of physiological principles in animals. 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 221 Human Anatomy and Physiology I and BIOL 222 Human Anatomy and Physiology II.

BIOL 335 Neuroscience
4 hours. An introductory course that provides a basic understanding in the multidisciplinary field of neuroscience. Major topics covered in this course include neural signaling, neurophysiology, sensation and sensory processing, physical and functional neuroanatomy, movement and its central control, nervous system organization, brain development, complex brain functions and diseases of the nervous system. The course will examine different model organisms that have advanced the field of neuroscience. Three lectures and one laboratory per week. Additional course fee is required.
Prerequisites: BIOL 211 General Biology I and BIOL 212 General Biology II or BIOL 221 Human Anatomy and Physiology I and BIOL 222 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 221 Human Anatomy and Physiology I and BIOL 222 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. Additional course fee required.
Prerequisites: BIOL 221 Human Anatomy and Physiology I; BIOL 222 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. Additional course fee required.
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 221 Human Anatomy and Physiology I and BIOL 222 Human Anatomy and Physiology II, and CHEM 331 Organic Chemistry I.
Recommended: CHEM 341 Biochemistry I.

BIOL 450 Advanced Human Anatomy
4 hours. A majors-level course 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, BIOL 212 General Biology II, and BIOL 333 Advanced Physiology or BIOL 221 Human Anatomy and Physiology I and BIOL 222 Human Anatomy and Physiology II, and BIOL 333 Advanced Physiology, or instructor's permission.

BIOL 460 Invertebrate Zoology
4 hours. Comparative phylogeny, morphology, ecology and life histories of several invertebrate groups and protozoa are covered. Includes 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. Additional course fee required.
Prerequisites: BIOL 211 General Biology I and BIOL 212 General Biology II or BIOL 221 Human Anatomy and Physiology I and BIOL 222 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 are covered. Emphasis is placed on the development of a basic knowledge of the statistical tools available for analysis of problems and decision making.
Prerequisite: MATH 150 World of Math or a higher math class or have a SAT math score of 620 or higher or an ACT math score of 28 or higher.

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.
Prerequisite: BUSN 110 Introduction to Business (may be taken concurrently).

BUSN 303 Personal Finance
3 hours. This course is designed to prepare students to think critically about their relationship with money, develop their own personal financial philosophy and implement practical application of personal financial management. Topics include relationship with money, biblical financial foundations, budgets, loans, spending, housing, insurance, investments and taxes.

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. This is 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 493 Senior Capstone - Strategy, Planning and Implementation
3 hour. Students will integrate key principles of strategic thinking and management as they relate to the world of business. The course is interactive in nature, and students will incorporate many 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: ACCT 272 Principles of Managerial Accounting, FINC 260 Business Finance, MGMT 260 Principles of Management, MKTG 260 Principles of Marketing and senior standing.

BUSN 495 Individualized Study
1-3 hours. Individual 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
4 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
4 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 (test taken prior to March 2016) or a math SAT score of at least 480 (test taken March 2016 or later), 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: A math SAT score of at least 500 (test taken prior to March 2016) or a math SAT score of at least 530 (test taken March 2016 or later) or successful completion of MATH 190 Precalculus Mathematics (or equivalent).

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. This is a 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 212 General Chemistry II.

CHEM 320 Advanced Inorganic Chemistry
3 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 transition metal chemistry. Three lectures per week. Additional course fee is required.
Prerequisites: 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 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; 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 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; 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
3 hours. An advanced study of organic reactions and structures including, reaction mechanisms, linear free energy relationships, isotope effects, pericyclic reactions, spectroscopy, and molecular modeling. Three lectures per week. Additional course fee is required.
Prerequisites: 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 440 Thermodynamics
4 hours. An introduction to modern theoretical chemistry, emphasizing the fundamental physical principles of chemical thermodynamics and chemical kinetics. The study of thermodynamics will apply mathematical models of energy relationships to the understanding of chemical equilibrium. Three lectures and one three-hour laboratory per week. Additional course fee is required. *Prerequisites: CHEM 332 Organic Chemistry; MATH 202 Calculus II; Corequisites: PHYS 202 General Physics II or PHYS 212 General Physics with Calculus II.*

CHEM 450 Quantum Chemistry
3 hours.. An introduction to the quantum mechanical description of matter. Emphasis is on the development of fundamental principles of quantum theory and applications to atomic and molecular structure and spectroscopy. Three lectures per week. *Prerequisites: CHEM 332 Organic Chemistry; MATH 202 Calculus II; Corequisites: PHYS 202 General Physics II or PHYS 212 General Physics with Calculus II; MATH 301 Calculus III.*

CHEM 461 Chemistry Seminar
1 hours. An advanced, senior-level course that will focus on reading and searching the chemical literature for the purpose of designing an independent research project. One lecture per week. *Prerequisites: Instructor permission*

CHEM 462 Experimental Chemistry
*2 hours.*An advanced, senior-level laboratory course integrating synthetic techniques, instrumental methods, reaction kinetics, thermodynamics, spectroscopy and an original research project. The purpose is to build on and consolidate the student's previous experiences in experiment design and execution, data acquisition and analysis, problem solution, and oral and written communication of results. Two laboratory sessions per week. Additional course fee is required. *Prerequisites: Chemistry 461 Chemistry Seminar*

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 240 Youth Culture and Ministry
2 hours. A study of some of the major trends and issues confronting and shaping young people in American culture today. A premium is placed upon developing the tools to interact with these realities as Christians in ministry and to recognize ways in which youth culture both hinders and fosters opportunities for ministry to young people.

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
3 *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 Sunday school.

CHMN 330 Foundations of Youth Ministry
3 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
2 *hours*. A camping overview, covering 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.)

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. Additional course fee required.
Prerequisite: CHMN 491 Shared Praxis III: Methods and Skills in Ministry.

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

Cinema and Media Communication (CMCO) Courses

CMCO 160 History of U.S. Cinema
3 hours. A historical examination of the moving image, including television programming and film in the United States. Employs contextual and ethical methods for illuminating the relationship of these media artifacts to modern culture, both secular and religious.

CMCO 220 History of International Cinema
3 hours. Film is a truly an international medium, stretching across borders, decades and cultures. Students will study international films in terms of the historical, cultural, political and economic forces that shaped them.

CMCO 230 Introduction to Video Production
3 hours. This course is 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. This course concentrates 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; and (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 animation elements and build them into interactive Web pages. Additional course fee required.

CMCO 260 Scriptwriting for Media
3 hours. This is an introduction to the styles, techniques content and forms of television writing. Both dramatic (sitcom and dramatic features) and non-dramatic (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 video production and Internet-distributed 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)

CMCO 275 Field Experience
2-10 hours. This is 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 280 Film Theory and Criticism
3 hours. An introduction to film as a narrative and visual medium, emphasizing the terms, methods and techniques of film analysis, as well as prominent critical theoretical approaches to understanding film.

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. This course is 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. Additional course fee required.
Prerequisite: CMCO 230 Introduction to Video Production or instructor's permission.

CMCO 340 Media Law and Ethics
3 hours. This course considers the rights and responsibilities of print and broadcast journalists, and explores media law and ethics in light of the First Amendment and legal philosophy. (Identical to JOUR 340)
Prerequisite: JOUR 230 Introduction to Journalism, 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. This course covers the theory and practice of editing the moving image. Analysis of Hollywood and avant-garde styles of editing is followed by practice exercises illustrating each concept. Additional course fee required.
Prerequisite: CMCO 230 Introduction to Video Production or instructor's permission.

CMCO 355 Event Video Production
3 hours. This course concentrates on live multi-camera 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. This is 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. Additional course fee required.

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. Additional course fee required.

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. (Identical to JOUR 370)
Prerequisite: CMCO 270 Broadcast News I or instructor's permission.

CMCO 371 Documentary Production I
3 hours. The documentary filmmaker must juggle a multitude of skills while maintaining a relationship with their subject in an ethical manner. Students will explore the historical, critical and ethical aspects of the documentary while studying the steps taken during preproduction.
Prerequisite: CMCO 230 Intro to Video Production or instructor's permission.

CMCO 372 Documentary Production II
3 hours. This course continues the documentary experience started in Documentary Production I. Students will apply their understanding of documentary filmmaking while exploring the aspects of production and post-production.
Prerequisite: CMCO 371 Documentary Production 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. In this advanced course in video directing and producing, students explore the preproduction, production and postproduction of original short feature videos for the Fox Film Festival. Additional course fee required.
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. Additional course fee required.
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 474 Corporate Video Production
1 hour. Working with a client is an essential skill for the video professional. This course will prepare students to work collaboratively and creatively alongside a client while gaining hands-on experience.

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. Additional course fee required.
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. Additional course fee required.

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. Additional course fee required.
Prerequisite: senior status.

CMCO 495 Individualized 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, this course requires students to apply communication principles to interpersonal, group and public contexts. Particular emphasis is on the practice of public speaking. Students will prepare and deliver several oral presentations.

COMM 190 Introduction to Communication Research Methods
3 hours. This course is an introduction to quantitative and qualitative research methods commonly used in the field of communication and in social science in general.

COMM 200 Persuasive Communication
3 hours. Course is a presentation of key principles of persuasion as they are reflected in typical organizational communication contexts. Focus is 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. Course is a 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.

COMM 220 Intercultural Communication
3 hours. This covers communication as it affects and is affected by language and culture. Topics include contextualized use of communication within speech communities, intercultural effectiveness, cultural communication theory, competent intercultural experiences in co-cultures (ethnic, gender, intergenerational, deaf, etc.) and global cultural groups. *A student may not earn credit for both the lower-division and upper-division versions of this course.* (Identical to INTL 220)

COMM 230 Mass Media and Popular Culture
3 hours. This is a survey of the historical development of newspapers, magazines, broadcast media and cinema. Includes 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. This course is 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. Course is an experience in supervised field situations, generally off campus, involving extensive communication activity. Admission to course and amount of credit are 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. This is 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. Structured to give students experience in real-world communication events, generally on campus, this course is offered each term. It may be repeated for a maximum of 6 hours total. Pass/No Pass.

COMM 310 Conflict Resolution
3 hours. This is 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
0-3 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. Additional activity fee required.

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. Course is a study of the nature of verbal symbols as they function in communication. It covers phonetic transcription, semantics, modern grammatical theories, history of the English language and modern English dialects. (Identical LANG 340.)

COMM 380 Advanced Organizational Communication
3 hours. This is an advanced study of organizational communication. Topics include, but are not limited to, organizational storytelling, communication technologies, career theory, power and resistance in organizations, and impression management. Students will be encouraged to recognize ways organizational communication can be improved through their everyday interactions.

Prerequisite: COMM 270 Introduction to Organizational Communication or instructor's permission.

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: junior standing or above.

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. This course covers 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, etc.) and global cultural groups. *A student may not earn credit for both the lower-division and upper-division versions of this course.* (Identical to INTL 420)

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 are determined by the faculty supervisor. Pass/No Pass. *Prerequisite: Communication studies major, junior standing, completed 9 credits in COMM coursework.*

COMM 480 Senior Capstone: Ethical and Spiritual Dimensions of Communication
3 hours. This course is 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 Individualized 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 201 Introduction to Computer Science I
3 hours. A foundational course for the study of computer science and information systems, it 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 science and information systems, it 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 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. Course is 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 304 Web-Based Programming

3 hours. A computer programming course using web-based technologies, the emphasis of the course is placed on fundamental concepts of computer programming and application development through the creation of interactive Web applications. The course is designed for students who want to design and implement web-based applications.

CSIS 310 Data Structures
3 hours. This is an introduction to the concepts of information organization and 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 and CSIS 214 Web-Based Programming.

CSIS 321 Software Engineering
3 hours. This serves as 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 Human-Computer Interactions (HCI)
3 hours. Course is an introduction to the principles and methods with which one builds effective interfaces for users. A basic precept of HCI is that users should be able to focus on solving problems, rather than dealing with the intricacies of complex software. Interfaces must be accessible, meaningful, visually consistent, comprehensive, accurate, and oriented around the tasks that users tend to perform. The course will provide a balance of practical and theoretical knowledge, giving students experience ordinarily not provided by other courses in computer science. Students will also participate in group-projects to design, implement, and evaluate user interfaces. Additional course fee required.
Prerequisites: CSIS 201 Introduction to Computer Science I.

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.

CSIS 350 Data Communications and Networks
3 hours. This is 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. Serve as 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.

CSIS 370 Object-Oriented Analysis & Design
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.

CSIS 380 Secure Software
3 hours. Many security problems in software occur when software developers make poor implementation decisions or unwittingly introduce bugs into their code. This course will focus on many of the classic flaws in systems that can lead to security problems including: buffer overflows, format string problems, race conditions, memory leaks, etc. It will also cover many web-application specific topics such as SQL injection attacks and cross-site scripting (XSS) attacks.
Prerequisite: CSIS 321 Software Engineering.

CSIS 390 Cellular & Mobile Technologies
3 hours. As more communications are conducted via mobile and cellular technologies, these technologies have become critical to both industry and private life. This course covers how data is processed and transmitted using mobile and wireless devices. Topics include but are not limited to: an overview of smart phone technologies, embedded operating systems, wireless and mobile specific protocols, mobile identifiers, location based services and more.
Prerequisite: CSIS 350 Data Communications and Networks and CSIS 460 Operating Systems.

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 412 Computer Security and Digital Forensics
3 hours. In a highly connected, data-intensive and cost-focused business environment, the practice of information security is not a business advantage; it is a customer requirement. Viruses, malware, trojans, denial of service attacks, phising, and even Wiki leaks have become headline news. Failure to ensure the confidentiality, integrity and availability of data costs companies millions, if not billions, of dollars in legal settlements, lost business and trade secrets. In this breadth-based course, you will get an overview of information security principles and practices, including models, risk management, access controls, intrusion detection and prevention, cryptography, software vulnerabilities and ethical issues. This class will also provide an overview of digital forensics. Students will learn techniques behind digital forensic investigations and evidence collection and will cover the fundamental steps of the traditional computer forensic methodology. Topics will include building forensic workstations, collecting evidence, extracting artifacts, identifying unknown files and reassembling evidence from network packet captures and device images Additional course fee required.

CSIS 413 Advanced Security
3 hours. This course would cover a number of advanced topics such as cellular and mobile technologies and their security, system vulnerabilities and penetration testing of corporate networks/systems, risk management of information systems, and other current topics. Students will also be introduced to both international and U.S. cyber laws including reporting compliance.

Prerequisite: CSIS 412 Computer Security and Digital Forensics.

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.

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.

CSIS 434 Parallel & Distributed 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. Additional course fee required.
Prerequisite: CSIS 310 Data Structures.

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.

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 451 Cyber Defense
4 hours. This course introduces students to the concepts of defense in-depth, a security industry best practice. Topics include firewalls, backup systems, redundant systems, disaster recovery, and incident handling. Upon completion, students should be able to plan effective information security defenses, backup systems, and disaster recovery procedures. This course requires a lab component that provides practical experience working with current technologies for defense.
Prerequisite: CSIS 413 Advanced Security and CSIS 450 Network Administration.

CSIS 460 Operating Systems
3 hours. This is 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.

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. (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 are 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 Individualized 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. Course is 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. Course is 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, interest rates, 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. Course provides an overview of the economic role and impact of government, including topics in public finance, fiscal policy, monetary policy, 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 INTL 370 and 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: College level statistics course 200 level or higher. Students who've taken PSYC 240 or SOCI 340 must also complete MATH 150 or higher, or have a SAT math score of 620 or higher or have an ACT score of 28 or higher.

ECON 461 International Trade
3 hours. Course provides 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. Course is 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 Individualized 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 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 260 Teaching, Schooling and Learning
4 hours. Course is an overview of history and diverse social issues in education and an exploration of teaching as a career. Serves as an introduction to the teacher education program at George Fox University. Survey of learning theories and possible applications in the elementary classroom are explored. Required for elementary teaching majors and music education majors. Includes 10 hours of clinical practice.

EDUC 270 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 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 field work 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 324 Trends and Methods of Early Childhood Education
4 hours. This course provides an overview of early childhood as a profession in relation to its historical, philosophical and social foundations. Students examine how these functions influence current thought and will be able to translate those theories into practice. Included will be age-level characteristics and child-centered activities that enhance developmentally appropriate practice, assessment, curriculum/instruction, environment and family/community collaboration. The role of the teachers and ethical considerations are considered to promote reflective thinking, cultural competency, and positive use of technology to meet the needs of young children. Course goals align with the State of Oregon program objectives for early childhood and elementary OAR 584-017-0100, ages 3 years to the fourth grade, and to the National Association for the Education of Young Children (NYAEYC) initial license standards.
Prerequisite: Successful admission into the Undergraduate Elementary Education major program.

EDUC 343 Adventures in Math and Science I
4 hours. This course is the first of two integrated math and science pedagogy courses that focus on the teaching of math and science in the elementary/middle school environment. Teaching science and math in the primary (K-3) grades is emphasized

in this course. An inquiry-based approach to teaching science is emphasized. The mathematics pedagogy is focused on the common core state standards of counting and cardinality, operations and algebraic thinking, number and operations in base 10, measurement and data, and geometry at the primary level. The standards of mathematical practice are taught and emphasized. Emphasis on STEM.
Prerequisite: Successful admission into the Undergraduate Elementary Education major program.

EDUC 344 Adventures in Math and Science II
4 hours. This course is the second of two integrated math and science pedagogy courses that focus on the teaching of math and science in the elementary/middle school environment. Teaching science and math in the intermediate (3-8) grades is emphasized in this course. An inquiry-based approach to teaching science is emphasized. The mathematics pedagogy is focused on the common core state standards of operations and algebraic thinking, number and operations-base 10, number and operations-fractions, measurement and data, ratios and proportional systems, the number system, expressions and equations, and geometry at the intermediate level. The standards of mathematical practice are taught and emphasized.
Prerequisite: Successful admission into the Undergraduate Elementary Education major program.

EDUC 346 The Inclusive Classroom in a Diverse Society
4 hours. Course 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 hands-on learning approaches that accommodate a diverse population. Also included are strategies for collaborating with educators and community members in order to provide comprehensive, challenging educational opportunities for ESOL students. In this course, students are invited to evaluate best practices, use strategies for developing and integrating language skills, choose and adapt classroom resources, and reflect on their role as an agent of change who will effectively empower students to reach their potential. This course will examine the diversity of cultures, languages, experiences and knowledge that our students bring to our classrooms. This course also will examine the tensions and barriers that are evident when students of diversity encounter the mainstream classroom in which they are the minority culture. Teacher perceptions and biases will be examined and challenged.
Prerequisite: Successful admission into the Undergraduate Elementary Education major program.

EDUC 353 Trends and Issues in Middle-Level Education
4 hours. This course provides an overview of middle level teaching as a profession in relation to its historical, philosophical and educational foundations. Students examine how these functions influence current thought and will be able to translate those theories into practice. Included will be adolescent development and current teaching methods and structures that are developmentally appropriate for creating a positive learning environment. The role of teachers and ethical considerations are explored to promote reflective thinking, cultural competency, and positive use of technology to meet the needs of adolescents.
Prerequisite: Successful admission into the Undergraduate Elementary Education major program.

EDUC 354 Pedagogy of Health, Human Performance and the Arts

4 hours. Using the basic principles and elements of music and art, students will explore making connections between subjects in the elementary curriculum. This course examines and offers opportunities to apply health and human performance methods. *Prerequisite: Successful admission into the Undergraduate Elementary Education major program.*

EDUC 371 Curriculum Design with ESOL
4 hours. Working within the differentiation framework (background knowledge, language, academic and behavior), or BLAB, this course will examine and apply the concepts and instructional strategies that are essential for the academic achievement of our students from cultural, diverse, language, behavioral and academic backgrounds. Specific emphasis will be devoted to the success of our exceptional students and our second-language learners. Integration of Social Studies into the methodology of the work sample will be addressed. *Requires 20 hours of practicum.*
Prerequisite: Successful admission into the Undergraduate Elementary Education major program.

EDUC 375 Practicum I
4 hours. The teacher candidate enters the classroom as a co-teacher who is collaborating with a cooperating teacher in developing and presenting instruction that is designed for the success of all students. Successful teaching and completion of a work sample is required. The work sample is a written documentation of the student's ability to teach all students. The practicum is scheduled 4 days a week for EDUC and 5 days a week for ELED.
Prerequisite: Successful admission into the Undergraduate Elementary Education major program.

EDUC 376 Student Teaching I for Middle-Level Authorization
1 hour. Course is a laboratory experience consisting of general and specific tasks, managing and instructing pupils and assisting teaching in the classroom.
Prerequisites: EDUC 353 Trends and Issues in Middle-Level Education and EDUC 375 Practicum I

EDUC 381 Classroom Management
2 hours. Clearly, individual classroom teachers can have a major impact on student achievement. Of the three major roles of the classroom teacher – making choices about instructional strategies, designing classroom curriculum and employing classroom management techniques – classroom management is arguably the foundation. Research on classroom management is integrated into the course. This course introduces the teacher candidate to research-based effective classroom management strategies.
Prerequisite: Successful admission into the Undergraduate Elementary Education major program.

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 412 Literacy for Children and Adolescents

2 hours. This course provides an overview of children's and adolescent literature and its use in culturally responsive teaching. Children's and adolescent literature will be explored as a method to provide culturally responsive teaching in relation to diversity and critical literacy areas.
Prerequisite: Successful admission into the Undergraduate Elementary Education major program.

EDUC 413 Reading and Writing Methods I
4 hours. This course creates a foundation for teaching listening, speaking, reading and writing in all grades, with a focus on beginning readers and writers. Theory, learner development, diversity and content knowledge will be applied in lesson and unit planning and in teaching children in the placement. Assessment, planning, teaching and reflection will be modeled and experienced in classroom settings using the CCSS, best practice and attention to the needs of all learners.
Prerequisite: Successful admission into the Undergraduate Elementary Education major program.

EDUC 414 Reading and Writing Methods with the Common Core Subjects
4 hours. This course builds on the foundation gained in Reading and Writing I and focuses on grade 3-8 readers and writers. Theory, learner development, diversity and content knowledge will be applied in lesson and unit planning and in teaching children in the placement. Assessment, planning, teaching and reflection will be modeled and experienced in classroom settings using the CCSS, best practice and attention to the needs of all learners.
Prerequisite: Successful admission into the Undergraduate Elementary Education major program.

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 and 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 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 461 Applied Linguistics and Second Language Acquisition
4 hours. Communication is the basis for all human interaction. In this course, we will explore key language theories of first- and second-language acquisition, since multiple fields intersect in their quest to explain language. Students will investigate and identify the underlying structure of language and its component systems through interactive, semester-long projects with second-language learners. 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.
Prerequisite: Successful admission into the Undergraduate Elementary Education major program.

EDUC 475 Practicum II
10 hours. The teacher candidate enters the classroom as a co-teacher who is collaborating with the collaborating with a cooperating teacher in developing and

presenting instruction that is designed for the success of all students. Successful teaching and completion of a work sample is required. The work sample is a written documentation of the student's ability to teach all students. The practicum is scheduled 5 days a week. Pass/No Pass.
Prerequisite: Successful admission into the Undergraduate Elementary Education major program.

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 480 Classroom Assessment: Assessing and Planning for All Learners
4 hours. Building on the conceptual ideas of Assessment for Learning, this course focuses on the idea that assessment is a collaborative process that involves the student, teacher and other stakeholders in a collaborative experience that is designed to empower student success. The four dimensions of background knowledge, language abilities, academics and behavior assessments will provide the impetus for a course which investigates, develops and plans assessments for all students, specifically including English language learners, special education students, talented and gifted students, and mainstream students. A wide diversity of classroom assessments will be explored. Additionally, the use and interpretation of standardized assessments will be examined. Through direct practice, teacher candidates will gain insights into identification, placement, monitoring and exiting criteria for ELL students according to federal and state policies; and will be prepared to implement fair and realistic accommodations/assessments in the mainstream classroom.
Prerequisite: Successful admission into the Undergraduate Elementary Education major program.

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
2 hours. This course assists teacher candidates to synthesize their foundation, methods and content background during the full time clinical experience, including content to prepare the teacher candidates as they transition into the teaching profession. The course content is presented in a professional development workshop while encouraging an understanding of the need for continued growth as teaching professionals as well as additional information on classroom management and differentiation.
Prerequisite: Successful admission into the Undergraduate Elementary Education major program.

EDUC 495 Individualized Study
1-3 hours. Directed individual 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 210 Site Development w/ AutoCAD and Civil 3D
*2 hours.*Introduction to civil design for transportation, municipal, and private development projects. Creation of digital topographic maps using survey data of existing terrain is emphasized. For transportation systems the geometric layout of highways, streets, and intersections is covered using current AASHTO and ODOT standards. For private and municipal projects, site plans include vehicle access, parking, and pedestrian access in accordance with ADA requirements and Oregon state codes. Storm water drainage and sanitary sewer pipe systems are designed in accordance with local or state standards. The development of grading plans for on-site construction activities is emphasized. This course introduces students to drafting and design using AutoCAD and Civil3D software. Additional course fee is required.
Prerequisite: ENGR 151 Engineering Principles and MATH 201 Calculus I.

ENGC 220 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 275 Field Experience
1-3 hours. Course is a 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. Course covers fundamental principles of environmental engineering. Topics include life support system, carbon-oxygen cycle, cycling of nitrogen, sulfur and phosphorus, and the hydrologic cycle. Also covers calculation of pollution potential and treatment system parameters. Concepts of water and wastewater treatment, solid and hazard waste management, and air pollution abatement are also discussed. Additional course fee is required.
Prerequisites: CHEM 211 General Chemistry and MATH 311 Differential Equations with Linear Algebra.

ENGC 330 Structural Analysis and Design
3 hours. Class covers an 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.*Course covers basic physical and mechanical properties of soils, including specific gravity, grain size distribution, plasticity, permeability, consolidation and shear strength. Instruction included on use of these properties to calculate stresses in a soil

mass, lateral earth pressures, bearing capacity and slope stability. Includes 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 hydraulics and hydrology, and their application in civil engineering, are covered. Topics include applications of fluid mechanics to hydraulic infrastructure, principals of open channel flow, the hydrologic cycle, 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: ENGM 330 Fluid Mechanics.

ENGC 360 Engineering Economics
*2 hours.*Introduction to economic analysis techniques for engineering decision-making. Topics include the time value of money, cost estimation methods, cash flow, interest, equivalence, depreciation, and inflation. Compare engineering alternatives on the basis of economic parameters. Additional course fee is required.
Prerequisite: MATH 201 Calculus I

ENGC 370 Transportation Engineering
3 hours. Course is an introduction to planning, design and operation of transportation systems. Covers 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, transportation systems management and geometric design of highways. Also includes application of statistical analysis on transportation problems. Additional course fee is required.
Corequisites: MATH 330 Engineering Statistics. Prerequisites: ENGM 211 Statics and ENGC 220 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. Course covers 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
2 hours. Class covers principles and practice of construction engineering and project management, including development of cost estimates and project schedules. Basic construction methods and fundamental construction terminology are discussed. Also includes an 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. Course covers 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. This is a 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. Course serves as an 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.
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 are covered, as are voltage-current relationships for circuit elements, Kirchhoff's laws, and Thévenin and Norton theorems. Includes basic transient and sinusoidal steady-state analysis; frequency domain analysis; frequency response, resonance and measurement concepts. Applications of the operational amplifier. Analysis and design aided by circuit simulation software. Three lectures and one laboratory per week. Additional course fee is required.
Prerequisite: ENGR 152 Engineering Principles II, MATH 311 Differential Equations with Linear Algebra and PHYS 212 General Physics with Calculus II.

ENGE 260 Circuits and Instrumentation
4 hours. An introduction to DC and AC circuit theory, electronics, and instrumentation. Specific areas of study include Ohm’s law, basic circuit analysis techniques, electrical power, motor selection, circuit simulation software, measurement methods, various types of instrumentation devices, and data acquisition. Three lectures and one laboratory per week. Additional course fee is required.
Prerequisite: ENGR 152 Engineering Principles II and PHYS 212 General Physics with Calculus II.

ENGE 270 Electric Power Systems
3 hours. This course is an introduction to electrical power systems, with a focus on power generation, transmission, and loads. AC and DC electric machines, transformers, power transmission lines, and three phase power systems are discussed. Includes phasor analysis, rms signals and power factor. Additional course fee is required.
Corequisite: ENGE 250 Electrical Circuit Analysis.
Prerequisite: 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. Course is an introduction to the C programming language as a means to perform low-level access and control of hardware with a high-level language. Covers custom software applications, portability issues, application of pointers, and introduction

to data structures. Also covers 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. Course is an introduction to the terminal characteristics of active semiconductor devices. Topics covered include operation and small-signal models of diodes, junction and field-effect transistors and operational amplifiers. Also covers basic single-stage and multistage amplifiers: gain, biasing and frequency response, as well as 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. Covers analog and digital applications of electronic devices: amplifiers, oscillators, filters, modulators, logic circuits and memory elements. Topics include feedback, stability and noise considerations. Emphasis is 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 320 Microprocessor Architecture
4 hours. This course teaches students fundamental knowledge in microprocessor architecture. Course topics include microcomputer architecture, assembly language and higher-level programming, I/O programming, data communications, data acquisition systems, memory interfacing and memory architecture. Three lectures and one three-hour laboratory per week. Additional course fee is required.
Prerequisite: CSIS 202 Introduction to Computer Science II and CSIS 310 Data Structures or ENGE 220 Digital Logic Design.

ENGE 330 Electrical Signals and Networks
3 hours. Fundamental concepts of continuous-time and discrete-time signals and systems are covered. Topics covered include linear time-invariant systems, the convolution integral and impulse response; Fourier series and frequency domain analysis; Fourier and Laplace techniques; principles of sampling and modulation; theoretical and practical aspects of electrical networks; loop and nodal analysis of multi-port networks; admittance, impedance, and transmission parameters; and matrix solutions. Additional course fee is required.
Prerequisite: ENGE 250 Electrical Circuit Analysis and MATH 301 Calculus III.

ENGE 350 Electrical Network Analysis
3 hours. Theoretical and practical aspects of electrical networks are covered. Topics covered include 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; and 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. Course is a theoretical study of static and dynamic electric and magnetic fields. Among topics covered: 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; and Poynting's theorem. In addition, numerical methods and computer simulation tools in electromagnetics are introduced. Additional course fee is required.
Prerequisites: ENGE 250 Electrical Circuit Analysis and MATH 301 Calculus III.

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. Course covers practical aspects of digital design with Hardware Description Languages including the design, construction and testing of significant digital subsystems. Students will explore 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 Embedded Systems Design
3 hours. This course teaches students how to design and manufacture microcontroller-based embedded computer systems. Course topics include printed circuit board design and fabrication, I/O interface design, I/O peripheral devices, and data communication interfaces. Real-time operating systems and their integration into an embedded system will be examined. Design projects involve the construction and programming of a microcontroller-based embedded system. Two lectures and one three-hour laboratory per week. Additional course fee is required.
Prerequisite: ENGE 311 Electronic Devices and Circuits and ENGE 320 Microprocessor Architecture.

ENGE 430 Communication Systems
3 hours. Serves as an 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 460 Microwave Engineering and Applications
3 hours. A study of microwave circuits, devices and techniques as applied to cellular communications and other modern systems. Includes 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 included, as is an 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 470 Power Electronics and Renewable Energy
3 hours. This course is an introduction to DC-DC converters, rectifiers, inverters, and electrical renewable energy sources. Power electronics switch characterization is discussed and a renewable energy project is integral to the course. Additional course fee is required.
Prerequisites: ENGE 270 Electrical Power Systems and ENGE 312 Applications of Electronic Devices.

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. Course covers 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; and effects of quantization and finite-word-length arithmetic. Additional course fee is required.
Prerequisite: ENGE 312 Applications of Electronic Devices.

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 211 Statics
3 hours. Static force and moment vectors, resultants. The free-body diagram is used extensively to understand the equilibrium of a whole physical system through isolation of each component, particle, or body. Applications to simple trusses, frames, and machines. Distributed loads. Internal forces in beams. Properties of areas, second moments. Laws of friction. Additional course fee is required.
Prerequisites: ENGR 152 Engineering Principles II, MATH 202 Calculus II and PHYS 211 General Physics w/Calculus I.

ENGM 212 Dynamics
3 hours. This course considers the mathematical description of particles and 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. Applications using computer software are included. Additional course fee is required.
Prerequisites: ENGM 211 Statics

ENGM 220 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). Additional course fee is required.
Corequisite: ENGR 250 Principles of Materials Science.

ENGM 275 Field Experience
1-3 hours. A 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 311 Engineering Thermodynamics
3 hours. Course provides a 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. Course provdes an 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
2 hours. Advanced topics in the first and second laws of thermodynamics. Covered topics include availability and irreversibility, vapor and gas power cycles, mixtures of gases and vapors, non-reacting flows, and compressible flow. Also covered are applications to spark and compression ignition engines, gas and vapor turbines,

refrigeration systems, heat exchangers, and psychrometrics. 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. Additional course fee is required.
Prerequisites: ENGM 211 Statics and ENGR 250 Principles of Materials Science.

ENGM 321 Mechanics of Materials Lab
1 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. One two-hour laboratory per week. Additional course fee is required.
Prerequisites: ENGM 320 Mechanics of Materials.

ENGM 330 Fluid Mechanics
3 hours. Course covers presentation and development of fundamental concepts of fluids such as continua, including velocity, pressure, and viscosity. Topics include 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 control volume analysis; incompressible inviscid flow, dimensional analysis and similitude; pipes, ducts, and open channel flow; and boundary-layer concepts and their application to lift and drag. Additional course fee is required. *Prerequisites: ENGM 212 Dynamics, ENGM 311 Engineering Thermodynamics and MATH 311 Differential Equations with Linear Algebra.*

ENGM 350 Machine Dynamics and Vibrations
3 hours. Course is a kinematic and dynamic analysis of basic mechanisms with an introduction to kinematic synthesis. Covers 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 212 Dynamics and MATH 311 Differential Equations with Linear Algebra.

ENGM 360 Finite Elements and Computer Modeling
3 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.Problems will be solved by hand using the finite element method (FEM) and via software packages that use both FEM and the finite volume method. Advancedsolid modeling techniques are also covered. Additional course fee is required.
Corequisite: ENGM 380 Heat Transfer
Prerequisites: ENGM 320 Mechanics of Materials and ENGM 330 Fluid Mechanics.

ENGM 380 Heat Transfer

3 hours. Course covers fundamental aspects of conduction, convection, and radiation heat transfer; analytical and numerical solutions of heat transfer problems, estimation of heat transfer coefficients, and heat exchanger design. Boiling and condensation are also considered. Additional course fee is required.
Prerequisite: ENGM 330 Fluid Mechanics.

ENGM 381 Energy Lab
1 hours. Laboratory exercises are included to enhance course theory from Application of Engineering Thermodynamics, Fluid Mechanics, and Heat Transfer. Hands-on experiences will occur with measurement apparatus and analysis techniques. Common misconceptions will be addressed. One two-hour laboratory per week. Additional course fee is required.
Corequisite: ENGM 380 Heat Transfer
Prerequisite: ENGM 312 Application of Engineering Thermodynamics and 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. Course covers fundamental principles for the synthesis, analysis and design of mechanical elements and systems. Students study the use of statics, dynamics, mechanics of materials, and failure theories to evaluate mechanical systems under static and dynamic loading. Includes 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.
Corequisite: ENGM 360 Finite Elements and Computer Modeling.
Prerequisites: ENGM 320 Mechanics of Materials and ENGM 350 Machine Dynamics and Vibrations.

ENGM 420 Biomechanics
3 hours. From a biomechanical perspective, the healthy human skeleton is an optimal structure that has adapted its form in response to its function. Studying the mechanics of the skeleton provides information that can be used not only to design artificial prostheses and materials and thus address specific health care issues but also to aid in the design of more traditional engineering structures by understanding the behavior and underlying design features of this complex dynamic structure. The purpose of this course is twofold: to learn the fundamental concepts of orthopedic biomechanics and to enhance skills in mechanical engineering and bioengineering by analyzing the mechanical behavior of various complex biomedical problems. *Prerequisites: ENGM 360 Finite Elements and Computer Modeling and ENGM 400 Mechanical Engineering.*

ENGM 450 Fundamentals of Flight Dynamic
3 hours. This course provides an introduction to flight dynamics of aircraft and autonomous aircraft systems. Longitudinal, lateral and directional static stability will be analyzed for conventional aircraft. The complete aircraft governing dynamic equations will be developed and reduced to conventional linear mode approximations using small

disturbance theory. Linear systems theory is used to analyze, design aircraft, and develop control systems to meet desired dynamic performance metrics. Additional course fee is required.
Prerequisite: ENGM 350 Machine Dynamics and Vibration.

ENGM 470 Energy Systems Engineering
3 hours. Class covers 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 in the frequency and time domains. Special attention is given to compensator design by PID. Principles of closed loop mechanical, electrical, hydraulic, pneumatic and thermal 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: ENGM 350 Machine Dynamics and Vibrations and MATH 311 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. This course serves as an 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. Course is an 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. Course concerns 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 and ENGR 152 Engineering Principles 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 381 Servant Engineering I
2 hours. Servant engineering is a two-semester course sequence typically taken in the student's junior year. In the summer before the course begins, students research a potential engineering project designed to serve others. These projects are proposed early in the first semester, and the most feasible projects are selected for the program. Students are then assigned to a team of four or five who work on a selected project. Projects might require a multi-disciplinary team ranging from computer science to civil

engineering, or they might be more focused on a specific skill-set. Each team has a faculty mentor who helps guide the project. In both semesters, teams meet weekly with their faculty mentors and work through problem definition, specification development and conceptual development, with the goal of selecting a specific design for detailed design-and-build. 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. Final enrollment is contingent on approval from the College of Engineering.*

ENGR 382 Servant Engineering II
2 hours. Servant engineering is a two-semester course sequence typically taken in the student's junior year. In the summer before the course begins, students research a potential engineering project designed to serve others. These projects are proposed early in the first semester, and the most feasible projects are selected for the program. Students are then assigned to a team of four or five who work on a selected project. Projects might require a multi-disciplinary team ranging from computer science to civil engineering, or they might be more focused on a specific skill-set. Each team has a faculty mentor who helps guide the project. In both semesters, teams meet weekly with their faculty mentors and work through problem definition, specification development and conceptual development, with the goal of selecting a specific design for detailed design-and-build. Every project will be an opportunity to use the gifts that God has given us to serve others. Additional course fee required. *Prerequisite: ENGR 381. Final enrollment is contingent on approval from the College of Engineering.*

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 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.

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: BUSN 110 Introduction to Business and MKTG 260 Principles of Marketing.

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 Individualized Study
1-3 hours. Individual 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. Course is 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. This is 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. This course is 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. This is 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. This is 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. This is 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.

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, ACCT 272 Principles of Managerial Accounting (may also be a co-requisite), ECON 202 Principles of Macroeconomics and a college level statistics course 200 level or higher. Students who've taken PSYC 240 or SOCI 340 must also have completed MATH 150 or higher, or have a SAT math score of 620 or higher or an ACT score of 28 or higher..

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. This is 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, ECON 202 Principles of Macroeconomics and FINC 260 Business Finance.

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. Course serves as 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 Individualized Study
1-3 hours. Individualized 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. Course is 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. This is 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. Course takes 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. Course takes 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 Individualized 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. Course is a thorough review of French to develop an intermediate/high proficiency, as defined by ACTFL. Activities include reading authentic texts, writing short essays and developing conversational skills. 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. Course is a thorough review of French to develop an intermediate/high proficiency, as defined by ACTFL. Activities include reading authentic texts, writing short

essays and developing conversational skills. 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. This is 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 Individualized 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. Course is 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. Course is 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 470 Global Strategy
3 hours. This course provides an overview of the field of strategic global business and its central concerns in order to develop an understanding of the global dynamics of an industry as well as the competitive position of a given firm within that industry and the underlying international market forces that shape competitive strategy. The course will focus on global strategy frameworks and review applied and theoretical fields within the discipline. Cross-cultural understanding, adaptation and communication are explored as a critical component for successful global strategy efforts. The course includes a two- to

three-week study abroad component in an international setting. Additional course fee is required.
Prerequisite: MGMT 260 Principles of Management.

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

GBSN 480 Global Business Strategy
3 hours. This 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; and 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 Individualized 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 125 Academic English Development
3 hours. For students who are not native speakers of English, this is an intensive course with the goal of improving academic English skills. Students concurrently enroll in a designated general education course, and the content, activities and assignments for that course provide the context for developing academic English skills including listening and reading comprehension, note taking, writing, vocabulary, speech and study skills.
Prerequisite: Instructor's permission.
Corequisite: Enrollment in the designated general education course.

GEED 130 First Year Seminar
1 hour. Members of the entire entering freshman class select a small seminar-style topical course for the first six 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. Additional course fee required. 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 Discover Your Calling
1 hour. This course promotes self-discovery and understanding in relationship to vocational calling, values, interests, strengths development and personality. Educational and occupational pathways are examined, with selecting a major and clarifying one's calling as the intended outcomes. Students will also be introduced to the importance of building a network, cultivating skills, and strategic academic planning.
Prerequisite: freshman or sophomore status.

GEED 216 Internship: Finding,Landing and Succeeding
1 hour. This course will help you to: identify a career direction, create a personal brand, build a professional network, write an effective resume and cover letter, create a LinkedIn profile that gets results, interview with confidence, create an internship search strategy, and succeed in your internship experience.
Prerequisite: sophomore or junior status.

GEED 218 Developing Professional Identity

1 hour. This course will focus on developing awareness and understanding of a professional identity. Discussing and developing the technical components to navigating professional opportunities such as resume, e-presence, career planning, networking, and employer engagement strategies, along with identifying and creating professional goals will be emphasized.
Prerequisite: junior or senior status.

GEED 271 Honors Colloquium I
1 hour. This is an 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. This is an 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. This is a 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. Course requires 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. Course requires 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. This is a 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. This is 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. Course is 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. This is 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. Serves as 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. This is 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. This class is 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, course is 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, this is 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, this is 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, course is 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
4 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, this course covers 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. Students will be introduced to the basic vocabulary, grammar and syntax of ancient biblical Hebrew.

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 reading of Biblical texts. Students will continue to master basic vocabulary, grammar and syntax of Hebrew. 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 Individualized 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 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 109 Ballroom Dance
1 hour. Course offers instruction in basic to intermediate steps and etiquette in ballroom dance, including six-count and eight-count swing, fox-trot, waltz, and tango.

HHPA 112 Fitness Walking
1 hour. Course is 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 byproducts 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 121 Core Fitness and Flexibility
1 hour. This is a beginning yoga, core and flexibility class with intermediate/advanced options given. The course will focus on basic postures, breathing, stretching and relaxation.

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 123 Skateboarding
1 hour. Students will engage in skateboarding or a similar discipline (roller blades, pro scooter), which can be performed on the Newberg cement skatepark. Students will be able to progress at a pace that best suits their skill level. The Newberg skatepark is a world-class cement park with a very friendly layout for all levels. Participation is a major portion of the course, and skill will be assessed on individual progression.

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 covers skills, techniques, rules and strategies in doubles and singles tennis. 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 and 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 and roll and execute 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. Two credits toward the physical education general education requirement may be earned in athletics, but no more than one 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 covers basic to intermediate steps and etiquette in ballroom dance, including six-count and eight-count swing, fox-trot, waltz and tango.

HHPA 312 Fitness Walking
1 hour. Course is 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 byproducts 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 321 Core Fitness and Flexibility
1 hour. This is a beginning yoga, core and flexibility class with intermediate/advanced options given. The course will focus on basic postures, breathing, stretching and relaxation.
Prerequisite: HHPA 121.

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 323 Skateboarding
1 hour. Students will engage in skateboarding or a similar discipline (roller blades, pro scooter), which can be performed on the Newberg cement skatepark. Students will be able to progress at a pace that best suits their skill level. The Newberg skatepark is a world-class cement park with a very friendly layout for all levels. Participation is a major portion of the course, and skill will be assessed on individual progression.

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 covers skills, techniques, rules and strategies in doubles and singles tennis. 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 and roll and execute 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. Two credits toward the physical education general education requirement may be earned in athletics, but no more than one 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. This is 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. Course provides intermediate to advanced instruction in skills, teaching techniques, rules and strategy for basketball and golf.

HHPE 222 Field Sports
1 hour. Course covers 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. Course covers beginning to intermediate instruction in skills, teaching techniques, spotting and safety factors involved in tumbling and gymnastics.

HHPE 226 Tennis/Volleyball
1 hour. Covers 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 Principles of Conditioning
2 hours. Instruction covers concepts related to developing and maintaining physical fitness and movement skills.

HHPE 275 Field Experience
1-3 hours. This is a 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 Individualized Study
1-3 hours. Individual research under the guidance of the faculty.
Prerequisite: instructor's permission.

HHPE 300 Coaching Theory and Practice
2 hours. This involves the development of a philosophy of coaching. Class 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. Class is 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. This is 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. This is 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. Course is 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. This is 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 Sport and Physical Education
2 hours. Course provides instruction in the planning and implementation of health, physical education and athletics programs. Course content will include curriculum design, budget formation, facility design and coordination. Professional conduct and ethics will be stressed.

HHPE 363 Organization and Administration for Athletic Training
2 hours. This course exposes students to the organization and administration in athletic training, including management, leadership, legalities, historical perspectives as well as in-depth exploration of the requirements set forth by federal, national and state organizations governing the practices of athletic trainers. Course is offered every other year.

HHPE 364 Psychosocial Intervention and Referral in Athletic Training
3 hours. Course 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. Also covers 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. Class 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
2 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. This is a 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: 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. This is a 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 376 Athletic Training Practicum III
3 hours. This is a 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. This is a 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.

HHPE 378 Athletic Training Practicum V
3 hours. This is a supervised experience in an athletic training environment. Additional study required, with an emphasis on athletic training techniques and athletic injury management.
Prerequisites: HHPE 377 Athletic Training Practicum IV.

HHPE 379 Athletic Training Practicum VI
3 hours. This is a supervised experience in an athletic training environment. Additional study required, with an emphasis on athletic training techniques and athletic injury management.
Prerequisites: HHPE 378 Athletic Training Practicum V.

HHPE 380 Experiential Recreational Leadership
3 hours. Course is 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. Additional course fee required.

HHPE 384 Pharmacology in Athletic Training
1 hour. Course emphasizes 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 221 Human Anatomy and Physiology I and BIOL 222 Human Anatomy and Physiology II.

HHPE 390 Care and Prevention of Athletic Injuries
3 hours. This is 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 is covered. Special emphasis is given to detailed analysis of various sports activities.
Prerequisites: BIOL 221 Human Anatomy and Physiology I and BIOL 222 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 401 Physical Exam of the Lower Extremities in Athletic Training
3 hours. Course is an in-depth study of the lower extremities, including skills of injury evaluation, physical examination and treatment. One one-hour lab per week.
Prerequisites: Athletic training major or instructor permission.

HHPE 402 Physical Exam of the Spine and Upper Extremities in Athletic Training
3 hours. Course is an in-depth study of the spine and upper extremities, including skills of injury evaluation, physical examination and treatment. One one-hour lab per week.
Prerequisites: Athletic training major or instructor permission.

HHPE 410 Teaching Physical Education
2 hours. Development of competence, style and confidence in teaching physical education for the physical education major is covered. 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 athletic training major or instructor permission.

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 athletic training major or instructor permission.

HHPE 420 Exercise Prescription
3 hours. Application of exercise testing and prescription of individuals, ranging from athletes to special populations, is covered. Includes aspects of nutrition, disease, training methods and exercise responses. Additional course fee required. *Prerequisites: BIOL 221 Human Anatomy and Physiology I and BIOL 222 Human Anatomy and Physiology II.*

HHPE 430 Exercise Physiology
3 hours. Covers 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. The laboratory component explores the assessment of resting metabolic rate, energy expenditure, body composition, cardio-respiratory function, maximum oxygen uptake, lactate threshold, strength and flexibility, and other physiological responses to exercise. Three lectures and one laboratory per week. *Prerequisites: BIOL 221 Human Anatomy and Physiology I and BIOL 222 Human Anatomy and Physiology II.*

HHPE 440 Camp Administration
2 hours. Designed is 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.)

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. Course is a study of the development of motor skills. Psychological principles of learning are applied to motor-skill learning. Includes 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 HHP Field Experience: Selected Topics
3-*6 hours.* This is a supervised experience in the discipline, including internships and practica required for professional programs. This experience must have an on-site supervisor and a departmental instructor overseeing, designing and evaluating the content of the course. *Prerequisite: instructor's permission.*

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. Course includes research of current issues in health, physical education and athletics. Senior thesis and public presentation of thesis is required.

HHPE 495 Individualized 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. Course is 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. Course is 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, this 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, this 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. This is a study of 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. Course is 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. Course serves as 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. Course is 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. Class 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. Course covers 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. Class covers 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. Course 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. Course is 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. Course is 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. Course is 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. Class covers political and cultural developments of China and Japan.

HIST 380 The African-American Experience in the United States
3 hours. Class is a study of Africans in an America dominated by those of European descent.

HIST 390 Peace Research
1-3 hours. Course involves directed research on peace subjects, both current and historical. Students will normally write a major research paper. (Identical to PSCI 390.)

HIST 393 Introduction to Public History
3 hours. This course will introduce students to the various fields within public history, the ethical and methodological standards, and give students the opportunity to work on a public history project.

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, is studied. (Identical to RELI 401.)

HIST 402 Christianity in History II
3 hours. Christianity's development is covered, 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. Course is 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. Course is 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 are studied.

HIST 422 Europe 1890-Present
3 hours. Course covers 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 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. This course 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. This class 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. Course 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. Class 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. Course covers 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 are 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 (2016, 2020).

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.
Prerequisite: HIST 290 Introduction to Historical Studies.

HIST 495 Individualized 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. Class covers 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 223 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 223).

HLTH 230 First Aid and Safety
1 hour. Instruction is 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. This is 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. This is a 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. Course is a study of nutrients present in foods and their relation to the nutritive needs of the human body. Emphasis is 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. This is a study of our nation's current health problems and concerns. Emphasis is 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 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. This is a 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.

Honors (HNRS) Courses

HNRS 150 Origins: Athens and Jerusalem
6 *hours*. Class explores some of the greatest and/or most influential works from the ancient Western world. Biblical texts are engaged at multiple levels – historically, meditatively, allegorically and for spiritual transformation. Additional course fee required.

HNRS 190 Rome Through Early Church
6 *hours*. Class explores some of the greatest and/or most influential works from Rome and the early church. Biblical texts are engaged at multiple levels – historically, meditatively, allegorically and for spiritual transformation.

HNRS 250 Medieval Western Civilization
6 hours. Course explores some of the greatest and/or most influential works from early medieval Western civilization. Biblical texts are engaged at multiple levels – historically, meditatively, allegorically and for spiritual transformation.

HNRS 290 Late Medieval and Early Modern Western Civilization
6 hours. Class explores some of the greatest and/or most influential works from late medieval and early modern Western civilization. Biblical texts are engaged at multiple levels – historically, meditatively, allegorically, and for spiritual transformation.

HNRS 350 Seventeenth to Nineteenth Centuries
6 hours. Class explores some of the greatest and/or most influential works from the 17th to 19th centuries in the West. Biblical texts are engaged at multiple levels – historically, meditatively, allegorically, and for spiritual transformation.

HNRS 450 20th Century
6 *hours*. Class explores some of the greatest and/or most influential 20th century Western works. Biblical texts are engaged at multiple levels – historically, meditatively, allegorically and for spiritual transformation.

HNRS 490 Integration Thesis
3 hours. As a culmination of this program, honors students are asked to make a contribution to the store of Western knowledge. This contribution will usually take the form of a scholarly paper or work of art, but other possibilities may be negotiated with the director of the honors program and a faculty sponsor.

Humanities (HUMA) Courses

HUMA 205 Philosophy and Literature
3 hours. This course introduces students to literature and philosophy as methods of human inquiry. Special focus is given to close reading of texts with an attention to literary form and on thinking and living ethically. Topics and texts vary by section.

HUMA 290 Art, Beauty, and Truth
3 hours. This interdisciplinary, general education course centers its intellectual and artistic queries around the enduring question: “How do the arts reveal truth and celebrate beauty in their cultural context?” The course will introduce students to the manner in which the disciplines of art, music and theatre encounter the world with specific attention to their relationship to truth and beauty in both the Renaissance and Postmodern worlds.

International Studies (INTL) Courses

INTL 200 Cultural Geography and Global Relations
3 hours. Course is 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 220 Intercultural Communication
3 hours. This covers communication as it affects and is affected by language and culture. Topics include contextualized use of communication within speech communities, intercultural effectiveness, cultural communication theory, competent intercultural experiences in co-cultures (ethnic, gender, intergenerational, deaf, etc.) and global cultural groups. *A student may not earn credit for both the lower-division and upper-division versions of this course.* (Identical to COMM 220).

INTL 230 Introduction to International Affairs
3 hours. Serves as an introduction to the core issues and problems that affect the entire world, including threats to security such as war and terrorism, the rise of globalization, the persistence of inequality between rich and poor countries, and the degradation of the environment. (Identical to PSCI 230.)

INTL 260 Global Awareness Proseminar
1 hour. This course provides a foundation in the intellectual and social abilities required for international experiences. The primary goals of this course are to develop global awareness and cross-cultural competencies that will provide students with the practical skills necessary for effective off-campus study abroad and internationally focused internships.

INTL 275 Field Experience
1-3 hours. This is a 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. Why do wars and conflicts occur and how do we prevent these? This course considers the causes of global insecurity (from wars between countries to transnational terrorism to genocide) and examines the various approaches to their resolution, including the creation of international institutions and military alliances. Special emphasis will be placed on the role of religion in global political conflict. (Identical to PSCI 303 and SOCI 303.)

INTL 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. (Identical to PSCI 330.)

INTL 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 and SOCI 370.)
Prerequisite: ECON 201 Principles of Microeconomics or ECON 202 Principles of Macroeconomics.

INTL 375 Cultural Immersion
These are supervised experiences in a non-American culture. *Prerequisite: upper-division international studies majors or minors, and by permission.*

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 420 Intercultural Communication
3 hours. Course covers 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, etc.) and global cultural groups. *A student may not earn credit for both the lower-division and upper-division versions of this course.* (Identical to COMM 420.)

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 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. Course presents key principles of persuasion as they are reflected in typical organizational communication contexts. Focus is 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. The focus is 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: Successful completion of the college writing competency, enrollment in the William Penn Honors Program, or instructor permission.

JOUR 270 Broadcast News I
3 hours. This class covers the basic principles of broadcast journalism: broadcast news writing, broadcast video production and Internet-distributed news production. Students participate in a student-focused television news show by creating news and feature videos for broadcast (cable, online); they create a demo tape/DVD from those packages. (Identical to CMCO 270)

JOUR 275 Field Experience
1-3 hours. This is a 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: Successful completion of the college writing competency, enrollment in the William Penn Honors Program, or instructor 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. This is 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: Successful completion of the college writing competency, enrollment in the William Penn Honors Program, or instructor permission.

JOUR 340 Media Law and Ethics
3 hours. Class considers the rights and responsibilities of print and broadcast journalists and explores media law and ethics in light of the First Amendment and legal philosophy. (Identical to CMCO 340)
Prerequisite: JOUR 230 Introduction to Journalism, or instructor's permission.

JOUR 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. (Identical to CMCO 370)
Prerequisite: JOUR 270 Broadcast News I 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. This is a 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. Course is 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 Individualized 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. This is 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. This is 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. Course is 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. Course is 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.

Language Studies (LANG) Courses

LANG 340 General and Cultural Linguistics
3 hours. Course is a study of the nature of verbal symbols as they function in communication. It covers phonetic transcription, semantics, modern grammatical theories, history of the English language and modern English dialects. (Identical COMM 340.)

LANG 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.

LANG 350 Introduction to TESOL (Teaching English to Speakers of Other Languages)
3 hours. This is 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.

Leadership Studies (LEAD) Courses

LEAD 235 Residence Life Seminar
1 hour. This is an integrative seminar linking residence-life leadership, course work and group exercises. It 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, this course is required for incoming Miller Scholarship recipients. It is 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, this course is 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 class sessions. Pass/No pass.

LEAD 360 Student Leader Development I
1 hour. Course 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 Six scholars, residence life). Focus is 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 Development II
1 hour. This 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 Six scholars, residence life). Focus is 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. This is 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. Class is designed to provide students with an opportunity to develop their leadership skills through work or volunteer experience. All leadership experience proposals are 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. This is an 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. This is an 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.

Liberal Arts (LIBA) Courses

LIBA 100 Knowing and Being Known
3 hours. The first course in the liberal arts core, Knowing and Being Known, introduces students to the history and mission of George Fox University and the values and habits of mind central to a liberal arts education. The course presses each student to engage in metacognitive analysis of his or her own learning style and goals. Additional course fee required.

LIBA 295 Individualized Study
1-3 hours. Individualized study or supervised research in an area of special interest to the student which is outside the regular offerings of the major. Additional course fee (per credit) is required.

LIBA 400 Engaging Christ in Transition
3 hours. This course, taken by all George Fox students in their final year of study, provides an opportunity for students to reflect on the liberal arts learning of their undergraduate experience and to prepare for the transition to the next stage of their lives. The course allows students to wrestle with challenging texts and focus on discerning vocation while planning for their own continuing spiritual formation and engagement with the wider community after college. *Prerequisite: Senior standing or permission of LIBA 400 director.*

LIBA 495 Individualized Study
1-3 hours. Individualized study or supervised research in an area of special interest to the student which is outside the regular offerings of the major. Additional course fee (per credit) is required.

Literature (LITR) Courses

LITR 100 Introduction to Literature
3 hours. Course explores the major genres, themes and elements of literature.

LITR 180 Studies in Literature
3 hours. Class 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. Class is 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. Course 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. Class 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. Course 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. Course is 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. This is a 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. Course 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. This is 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. Class takes 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: HUMA 205 Philosophy and Literature, any 100 or 200 level LITR course, or equivalent, enrollment in the William Penn Honors Program, or instructor permission.

LITR 327 American Literature, 1865-1914
3 hours. Class is 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: HUMA 205 Philosophy and Literature, any 100 or 200 level LITR course, or equivalent, enrollment in the William Penn Honors Program, or instructor permission.

LITR 328 American Literature, 1914-Present
3 hours. Class takes 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: HUMA 205 Philosophy and Literature, any 100 or 200 level LITR course, or equivalent, enrollment in the William Penn Honors Program, or instructor permission.

LITR 335 Advanced Studies in American Literature
3 hours. This is an advanced study of selected authors and topics in American literature. May be repeated with permission of instructor.
Prerequisite: Students must have completed any two of the following literature sequence courses: LITR 236, LITR 237, LITR 238, LITR 326, LITR 327, LITR 328, LITR 376, LITR 377, LITR 378.

LITR 350 Literary Criticism
3 hours. Course 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. This is an advanced study of selected authors and topics in British Literature. May be repeated with permission of instructor.

Prerequisite: Students must have completed any two of the following literature sequence courses: LITR 236, LITR 237, LITR 238, LITR 326, LITR 327, LITR 328, LITR 376, LITR 377, LITR 378.

LITR 376 British Literature to 1660
3 hours. Class takes 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: HUMA 205 Philosophy and Literature, any 100 or 200 level LITR course, or equivalent, enrollment in the William Penn Honors Program, or instructor permission.

LITR 377 British Literature, 1660-1830
3 hours. Course takes 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: HUMA 205 Philosophy and Literature, any 100 or 200 level LITR course, or equivalent, enrollment in the William Penn Honors Program, or instructor permission.

LITR 378 British Literature, 1830-Present
3 hours. Class takes 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: HUMA 205 Philosophy and Literature, any 100 or 200 level LITR course, or equivalent, enrollment in the William Penn Honors Program, or instructor permission.

LITR 379 Shakespeare
3 hours. Course covers 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: HUMA 205 Philosophy and Literature, any 100 or 200 level LITR course, or equivalent, enrollment in the William Penn Honors Program, or instructor permission.

LITR 380 Gender Theory
3 hours. This course is designed to 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. (Identical to PHIL 380.)

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. This is a 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. Class 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: HUMA 205 Philosophy and Literature, any 100 or 200 level LITR course, or equivalent, enrollment in the William Penn Honors Program, or instructor permission.

LITR 485 Selected Literary Topics
3 hours. The is 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 Individualized 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. Class offers 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. This is a liberal arts math course that emphasizes applications of mathematical concepts in areas such as financial topics, probability and statistics. Course uses spreadsheets as a mathematical tool.

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. This is 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. Class is 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. This is 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. Serves as 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, linear regression and correlation.
Prerequisite: MATH 180 College Algebra or equivalent.

MATH 260 Discrete Mathematics
3 hours. This is an introduction to discrete mathematics. Topics covered include sets, functions, math induction, combinatorics, recurrence, graph theory, trees and networks.

MATH 275 Field Experience
1-3 hours. This is a 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 or interests 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 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 311 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 202 Calculus II.*

MATH 312 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 311 Differential Equations with Linear Algebra and either CSIS 201 Introduction to Computer Science I or ENGR 152 Engineering Principles II.

MATH 330 Engineering Statistics

3 hours.Serves as an introduction to probability and statistics with content and application directed toward the engineering and science disciplines. Topics to be covered include methods of describing data, probability, random variables and their distributions, estimation, hypothesis testing, linear regression and correlation. *Does not meet math major requirements.*
Prerequisite: MATH 202 Calculus II or equivalent.

MATH 331 Probability
3 hours. A study of sample spaces, combinatorial methods, discrete and continuous distributions, moment-generating functions, and the central limit theorem.
Prerequisites: MATH 290 Introduction to Proofs and MATH 301 Calculus III.

MATH 332 Mathematical Statistics
3 hours. Class is 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. This is an introduction to the basic properties of whole numbers, including such topics as prime numbers, Euclid's algorithm, Fermat's Theorem, congruence and Diophantine equations. The course will emphasize historical development of the relevant topics.
Prerequisites: MATH 202 Calculus II and MATH 290 Introduction to Proofs.

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 411 Advanced Linear Algebra
3 hours. A study of matrices and their properties and application, linear transformations and vector spaces.
Prerequisites: MATH 290 Introduction to Proofs.

MATH 412 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 411 Advanced Linear Algebra.

MATH 421 Real Analysis I
3 hours. Class serves as an introduction to the fundamental concepts in real analysis including limits, continuity, sequences, series, differentiation and integration.
Prerequisites: MATH 290 Introduction to Proofs and MATH 301 Calculus III.

MATH 422 Real Analysis II
3 hours. Class serves as a continued study of the fundamental concepts in real analysis including limits, continuity, sequences, series, differentiation and integration.
Prerequisite: MATH 421 Real Analysis I.

MATH 475 Field Experience
1-3 hours. This is a 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. This is a class with topics in mathematics chosen to fit special needs or interests 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 Individualized 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, this 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 (may be taken concurrently).

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, are addressed. 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: MGMT 260 Principles of Management and college level statistics course 200 level or higher. Students who've taken PSYC 240 or SOCI 340 must also have complete MATH 150 or higher, or have a SAT math score of 620 or higher or an ACT score of 28 or higher.

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 Individualized 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. The is a 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 (may be taken concurrently).

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 360 Digital Marketing
3 hours. This course focuses on creating digital marketing strategies across disciplines, including branding, design, usability, technology, IT development, search engine optimization, pay-per-click, link development, online reputation management, and social media marketing integration to drive commerce via viral adoption and engagement. Students will learn to understand how to conduct technical, business and creative relationships with social media platform providers such as LinkedIn, YouTube, Facebook, Twitter, Pinterest and Foursquare.
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. Class includes a consideration of promotional strategies, with particular emphasis on evaluation and selection of advertising media, public relations, selling and management of the promotion mix. Includes an investigation of the international aspects of marketing, including 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. Class covers 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. Includes examination of forecasting, pricing and decision-making models.
Prerequisites: MKTG 260 Principles of Marketing, senior status and college level statistics course 200 level or higher. Students who've taken PSYC 240 or SOCI 340 must also have completed MATH 150 or higher, or have a SAT math score of 620 or higher or an ACT score of 28 or higher.

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

MKTG 480 Marketing Management and Strategy
3 hours. This 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 and senior standing.

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

MKTG 495 Individualized 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. This is a 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. Class covers technical exercises, scales and arpeggios in various rhythms; études 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. This is a 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. Class includes instruction on violin, viola, cello and string bass. Covers 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. Class includes instruction on flute, clarinet, oboe, saxophone and bassoon. Technical studies include 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. Class includes 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. Class includes 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. This is a 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
1/2 or 1 hour. This is a study of improvisational methods through task-oriented performance of a selected jazz repertoire. The goal of this class is to introduce concepts and practice methods used by jazz artists to gain improvisation 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. This is a 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. Class covers technical exercises, scales and arpeggios in various rhythms, as well as études 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. Class is a basic study of pedal and manual techniques. Includes 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. Class includes instruction on violin, viola, cello and string bass. Covers 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. Class includes instruction on flute, clarinet, oboe, saxophone and bassoon. Technical studies include 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. Class includes 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. Class includes 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. This is a 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
1/2 or 1 hour. This is a study of improvisational methods through task-oriented performance of a selected jazz repertoire. The goal of this class is to introduce concepts and practice methods used by jazz artists to gain improvisation 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
0 or 1 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 an 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
0, *1, or 2 hours*. 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. Additional course fee required.
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
0 or 1 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
0 or 1 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. Additional course fee required.
Prerequisite: instructor's permission at the beginning of each semester.

MUSA 135H George Fox University Handbell Ringers
0 or 1 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
0 or 1 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
0, *1, or 2 hours*. 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. Additional course fee required.
Prerequisite: instructor's permission.

MUSA 145J Jazz Ensemble
0 or 1 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
0 or 1 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 George Fox University Symphony Orchestra
0, *1, or 2 hours*. 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. Additional course fee required.
Prerequisite: instructor's permission.

MUSA 165 Chamber Music
0 or 1 hour. A variety of small chamber groups organized to meet the interests of instrumental and vocal music students who desire to perform literature for the chamber ensemble. Small chamber groups will be organized by experience and performance ability. Combinations can include, but are not limited to: string quartet, brass quartet, woodwind quintet, and piano trio.

MUSA 315 Master Chorus
0 or 1 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 an 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
0, *1, or 2 hours*. 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. Additional course fee required.

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
0 or 1 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
0 or 1 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. Additional course fee required.
Prerequisite: instructor's permission at the beginning of each semester.

MUSA 335H George Fox University Handbell Ringers
0 or 1 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
0 or 1 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
0, *1, or 2 hours*. 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. Additional course fee required.
Prerequisite: instructor's permission.

MUSA 345J Jazz Ensemble
0 or 1 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
0 or 1 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 George Fox University Symphony Orchestra
0, *1, or 2 hours*. 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. Additional course fee required.
Prerequisite: instructor's permission.

MUSA 365 Chamber Music
0 or 1 hour. A variety of small chamber groups organized to meet the interests of instrumental and vocal music students who desire to perform literature for the chamber ensemble. Small chamber groups will be organized by experience and performance ability. Combinations can include, but are not limited to: string quartet, brass quartet, woodwind quintet, and piano trio.

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 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 Creating, Planning, and Leading Worship
3 hours. The purpose of this course is to teach students how to plan, prepare and execute worship in various settings. Students will be exposed to different styles of worship services and different components and ordinances used in Christian worship services. We will also explore different technologies used in planning and leading worship.

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 MUSI 125T 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 and 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 481 Degree Recital/Project 1
1/2 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 482 Degree Recital/Project 2
1/2 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 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 495 Individualized Study
1-3 hours. Individual research under the guidance of the faculty.
Prerequisite: permission of music faculty.

Nursing (NURS) Courses

NURS 201 Nursing Fundamentals
5 hours (3 didactic/2 clinical). Introduction and application of theories concerning clients in need of primary, acute, and restorative nursing care. Students will be introduced to basic nursing concepts, skills, and techniques of professional nursing practice. Application of health assessment and basic nursing skills in the care of individuals experiencing alterations in biospychosocial, cultural, and spiritual health status. Additional course fee is required.
Prerequisites: BIOL 367 Essentials of Microbiology

NURS 204 Introduction to Nursing Professional Practice
2 hours. Introduction to study of professional nursing as a science and as an art. Encompasses role definition of nursing based on scientific theoretical frameworks and the art of caring. Students learn the nursing process, a critical thinking approach to problem-solving and decision-making on behalf of patients, and are introduced to evidence-based practice. Introduces definitions, historical background and status of nursing as a profession and as a discipline of applied science.
Prerequisite: Admission to the nursing program.

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 the nursing program.

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 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 301 Nursing Care of Adults with Acute Conditions
7 hours (4 didactic/3 clinical). The acquisition, integration, prioritization, and 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 required.
Prerequisites: NURS 201 Nursing Fundamentals and NURS 210 Health Assessment

NURS 302 Nursing Care of Adults with Complex Conditions
7 hours (4 didactic/3 clinical). 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. Students will synthesize and implement theoretical knowledge necessary for the provision of holistic nursing care. Additional course fee is required.
Corequisite: NURS 324 Evidence-based Nursing for Clinical Practice
Prerequisites: NURS 301 Nursing Care of Adults with Acute Conditions

NURS 311 Pathophysiology
3 hours. Pathophysiology is a study of the basic principles, processes, and physiological changes of alterations in body systems. This course will provide a review of human physiology and an overview of pathophysiology, emphasizing imbalance of homeostatic mechanisms and etiology of disease. Pathophysiology of the body systems will be examined from cellular, organ, and systemic levels. Discussions and applied materials will be directed primarily toward nursing students but may also be useful to others wishing to explore healthcare-related fields.
Prerequisites: Admission to the nursing program, BIOL 221 Human Anatomy and Physiology I, BIOL 222 Human Anatomy and Physiology II, and CHEM 151 General, Organic and Biochemistry or instructor permission.

NURS 312 Pharmacology
3 hours. Pharmacology is the study of various drug classifications, their impact on living tissue, and their actions and distributions in the body - pharmacodynamics and pharmacokinetics. This course will provide an overview of the therapeutic use of drugs on humans. Classes of drugs will be reviewed by body system with key drugs within each class emphasized. The molecular and cellular mechanisms of drug action will be explored, as well as specific drug pharmacokinetics and adverse reactions along with appropriate nursing interventions related to medication administration.
Prerequisites: Admission to the nursing program, BIOL 221 Human Anatomy and Physiology I, BIOL 222 Human Anatomy and Physiology II, CHEM 151 General, Organic and Biochemistry, and NURS 311 Pathophysiology or instructor permission.

NURS 313 Nutrition Essentials for Nursing Practice
3 hours. This course will cover the science and fundamentals of human nutrition. In this course, topics covered will include nutritional requirements related to changing individual and family needs, food choices, health behaviors, prevention of chronic disease and nutrition-related public health in the United States and globally.
Prerequisite: NURS 204 Introduction to Professional Practice and NURS 311 Pathophysiology.

NURS 324 Evidence-based Nursing for Clinical Practice
2 hours. The emphasis for this course is on the elements of evidence-based practice (EBP). Focus is placed on the cyclical process of identifying clinical questions, searching and appraising the evidence for potential solutions/innovations, planning and implementing practice changes, evaluating the outcomes, and identifying additional gaps in the nursing knowledge. Integration of the existing evidence with clinical judgment, patient preferences, inter-professional perspectives, and other resources forms the basis for the clinical decision-making process that is inherent in improving patient, population, and organizational outcomes.
Prerequisite: Statistics (MATH 240, PSYC 240, or SOCI 340) and junior standing in the nursing program, or instructor permission.

NURS 370 Nursing Care of the Childrearing Family
3 hours. Acquisition and integration of knowledge vital to the holistic nursing care of children and families experiencing acute and chronic threats to health. Additional course fee is required.
Prerequisite: Junior standing or instructor permission.

NURS 390 Junior Academic Milestone Remediation
1 hours. The purpose of this course is to assist the nursing student explore strategies for the integration of nursing clinical practice knowledge with improved standardized test

performance. Course content is individualized based on each students' specific nursing content weaknesses based on standardized test score reports. Effective test-taking strategies will be emphasized.
Prerequisite: Instructor permission.

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 411 Mental Health Nursing
5 hours (2 didactic/3 clinical). Exploration of psychiatric nursing principles of mental health promotion and illness prevention; of evidence-based treatment modalities; of hospital and community treatment options; and of nursing principles applied to specific psychiatric clinical disorders.
*Corequisite:*Successful completion of all junior level nursing courses.

NURS 421 Nursing Care of the Childbearing Family
6 hours (3 didactic/3 clinical). The study and implementation of the nursing care of childbearing women and their families throughout all the stages of pregnancy and childbirth. Additional course fee required.
Prerequisite: Successful completion of all junior level nursing courses.

NURS 430 Population Health Nursing
6 hours (3 didactic/3 clinical). This course addresses population focused health promotion, and disease and injury prevention based on determinants of local, national and global health including lifestyle, environmental, cultural, and genetic factors. Addresses evidence-based clinical prevention responses, including information technology, inter-professional collaboration, population-focused advocacy partnerships, and the caring role of the professional registered nurse to improve population health and minimize the consequences of mass emergencies.
Prerequisites: NURS 301 Nursing Care of Adults with Acute Conditions, NURS 302 Nursing Care of Adults with Complex Conditions, NURS 411 Mental Health Nursing and Senior standing in the nursing program or instructor permission.

NURS 442 Nursing Leadership and Management
3 hours (2 didactic/1 clinical). The study of the leadership and management roles and functions filled by professional, registered nurses in a broad range of health care organizations and settings. Focus is on learning and applying core concepts of nursing leadership and management, and the requisite skills of effective nurse leaders/managers. The influence on nursing practice of theoretical, legal, ethical, economic, sociological, cultural and regulatory factors in the ever-changing health care system is examined. Students will have the opportunity to explore their personal and professional perceptions of how nursing leaders/managers impact nursing practice and patient care outcomes. Course should be taken the last semester of a students senior year in the program
Corequisite: NURS 490 Nursing Capstone
Prerequisites: NURS 301 Nursing Care of Adults with Acute Conditions, NURS 302 Nursing Care of Adults with Complex Conditions, NURS 411 Mental Health and senior standing in the nursing program.

NURS 450 Application of Clinical Genetics in Nursing Practice
2 hours. This course explores the genomic concepts and principles related to human variation in health and disease. In this course, topics covered will include basic concepts of molecular biology, inherited patterns and phenotypes related to single gene and complex human disorders, and clinical application of the family history and pedigree. In addition, application of moral, ethical and legal issues will be integrated throughout the course.
Prerequisites: Senior standing in the nursing program or by instructor permission.

NURS 452 Gerontological Nursing
2 hours. Exploration of the field of nursing that focuses on care of the older adult with chronic conditions. Includes unique healthcare needs of seniors, nursing approaches to managing these needs, ethical and legal issues that impact senior care, and exploration of the richness and wisdom of life experience shared by these members of society and families.
Prerequisites: Senior standing in the nursing program or by instructor permission.

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 permission.

NURS 481 ECG Interpretation
1 hour. This course will review cardiovascular anatomy and physiology and basic electrophysiology. Students will understand wave-forms, intervals, segments, and complexes. Through cardiac rhythm strip analysis, recognition of sinus, atrial, ventricular arrhythmias, and AV heart blocks will be emphasized.
Prerequisite: BIOL 221 Human Anatomy and Physiology I, BIOL 222 Human Anatomy and Physiology II, NURS 301 Nursing Care of Adults with Acute Conditions, NURS 311 Pathophysiology and NURS 312 Pharmacology or instructor permission.

NURS 482 Breastfeeding
1 hour. This course will cover the science and fundamentals of human lactation and breastfeeding. In this course, topics covered will include the bio-specificity of human milk, maternal anatomy and physiology of lactation, common breastfeeding problems, and maternal-related issues to breastfeeding.
Prerequisite: Senior standing in the nursing program or instructor permission.

NURS 483 Healthcare of the Developing World
1 hour. This hybrid course will be learning about various aspects of healthcare in third world countries. This will include studying tropical diseases not commonly seen in the United States as well as discussing general aspects of medical missions, both short-term and long-term. We will examine health issues of impoverished and underserved areas and evaluate interventions, resources, and programs for disease prevention and health promotion there. Cultural awareness and cultural humility will be an important concept throughout our discussions. This course would be beneficial for any student interested in medical missions or serving in a third world country in the future.
Prerequisite: BIOL 221 Anatomy and Physiology I, BIOL 222 Anatomy and Physiology II, NURS 210 Health Assessment, NURS 311 Pathophysiology and NURS 312 Pharmacology or instructor 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 490 Nursing Capstone
4 hours (1 didactic/3 clinical). A broad review of professional nursing content and practice to prepare students for the National Council License Exam for Registered Nurses (NCLEX-RN) licensure exam and transition to practice as registered nurses. Students will engage in the classroom and online learning environments to systematically review nursing content and complete NCLEX practice tests. Application and integration of knowledge and skills will occur during students' practicum experiences working in partnership with clinical teaching associates to provide holistic nursing care to acute-care patients. A comprehensive, standardized examination is completed to determine each student's proficiency and readiness for entry into nursing practice. Course should be taken the last semester of the student's senior year in program.
Corequisite: NURS 442 Nursing Leadership and Management
Prerequisites: NURS 301 Nursing Care of Adults with Acute Conditions, NURS 302 Nursing Care of Adults with Complex Conditions, NURS 411 Mental Health Nursing and senior standing in the nursing 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 214 Philosophy Colloquium
1 hour. Offered each spring, meets every other week during Spring term, requires retreat over MLK Jr. weekend—Friday evening until Sunday noon. Includes discussion of a selected text, carefully read and evaluated over the retreat. Includes bi-weekly discussions of and preparations for practicum/field experience, GRE, and presentations of faculty research. All faculty will attend when possible. Additional fee required.

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 studies the trajectory of thought in the Western world from the Pre-Socratic thinkers through William of Ockham. 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 313 Feminist Philosophy
3 hours. Comprised of a survey of feminist theory plus detailed readings of several feminist works in philosophy, with attention to feminist theological thought.

PHIL 314 Philosophy Colloquium
1 hour. Offered each spring, meets every other week during Spring term, requires retreat over MLK Jr. weekend—Friday evening until Sunday noon. Includes discussion of a selected text, carefully read and evaluated over the retreat. Includes bi-weekly discussions of and preparations for practicum/field experience, GRE, and presentations of faculty research. All faculty will attend when possible. Additional fee required.

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 331 Ethical Issues
3 hours. A course in which a variety of moral topics and issues are taken up and considered in some detail.
Prerequisite: PHIL 180 Ethics.

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 free will, 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 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. (Identical to LITR 380.)

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 414 Philosophy Colloquium
1 hour. Offered each spring, meets every other week during Spring term, requires retreat over MLK Jr. weekend—Friday evening until Sunday noon. Includes discussion of a selected text, carefully read and evaluated over the retreat. Includes bi-weekly discussions of and preparations for practicum/field experience, GRE, and presentations of faculty research. All faculty will attend when possible. Additional fee 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 Individualized Study
1-3 hours. Individual research.
Prerequisite: open to qualified students upon application.

Physics (PHYS) Courses

PHYS 150 Physics of Everyday Life
4 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
4 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.

Politics (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. An introduction to the core issues and problems that affect the entire world, including threats to security such as war and terrorism, the rise of globalization, the persistence of inequality between rich and poor countries, and the degradation of the environment. (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 253 Introduction to Comparative Government
3 hours. Whoever knows only one country knows none. This course introduces students to the field of comparative government and politics by examining the variety of political systems in the world. Particular attention will be paid to contrasting democratic and non-democratic governance, exploring the nature of democracy and the processes of democratization, and evaluating how American institutions and processes compare to other countries.

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 290 Political Science Research and Writing

3 hours. Explores the methods and resources for undertaking research in political science and writing persuasive and sound analytical papers. A required course for all political science majors and minors. Students are strongly encouraged to take this course during their sophomore year whenever possible.
Prerequisite: PSCI 150 Introduction to Political Science.

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. Why do wars and conflicts occur and how do we prevent these? This course considers the causes of global insecurity (from wars between countries to transnational terrorism to genocide) and examines the various approaches to their resolution, including the creation of international institutions and military alliances. Special emphasis will be placed on the role of religion in global political conflict. (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. (Identical to INTL 330.)

PSCI 343 Environmental Politics and Policies
3 hours. This course explores the range of national and international environmental problems (from toxic chemicals to nuclear waste to climate change) and the politics that have been created to deal with these issues. A key focus of the course is the development of a faith-based, Christian perspective to caring for creation and responding to environmental realities in this country and around the world.

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 354 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. Special attention is given to Quaker contributions to America's political development.

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. Why and when do Americans go to war? How do American governments relate to other countries? This course gives students the skills necessary to identify and explain the major influences in American foreign policy, including the roles of various institutions (the White House, Congress, CIA, military, etc.) as well as social factors such as mass public opinion and Christian fundamentalism. Special consideration will be given to discussion and evaluation of the "American Empire" in the international system.

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 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 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 220 Biological Psychology
3 hours. By focusing on the structures and functions of the nervous system, this course provides a biological framework for understanding normal and abnormal complex human behaviors and mental processes such as perception, motor control, learning, memory, and emotions.
Prerequisite: PSYC 150 General Psychology

PSYC 240 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 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. This course option can also be selected to develop an individualized professional development experience.
Prerequisite: PSYC 150 General Psychology.

PSYC 290 Professional Seminar
1 hours. This course examines psychology as a career. Career options are examined. Goal setting, professional development, and networking are emphasized. Required for all psychology majors.

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.
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.
Recommended: PSYC 220 Biological Psychology.

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 331 Positive Psychology
3 hours. This course examines mental illness, mental processing, and behavior from a strengths-based approach which emphasizes the strengths and resources individuals bring to a particular situation. The course is designed to explore the concepts, research, techniques, and exercises to enhance optimism, decrease stressors, and increase well-being.
Prerequisite: PSYC 150 General Psychology.

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 240 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 240 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 240 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.
Recommended: PSYC 220 Biological Psychology.

PSYC 422 Child Psychopathology

3 hours. A study of the nature, causation and treatment of the major psychiatric and behavioral disorders among children and adolescents.
Prerequisite: PSYC 150 General Psychology.
Recommended: PSYC 220 Biological 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.
Recommended: PSYC 220 Biological Psychology.

PSYC 433 Health Psychology
3 hours. This course is designed to provide an overview of the field of Health Psychology from a biopsychosocial perspective which assumes that health and illness are determined by the interaction of biological, psychological, and social factors of an individual's life.
Prerequisite: PSYC 381 Counseling.
Recommended: PSYC 220 Biological 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.
Prerequisite: PSYC 150 General Psychology and a minimum of two upper-division psychology courses; senior standing is recommended.

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.
Prerequisite: PSYC 150 General Psychology and junior status.

PSYC 465 Seminar Series
1 hour. Graduate-style series designed to prepare students for graduate school courses and provide an in-depth examination of a particular content area within psychology.
Prerequisite: upper-division psychology majors only and by permission.

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.
Prerequisite: PSYC 150 General Psychology.

PSYC 490 Senior Seminar
1 hour. This is a capstone course for the major focusing on the integration of Christianity and psychology and the application of psychological principles and findings in every day settings. Required for all psychology majors.

Prerequisite: senior status.

PSYC 495 Individualized 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 215 Topics and Themes in Religion and Theology
3 hours. In this course, students will be introduced to basic tools and scholarly attitudes for thinking about religious and theological topics. The course will draw on a variety of materials (such as texts, practices, and/or archaeology) to examine historical or contemporary issues. Material will be studied not only for academic knowledge but also spiritual and personal growth.
Prerequisite: BIBL 100 Bible Survey, BIBL 101 Literature of Old Testament or BIBL 102 Literature of New Testament.

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 History and Theology of Christianity
3 hours. This course introduces students to the Christian faith and to the diverse experiences of Christians within the world context. The course will proceed along the levels of history (where and when did Christianity flourish) and theology (what have Christians believed), as well as society and culture (what has Christian practice looked like).
Prerequisite: BIBL 100 Bible Survey, BIBL 101 Literature of Old Testament or BIBL 102 Literature of New Testament.

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 495 Individualized 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 220 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 223 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 HLTH 223.)

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. Why do wars and conflicts occur and how do we prevent these? This course considers the causes of global insecurity (from wars between countries to transnational terrorism to genocide) and examines the various approaches to their resolution, including the creation of international institutions and military alliances. Special emphasis will be placed on the role of religion in global political conflict. (Identical to INTL 303 and PSCI 303.)

SOCI 310 Cultural Anthropology
3 hours. A comparative study of world societies and their ways of life.

SOCI 331 Crime and Deviance

3 hours. An introduction to the study of deviance and criminology, including theoretical and paradigms and research.

SOCI 333 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 and SOCI 331 Crime and Deviance or instructor's permission.

SOCI 339 Restorative Justice
3 hours. This course will cover the theological and historical backgrounds of alternative systems of justice, and the criminological principles undergirding a variety of restorative justice programs, particularly community policing, problem-solving courts and community corrections, and will apply an international comparative component as well as study the programs' effectiveness.

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 363 Social Inequality
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 and INTL 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 240 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 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 and INTL 461)
Prerequisite: ECON 201 Principles of Microeconomics.

SOCI 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 INTL 462)
Prerequisites: ECON 202 Principles of Macroeconomics.

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 Individualized 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 210 Spanish for Medical Personnel
4 hours. An intensive introduction to Spanish medical vocabulary, focusing on listening and speaking skills likely to be used in a clinical setting, and on the cultural practices of Hispanic populations in the United States.
Prerequisite: One year of Spanish study prior to college, minimum score of 100 on Spanish placement exam, or SPAN 101.

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 303 Spanish for Heritage Speakers
4 hours. This course examines the Latino populations of the U.S. and develops academic Spanish for those who learned Spanish outside of a formal school setting. Taught in Spanish.
Prerequisite: Placement by testing or instructor 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 380 The Splendor of Spain
3 hours. An exploration of the history, art, music, religion and literature of Spain. This course is taught entirely in Spanish, moving students toward Advanced proficiency as defined by ACTFL. Three class sessions and one laboratory per week.
Prerequisite: SPAN 302 or 303, or instructor 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 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, a 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 Individualized 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 210 Introduction to Criminal Justice
3 hours. This course will provide students with an introduction and synopsis of the system of criminal justice operated in the United States today. The course will provide an overview of the philosophy of criminal law, theories of deviance and of the nature and extent of crime in America. The theory, structure and operation of each of the principal components of the criminal justice system (i.e., law enforcement, courts and corrections) will be examined in detail.

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 one-time 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. Additional course fee is required.

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. Additional course fee is required.
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 occur as one 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 420 Substance Abuse, Mental Health & Criminal Justice
3 hours. This course focuses on two related issues impacting the criminal justice system: substance abuse and mental health. The social impact and historical influences of drugs on society will be examined. Current issues involving mentally impaired persons in the U.S. criminal justice system are explored. The course covers issues pertaining to mentally impaired persons at all stages of the criminal justice system, from initial encounters with law enforcement on the street through imprisonment. Various forms of mental impairment are described as they affect approaches, decision-making and policies in law enforcement, the courts and corrections. This course will examine the interface of drug use, mental health and criminal behavior.
Prerequisites: SWRK 180 Introduction to Social Welfare, SWRK 331 Human Behavior in the Social Environment I, and SWRK 391 Social Work Practice I, or instructor permission.

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. Additional course fee is required.
Prerequisites: SWRK 180 Introduction to Social Welfare, 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. Additional course fee is required.
Prerequisite: SWRK 392 Social Work Practice II.

SWRK 495 Individualized 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 105 Technical Theatre Practicum
1 hour. The practical application of technical techniques in connection with university theatre main-stage productions. Open to any student taking part in a university theatre production. May be repeated for credit.
Prerequisite: instructor's permission.

THEA 115 Acting Practicum
1-3 hours. The practical application of acting techniques in connection with university theatre main-stage 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 135 Design Practicum
1-3 hours. The practical application of design techniques in connection with university theatre main-stage productions. Open to any student taking part in a university theatre production. May be repeated for credit.
Prerequisite: instructor's permission.

THEA 145 Management Practicum
1-3 hours. The practical application of theatre and stage management techniques in connection with university theatre main-stage productions. Open to any student taking part in a university theatre production. May be repeated for credit.
Prerequisite: instructor's permission.

THEA 155 Directing Practicum
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 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 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 305 Technical Theatre Practicum
1 hour. The practical application of technical techniques in connection with university theatre main-stage productions. Open to any student taking part in a university theatre production. May be repeated for credit.
Prerequisite: instructor's permission.

THEA 315 Acting Practicum
1-3 hours. The practical application of acting techniques in connection with university theatre main-stage 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 335 Design Practicum

1-3 hours. The practical application of design techniques in connection with university theatre main-stage productions. Open to any student taking part in a university theatre production. May be repeated for credit.
Prerequisite: instructor's permission.

THEA 340 Theatre as Ministry
3 hours. A consideration of theatre skills as tools for meeting human needs in essentially non-theatrical environments. Focus on drama as a service medium rather than as strictly an entertainment vehicle.

THEA 345 Management Practicum
1-3 hours. The practical application of theatre and stage management techniques in connection with university theatre main-stage productions. Open to any student taking part in a university theatre production. May be repeated for credit.
Prerequisite: instructor's permission.

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 MUSI 125T Music Theatre.

THEA 355 Directing Practicum
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 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 380 Costume Design
3 hours. A study of the elements and principles of costume design for the theatre. Students will develop skills in play analysis for costuming, basic rendering skills and period research. The class will include an introduction to the various media used in communicating a costume design concept. Additional course fee is required.

Prerequisite: THEA 130 Stagecraft or instructor's permission..

THEA 390 Playwriting
3 hours. This course is designed to introduce basic playwriting, in particular elements of the playwright's craft: dramatic action, plot, characterization and theatricality. The course functions as a playwriting workshop with students presenting exercises in class to be discussed by their peers. Utilizing techniques learned, students will complete a draft of a one-act play. (Identical to WRIT 390.)

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 Individualized 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 111 Writing Portfolio Development
3 hours. A course concentrating on expository writing, with an introduction to basic research methods. Argumentative writing is also introduced. Students must create and submit a passing writing portfolio, one component of the writing proficiency milestone.

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: Successful completion of the college writing competency, enrollment in the William Penn Honors Program, or instructor 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: Successful completion of the college writing competency, enrollment in the William Penn Honors Program, or instructor 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: Successful completion of the college writing competency, enrollment in the William Penn Honors Program, or instructor 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: Successful completion of the college writing competency, enrollment in the William Penn Honors Program, or instructor 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: Successful completion of the college writing competency, enrollment in the William Penn Honors Program, or instructor 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: Successful completion of the college writing competency, enrollment in the William Penn Honors Program, or instructor permission.

WRIT 360 Writing Fiction
3 hours. A workshop approach to writing fiction. Students write and prepare for publication original works.
Prerequisite: Successful completion of the college writing competency, enrollment in the William Penn Honors Program, or instructor permission.

WRIT 370 Writing Poetry
3 hours. A workshop approach to writing poetry. Students write and prepare for publication original works.
Prerequisite: Successful completion of the college writing competency, enrollment in the William Penn Honors Program, or instructor permission.

WRIT 390 Playwriting

3 hours. This course is designed to introduce basic playwriting, in particular elements of the playwright’s craft: dramatic action, plot, characterization and theatricality. The course functions as a playwriting workshop, with students presenting exercises in class to be discussed by their peers. Utilizing techniques learned, students will complete a draft of a one-act play. (Identical to THEA 390.)

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 Individualized 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 and Minors

Academic Programs

Majors and Minors Listing

Major and Minor Requirements

Preprofessional Programs/Advising Information

Prelaw Program/Advising Information

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.

Majors and Minors Listing

Academic Programs

Major and Minor Requirements

Preprofessional Programs/Advising Information

Prelaw Program/Advising Information

Program Name	Degrees Offered	Academic Department
Accounting	Bachelor of Arts, Minor	Business
American Culture and Language	Bachelors (BA Post Baccalaureate)	Education
Applied Science	Bachelor of Science	Engineering
Art **Concentrations in:** • Graphic Design • Studio Arts • Interior Design	Bachelor of Arts, Interdisciplinary Studies, Minor	Art and Design
Art History	Minor	Art and Design
Athletic Training	Bachelor of Science in Athletic Training (BSAT)	Health and Human Performance
Biblical Studies	Bachelor of Arts, Interdisciplinary Studies, Minor	Religious Studies
Biochemistry	Bachelor of Science	Chemistry
Biology **Concentrations in:** • Cell and Molecular Biology • Ecology and Field Biology • General Biology • Systems and Structural Biology	Bachelor of Science, Minor	Biology
Biology Administration	Bachelor of Arts	Biology Business
Business Administration	Bachelor of Arts, Minor	Business
Camping: Administrative	Minor	Religious Studies
Camping: Programming	Minor	Religious Studies
Chemistry	Bachelor of Science, Minor	Chemistry
Christian Ministries	**Concentrations in:** • Cross-Cultural Ministry	

Bachelor of Arts, Interdisciplinary Studies	Religious Studies

Program Name	Degrees Offered	Academic Department
• Theology and Vocation • Youth Ministry		
Christian Ministries: Theology and Vocation	Minor	Religious Studies
Christian Ministries: Cross-Cultural Ministry	Minor	Religious Studies
Christian Ministries: Youth Ministry	Minor	Religious Studies
Cinema and Media Communication **Concentrations in:** • Audio Production • Film Studies • Multimedia/Animation • Production	Bachelor of Arts, Minor	Communication Arts
Coaching	Minor	Health and Human Performance
Cognitive Science **Concentrations in:** • General • Human and Artificial Intelligence • Neuroscience	Bachelor of Science	Psychology
Communication Arts	Bachelor of Arts, Minor	Communication Arts
Computer Science **Concentrations in:** • Cyber Sercurity • General	Bachelor of Science, Minor	Computer Science
Conflict Management	Certificate	Politics
Criminal Justice	Minor	Social Work
Design Project Management	Minor	Art and Design
Economics	Bachelor of Arts, Minor	Business
Elementary Education	Bachelor of Science	Education
Engineering **Concentrations in:** • Civil Engineering • Computer Engineering	• Electrical Engineering • Mechanical Engineering	

Bachelor of Science

Engineering

Program Name	Degrees Offered	Academic Department
English	Bachelor of Arts	English
Entrepreneurship	Bachelor of Arts, Minor	Business
Exercise Science	Bachelor of Science	Health and Human Performance
Finance	Bachelor of Arts, Minor	Business
French	Minor	World Languages, Sociology and Cultural Studies
Global Business	Bachelor of Arts, Minor	Business
Health	Minor	Health and Human Performance
Health and Human Performance **Concentrations in:** • Fitness Management • Health Preteaching • Physical Education Preteaching	Bachelor of Science, Interdisciplinary Studies	Health and Human Performance
Health Teaching	Minor	Health and Human Performance
History	Bachelor of Arts, Minor	History
Information Systems	Bachelor of Science, Minor	Computer Science
Interior Design	Minor	Art and Design
International Studies	Bachelor of Arts, Minor, Certificate	International Studies
Journalism	Bachelor of Arts	Communication Arts
Literature	Minor	English
Management	Bachelor of Arts, Minor	Business
Marketing	Bachelor of Arts, Minor	Business
Mathematics	Bachelor of Science, Minor	Math
Music **Concentrations in:** • Composition • General • Performance • Preteaching	Bachelor of Arts, Interdisciplinary Studies, Minor	Music
Music Education	Bachelor of Arts	Music
Music Theatre	Minor	Music

Nursing	Bachelor of Science	Nursing
Organizational Communication	Bachelor of Arts	Communication Arts

Program Name	Degrees Offered	Academic Department
Peace Studies	Minor	Politics
Philosophy	Bachelor of Arts, Minor	Religious Studies
Politics	Bachelor of Arts, Minor	Politics
Psychology	Major (BA or BS), Minor	Psychology
Quaker Studies	Minor	Religious Studies
Recreation	Minor	Health and Human Performance
Religion	Interdisciplinary Studies, Minor	Religious Studies
Romance Languages	Minor	World Languages, Sociology and Cultural Studies
Social Welfare	Minor	Social Work
Social Work	Bachelor of Social Work (BSW)	Social Work
Sociology **Concentrations in:** • General • Global and Intercultural Studies • Social Justice and Communities	Bachelor of Arts, Minor	World Languages, Sociology and Cultural Studies
Spanish	Bachelor of Arts, Minor	World Languages, Sociology and Cultural Studies
Teaching English to Speakers of Other Languages (TESOL)	Minor	World Languages, Sociology and Cultural Studies
Theatre **Concentrations in:** • Acting/Directing • Design/Technology	Bachelor of Arts, Interdisciplinary Studies, Minor	English and Theatre
Women's Studies	Minor	English
Worship Arts Minor	Minor	English and Theatre
Writing	Minor	English

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 211 General Biology I
BIOL 212 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 Calculus I and MATH 202 Calculus II.

Other highly recommended courses include:
BIOL 310 Developmental Biology
BIOL 322 Comparative Vertebrate Anatomy
BIOL 350 Genetics
BIOL 370 Microbiology
BIOL 420 Cell Biology
CHEM 310 Analytical Chemistry
CHEM 341 Biochemistry
CHEM 440 Thermodynamics

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.

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.

General Education Program

General education, or what at George Fox we refer to as the liberal arts core, is that part of the undergraduate college curriculum required of all graduates which gives them a common experience and helps implement the distinctive university mission. Rather than being just a collection of “extra” courses, the liberal arts core is a coherent, sequential program designed by faculty to help students cultivate knowledge, develop skills, and foster dispositions that will help them become integrative, Christ-centered lifelong learners.

At George Fox, five themes are woven throughout the coursework in the liberal arts core: Communication, Collaboration, Critique, Care and Christ. These themes are introduced, reinforced and practiced through the following coursework.

General Education Requirements

Liberal Arts and the Christian Life (15-18 hrs)

LIBA 100 Knowing and Being Known (3) - Students admitted as First Year Freshman, that have also earned an approve transfer degree, are still **required** to take LIBA 100 and complete the Portfolio and Timed Writing Assessment milestones.
LIBA 400 Engaging Christ in Transition (3)
BIBL 100 Bible Survey (3) - 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.
RELI 300 History and Theology of Christianity (3)

One additional BIBL/RELI course from the following options:
BIBL 215 Biblical Studies (3)
BIBL 315 Contemporary Issues in Biblical Studies (3)
RELI 215 Topics and Themes in Religion and Theology (3)
RELI 260 History and Doctrine of Friends (3) *(Required of all students receiving the Friends Scholarship)*

Essential Skills (5-12 hours)

College Writing Competency (0-3)

- Students must fulfill the college writing competency milestone by submitting a proficient writing portfolio and passing a timed writing assessment. The following are ways students can successfully fulfill the writing competency requirements.
- Students enrolled in LIBA 100 have a chance to fulfill both of these requirements through enrollment in Writing Lab instruction during their first semester.
- Students unable to complete the writing portfolio requirement during their enrollment in LIBA 100 must take and pass WRIT 111 (3) to satisfy their portfolio requirement. They must also separately pass the timed writing assessment (administered by the Writing Lab) to complete the writing competency milestone.
- Students unable to pass the timed writing assessment during their enrollment in LIBA 100 will be required to strengthen their writing through a writing improvement

plan designed by the Writing Lab until they can pass the timed writing assessment.

- For transfer students who have LIBA 100 waived, a college-level writing course (equivalent to WRIT 110 College Writing) completed at a previous institution will satisfy the writing portfolio requirement. If they have not taken a writing course, they must enroll in and pass WRIT 111 to satisfy the writing portfolio requirement. Transfer students must also pass the timed writing assessment through the Writing Lab in order to satisfy the college writing competency milestone.
- Students transferring to George Fox with an approved transfer degree have their college writing competency satisfied through their transfer degree, with the exception of First Year Freshman that also earned an approved transfer degree. For a list of approved transfer degrees please visit our Transfer Credit page.

Communications (3)

COMM 100 Introduction to Communication (3)

Health and Human Performance (2)

HHPA 120 Lifelong Fitness (2)

Mathematics (0-4)

The math requirement is waived for students entering with a SAT math score of 600 or above (if test was taken prior to March 2016) or a SAT math score of 620 or above (test taken March 2016 or later) or an ACT score of 28 or above.
Other students meet the requirement by successfully completing one of the following classes:

MATH 150 The World of Mathematics (3)
MATH 180 College Algebra (3)
MATH 190 Precalculus Mathematics (4)
MATH 201 Calculus 1 (4)
MATH 212 Foundations of Elementary Mathematics II (4))
CSIS 201 Introduction to Computer Science (3)

Broad, Integrative Learning (16-24 hours)

In addition to these areas and skills which form a foundation for vocation and lifelong learning, a broadly-educated person will have experience in a breadth of domains of knowledge and inquiry. At George Fox, we offer students a choice of how to gain that critical breadth. The first option offers faculty as guides in the process of learning through integrative courses. The second option gives students more choice and flexibility but requires slightly more coursework and leaves the integrative component of the learning up to the students themselves.

Philosophy and Literature (3-6 hours)

HUMA 205 Philosophy and Literature (3)

OR

Alternate Option: If students choose the alternate option they must complete one literature course and one philosophy course from the following course options.

Literature

LITR 236 Ancient World Literature (3)
LITR 237 World Literature, Medieval to Modern (3)
LITR 238 Contemporary World Literature (3)

Philosophy

PHIL 150 Introduction to Philosophy (3)
PHIL 180 Ethics (3)
PHIL 270 Philosophy of the Arts (3)

Fine Arts (3-6 hours)

HUMA 290 Art, Beauty, and Truth (3)[1]

[1]In place of this course, students may satisfy 3 credits of general education requirements through participation in music ensembles. Please note that due to NASM accreditation rules, Music majors are not eligible for this general education substitution. To meet the requirement, a student must earn at least 3 credits total in approved ensembles, and must be enrolled in one or more ensembles each semester for four semesters (participation in more than one ensemble in any given semester still only counts as one semester for fulfillment of this requirement). A student may participate in different ensembles in different semesters. Following completion of the four required semesters, the student must successfully complete a GE fine arts assessment with the Music Department. Responsibility lies with the student to request this assessment. The requirement is not complete until this successful assessment has been recorded on the student's record.
Eligible ensembles are: Men's or Women's Chorale, Concert Choir, Symphonic Band, and George Fox University Symphony Orchestra.

OR

Alternate Option: If students choose the alternate option they must complete two courses in two different disciplines from the following course options.

Art

ARTS 111 Drawing (3)
ARTS 216 Art History Survey to 1450 (3)
ARTS 217 Art History Survey from 1450 (3)

Theatre

THEA 100 Acting 1 Fundamentals (3)
THEA 130 Stagecraft (3)

Music

MUSI 100 Music Fundamentals (2)

MUSI 110 Understanding Jazz (2)
MUSI 120 The World of Music (2)

History and Social Science (6 hours)

Choose one course from the list of approved courses in History, Political Science, and International Studies AND one course from the list of approved courses in Economics, Psychology, and Sociology.

History, Politics, and International Studies

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)
INTL/PSCI 230 Introduction to International Affairs (3)
PSCI 150 Introduction to Political Science (3)
SSCI 205 (HPI) Social Scientific Perspectives (3)

Economics, Psychology, and Sociology

ECON 201 Principles of Microeconomics (3)
ECON 202 Principles of Macroeconomics (3)
PSYC 150 General Psychology (3)
SOCI 150 Principles of Sociology (3)
SSCI 205 (EPS) Social Scientific Perspectives (3)

An SSCI 205 Social Scientific Perspectives course may be counted for either the HIST/PSCI/INTL (HPI) requirement or the ECON/PSYC/SOCI (EPS) requirement, with the disciplines being integrated in the course determining which requirement may be met by the course.

a. If an SSCI 205 course integrates two disciplines from HIST, PSCI, and INTL, then the course will only satisfy the HPI requirement.
b. If the course integrates two disciplines from ECON, PSYC, and SOCI, then the EPS requirement will be met.
c. If an SSCI 205 course integrates disciplines across the two lists (e.g. HIST and ECON), the class may be applied to either (but only one) requirement.
d. A student may take two SSCI 205 courses to complete the History and Social Sciences requirement as long as one course contains an HPI discipline and the other contains an EPS discipline.

Natural Science (4 hours)

Choose one course from the approved list in Biology, Chemistry, General Science, or Physics.

Natural Science

BIOL 100 Foundations of Biology (4)
BIOL 211 General Biology I (4)
CHEM 100 Chemistry of Life (4)

CHEM 110 Chemistry and Our Environment (4)
CHEM 151 General, Organic, and Biological Chemistry I (4)
CHEM 211 General Chemistry I (4)
GSCI 120 Environmental Science (4)
PHYS 150 Physics of Everyday Life (4)
PHYS 190 Astronomy (4)
PHYS 201 General Physics I (4)
PHYS 211 General Physics with Calculus I (4)

Intercultural Experience (0-4 hours)

Students are required to complete and document a significant interaction with a culture different from their own by the time of their graduation. Most students will complete this requirement by participating in a university-sponsored experience such as Juniors Abroad, May Serve or Study Abroad or by taking a course from the approved list below.

Intercultural

GEED 365 Cross-Cultural Experience International (3) [Juniors Abroad]
ARTS 355 Topics in Art History: Native American Art (3)
COMM/INTL 220/420 Intercultural Communication (3)
COMM 410 Gender Communication Across Cultures (3)
FREN 101, 102, 201, 202, 301, or 302 (all are 4 credits)
HIST 250 Latin America (3)
HIST 340 Modern Middle East (3)
HIST 343 History of South Africa (3)
HIST 360 Modern Russia (3)
HIST 380 African-American Experience in the United States (3)
INTL/RELI 440 World Religions (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)
PSYC 353 Culture and Psychology (3)
SOCI 310 Cultural Anthropology (3)
SOCI 380 Race and Ethnicity (3)
SPAN 101, 102, 201, 202, 301, or 302 (all are 4 credits)
SPAN 210 Spanish for Medical Personnel (3)
SPAN 303 Spanish for Heritage Speakers (4)

* These courses may be taken for Humanities credit or Intercultural credit, but one course cannot be counted for both requirements.
** Alternatively, students may choose to design their own intercultural experience. For example, a student may participate in a short-term cultural immersion trip or a longer-term interaction in a local, but culturally-different community. If the intercultural experience does not have academic credit attached to it, it must be approved in advance by the Center for Study Abroad no later than the first week of the student's senior year, and must be completed by the time of graduation. Past experiences are not eligible options to meet this requirement. Please contact the Center for Study Abroad

for specific requirements to be eligible for this option, as well as requirements to meet approved intercultural experiences.

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 BS 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.

Honors Program

George Fox University's William Penn Honors Program is an alternative liberal arts general education program for undergraduate students. Modeled on the Socratic style, the program is designed to hone students' critical thinking skills by exposing them to classical texts and using discussion as the primary mode of instruction. Graduates of the program will be prepared to engage their culture meaningfully at the deepest levels – and they will be able to do so in a humble and gracious manner from an orthodox Christian perspective.

Program Distinctives

- Courses are built around great books that have had a significant influence in Western civilization.
- All readings are studied with a critical focus on how they inform contemporary thought and how they harmonize – or, just as importantly, fail to harmonize – with the example and teachings of Jesus Christ.
- Rigorous study, nurtured spiritual development, and the necessity of a life of service all receive close attention.
- Courses are limited in size and emphasize student-centered pedagogies, including a variety of interactive approaches to discourse and learning.
- Courses are writing-intensive.
- The program fosters a community of well-prepared, highly motivated students, which is fully engaged with the larger student body in various majors and other campus activities.
- Students are assigned a mentor in addition to their academic advisors. In the context of this mentorship, special emphasis is placed upon where students' particular gifts can best serve the redemptive cause of Christ in a broken world.

Honors Requirements (46 hrs)

Structure: Students take blocks of 6 credit hours for six semesters, and a 3 credit senior spring semester (39 hours).
Students must also meet the regular general education math requirement and take one lab science course. Collectively, these courses constitute the general education package for honors students. Total hours required: 46 hours.

Core Requirements (39 hrs)

HNRS 150 Origins: Athens and Jerusalem (6)
HNRS 190 Rome Through Early Church (6)
HNRS 250 Medieval Western Civilization (6)
HNRS 290 Late Medieval and Early Modern Western Civilization (6)
HNRS 350 Seventeenth to Nineteenth Centuries (6)
HNRS 450 20th Century (6)
HNRS 490 Integration Thesis (3)

Math and Science (7 hours minimum)

Students must also meet the regular general education math requirement and take one lab science course.

1. **Mathematics**

   Waiver of 3 hours of math requirement for an SAT score of 620 or above (the 3 credit hours waived will be added to elective credits for the degree)
   CSIS 201 Introduction to Computer Science I (3)
   MATH 150 The World of Mathematics (3)
   MATH 180 College Algebra (3)
   MATH 190 Precalculus Mathematics (4)
   MATH 201 Calculus I (4)
   MATH 212 Foundations of Elementary Mathematics II (4)
2. **Natural Science**

   BIOL 100 Foundations of Biology (4)
   BIOL 211 General Biology I (4)
   CHEM 100 Chemistry of Life (4)
   CHEM 110 Chemistry and Our Environment (4)
   CHEM 151 General, Organic, and Biological Chemistry I (4)
   CHEM 211 General Chemistry I (4)
   GSCI 120 Environmental Science (4)
   PHYS 150 Physics of Everyday Life (4)
   PHYS 190 Astronomy (4)
   PHYS 201 General Physics I (4)
   PHYS 211 General Physics with Calculus I (4)

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 (AP)

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 (CLEP)

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.) Testing through the CLEP Subject Examinations provides verification of competency in selected academic fields such as foreign language and mathematics. These may be taken at any time (unless concurrently enrolled in an equivalent course) and assume competency has been gained in nonclassroom settings.

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 levels 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.

Academic Opportunities

George Fox University offers the following opportunities that support the mission of the traditional undergraduate program at the university:

Academic Success Program
English Language Institute (ELI)
Juniors Abroad
Semesters Off Campus
Consortium Visitor Program

Academic Success Program

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 16 for fall semester. An academic standing of Provisional Admission will appear on ASP students' official and unofficial transcripts upon admission but will be removed from the transcript after the completion of one semester.

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.

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.

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.

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 Study Abroad 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 George Fox 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 George Fox 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 Study Abroad or the George Fox 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.

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	Former Prefix	Semester Off-Campus Program
CONS	CONS	Christian College Consortium Exchange Program
XAMB	AMBX	Germany AMBEX Program
XAMS	AMSP	American Studies Program (Washington, D.C.)
XCMC	CMCP	Contemporary Music Center (Nashville, TN)
XFSD	FSPD	Semester in Dijon, France CIEF
XGEA	AFSP	Go ED. Africa Program (Rwanda)
XGEM	GEMP	Go ED. Mekong, Thailand Program
XLLE	ECLL	Living and Learning in Quito, Ecuador Program
XLTH	LTHU	Study Abroad at LCC International University
XMES	MESP	Middle East Studies Program
XOXF	OXFD	Scholars' Semester in Oxford, England
XRMS	RMSP	Romania Studies Program
XSAL	SALA	University of Salamanca, Spain
XTRY	TRTY	Semester in Spain Program
XUGS	UGSP	Uganda Studies Program
XVBR	VUBR	Veritas in Florianopolis, Brazil
XVCR	VUSJ	Veritas in San Jose, Costa Rica
XVEN	VUEN	Veritas in London, England
XVFR	VUFR	Veritas in Paris, France

XVIT	VUIT	Veritas in Rome, Italy
XVPR	VUPR	Veritas in Cusco, Peru
XVSK	VUSK	Veritas in Seoul, South Korea
XVSP	VUSP	Veritas in Sevilla, Spain

Undergraduate 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. Applicants with a criminal record may be required to submit additional official paperwork. 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, co-curricular 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, 2; science, 2; and mathematics, 3.

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. Apply online and visit our admissions page for infromation and application requirements.
2. Complete the Application for Admission. A $40 application fee will be due at the time of a submitted online application (if after the Early Action Deadline, Nov. 1). The postmark deadlines are: Nov. 1 for Early Action, Jan. 15 for Priority Deadline, 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) [George Fox code is 4325] or American College Test (ACT) [George Fox 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 fafsa.ed.gov as soon after Oct. 1 as possible. The George Fox 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. Apply online and visit our admissions page for admissions and application requirements.
2. Complete the Application for Admission. A $40 application fee will be due at the time of a submitted online application (if after Nov. 1 Early Action Deadline). The priority due date is March 1 for fall semester and Nov. 1 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 fafsa.ed.gov as soon after Oct. 1 as possible. The George Fox 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.

Transfer credit policies can be found here.

Readmission of Former Students

To apply for readmission after a withdrawal from the university, a student should submit an Application for Readmission to 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.

High School Nongraduates

A student who does not hold a high school diploma may be admitted on the basis of the General Educational Development (GED) test as follows:

- A GED received after December 2013 requires a standard score of at least 145 on each of the four subject examinations, with a total score of 660 or higher
- A GED received between January 2002 and December 2013 requires a standard score of at least 480 on each of the five subject examinations, with an average battery score of 530 or higher.

A high-school or two-year-college counseling center can supply testing details.

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.

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

Special Students-High School

High School Students

Program Details

A High School Special Student program is available to qualified high school students. This permits study in undergraduate courses at George Fox University while a student completes a high school program. Enrollment is at the discretion of George Fox University.

Eligibility Requirements

- An applicant must have completed the sophomore year of high school.
- An applicant who graduated from high school more than six months ago is not eligible.
- Students must receive grades of C or better in George Fox classes to continue taking classes as a High School Special Student.

Fees

- Students pay a $40 registration fee each semester.
- Fall or Spring terms: Students pay $50/credit
- May term and Summer Online Sessions: Students pay traditional undergraduate tuition, which is 50 percent of the full traditional undergraduate tuition in fall and spring. See the Student Accounts page for the specific per credit rates.
- Additional fees may apply for students registered for 5 or more credits. See the Student Accounts page for more information.
- All registered students must complete Vehicle Registration through MyGFU, even if a vehicle will not be used on campus. For students who will be parking on campus, a $60 parking permit will be issued. Please contact Security Services for more information.

What do I need to know?

1. Students are limited to one class per fall and spring semesters.
2. Students are limited to one class in May Term in the summer semester.
3. Students are limited to three classes in the Summer Online sessions during summer semester.
4. A maximum of 12 credits can be accrued as a High School Special Student.
5. A special student registration form must be completed each semester you intend to enroll. This form is due in the registrar's office before or during the first week of the add/drop period. List the class you would like to take, including the course section (example: ECON 201 C Principles of Microeconomics).
6. Enrollment is allowed on a ***space-available basis*** only. Any course pre-requisites must be met in order to be registered for the requested class. Your registration will be processed on the first day of the semester.

7. All courses require professor and department chair permission to enroll. The registrar's office will contact the department for you once your application has been received. (NOTE: Studio Art courses are not open for Special Student enrollment)
8. Enrollment is at the discretion of the university.
9. Regular admission is required to enter a degree/certificate program. Please contact the Office of Admissions for more information. Special student enrollment does not guarantee subsequent admission to any degree/certificate program. At the point of admission to a degree program, students will be required to pay the regular tuition rate.
10. Employees of the university should refer to the Human Resources webpage for information on tuition remission requirements, deadlines, and applications.

Application Procedures for High School Special Student

1. Search the Class Schedule to find a listing of available courses.
2. Browse the Catalog for course descriptions.
3. Download an application.
4. Submit the application to the registrar's office.
5. All courses require department permission to be registered. The registrar's office will contact the department for you once your application has been received.
6. On the first day of class, the student should contact the registrar's office to determine if space is available for the course. If the space is available, the student will be admitted to the class and charged course and lab fees if applicable.

Questions?

If you have questions, please contact the registrar's office at 503-554-2218 or by email at registrar@georgefox.edu.

Special Students-Conventional

Program Details

The special student program is for high school graduates who do not intend to enter a degree/certificate program **OR** those who plan to enter a degree/certificate program at a later time, but would like to take classes before being formally admitted to a degree/ certificate program. Enrollment is at the discretion of George Fox University.

Fees:

- A $40 registration fee will be added to your account for processing your registration. This fee will be added each semester you attempt to register for classes.
- Tuition is billed at current per credit rates for each program. See the Student Accounts page for the specific per credit rates.
- Additional fees may apply based on program. See the Student Accounts page for more information.
- May Term and summer online sessions for undergraduate courses: Students pay traditional undergraduate tuition, which is 50 percent of the full traditional undergraduate tuition in fall and spring.
- All registered students must complete vehicle registration through MyGFU, even if a vehicle will not be used on campus. For students who will be parking on campus, a $60 parking permit will be issued. Please contact Security Services for more information.

What do I need to know?

1. Up to 12 credit hours can be applied toward a degree program
2. A special student registration form must be completed each semester you intend to enroll. This form is due in the registrar's office before or during the first week of the add/drop period. List the class you would like to take, including the course section (example: ECON 201 C Principles of Microeconomics)
3. Enrollment is allowed on a ***space-available basis*** only. Any course pre-requisites must be met in order to be registered for the requested class. Your registration will be processed on the first day of the semester.
4. Some courses may require department chair/program director permission to enroll. (NOTE: Studio Art courses are not open for Special Student enrollment)
5. Enrollment is at the discretion of the university.
6. Undergraduate (100-499 level) and graduate (500-799) courses may be taken for credit or audit. Special student registration is not allowed for zero-level certificate courses.
7. Excluded are courses in programs using the cohort model, and a limited number of other courses.
8. Courses in the following programs do not allow special student registration: Master of Arts in Teaching (MAT), Full-time Master of Business Administration (MBA), Doctor of Physical Therapy (DPT) and Doctor of Ministry (DMin).

9. Regular admission is required to enter a degree/certificate program. Please contact the Office of Admissions for more information. Special student enrollment does not guarantee subsequent admission to any degree/certificate program.
10. Employees of the university should refer to the Human Resources webpage for information on tuition remission requirements, deadlines, and applications.

Application Procedure

1. Search the Class Schedule to find a listing of available courses.
2. Browse the Catalog for course descriptions.
3. Complete the Online Application or download an application.
4. Submit the application to the registrar's office.
5. Some courses require permission from the department. The Registrar's Office will contact the department for you once your application has been received.
6. On the first day of class, the student should contact the registrar's office to determine if space is available for the course. If the space is available, the student will be admitted to the class and charged tuition, course and lab fees if applicable.

Questions?

If you have questions, please contact the registrar's office at 503-554-2218 or by email at registrar@georgefox.edu.

Adults 62 and older

Program Details

Any person **62 years of age or older** may be eligible to enroll in traditional undergraduate courses at the discretion of the university.

Fees

- Undergraduate Courses:
  - Fall & Spring Terms: $50/credit
  - May Term and Summer Online Sessions: Regular traditional undergraduate per credit tuition applies, which is 50 percent of full traditional undergraduate tuition in fall and spring. See the Student Accounts page for the specific per/credit prices.
- Students must pay all applicable special course and lab fees.
- Additional fees may apply for students registered for 5 or more credits. See the Student Accounts page for more information.
- All registered students must complete Vehicle Registration through MyGFU, even if a vehicle will not be used on campus. For students who will be parking on campus, a $60 parking permit will be issued. Please contact Security Services for more information.

What do I need to know?

1. Adults 62 Special Students are not eligible to participate in institutional financial aid programs.
2. Adults 62 Special Students are limited to 12 credits per fall or spring semester.
3. Adults 62 Special Students are limited to one class in May term in the summer semester.
4. Adults 62 Special Students are limited to three classes in the Summer Online sessions during summer semester.
5. A maximum of 12 hours taken as a special student through the Adults 62 Special Student Program may transfer to a degree program.
6. A special student registration form must be completed each semester you intend to enroll. This form is due in the registrar's office before or during the first week of the add/drop period. List the class you would like to take, including the course section (example: ECON 201 C Principles of Microeconomics).
7. Enrollment is allowed on a ***space-available basis*** only. Any course prerequisites must be met in order to be registered for the requested class. Your registration will be processed on the first day of the semester.
8. All courses require professor and department chair permission to enroll. The registrar's office will contact the department for you once your application has been received. (NOTE: Studio Art courses are not open for Special Student enrollment)
9. Regular admission is required to enter a degree/certificate program. Please contact the Office of Admissions for more information. Special student enrollment does not guarantee subsequent admission to any degree/certificate program. At the point of admission to a degree program, students will be required to pay the regular tuition rate.

10. Employees of the university should refer to the Human Resources webpage for information on tuition remission requirements, deadlines and applications.

Application Procedure

1. Search the Class Schedule to find a listing of available courses.
2. Browse the Catalog for course descriptions.
3. Complete the online application or download an application.
4. Submit the application to the registrar's office.
5. All courses require department permission to be registered. The registrar's office will contact the department for you once your application has been received.
6. On the first day of class, the student should contact the registrar's office to determine if space is available for the course. If the space is available, the student will be admitted to the class and charged course and lab fees if applicable.

Questions?

If you have questions, please contact the registrar's office at 503-554-2218 or by email at registrar@georgefox.edu.

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.

Academic Calendar 2017-2018

Fall Semester

Fall Semester Begins	August 28, 2017
Last Date for Special Student Class Registration	September 1, 2017
Last Date for Adding Classes Online (without Instructor Approval)	September 3, 2017
Labor Day Holiday (non-Newberg locations only)	September 4, 2017
Last Day to Change Registration (Add/Drop)	September 10, 2017
Last Day to Submit Application for Degree (Midyear Commencement Participation)	September 10, 2017
Census Date	September 12, 2017
Serve Day	September 13, 2017
Last Day to Exercise Pass/No Pass or Audit Option	September 22, 2017
Mid-Semester Holiday (Newberg only)	October 6, 2017
Mid-Semester Grade Entry	October 18-22, 2017
Registration for Spring Semester Opens for Graduate and ADP Students	October 23, 2017
Last Day to Withdraw from Class without Grade Responsibility	November 5, 2017
Transfer Credit Transcript Due Date (Midyear Commencement Participation)	5:00 pm, November 17, 2017
Last Day to Request Participation in Midyear Commencement with Incomplete Requirements	November 19, 2017
Thanksgiving Holiday	November 23-24, 2017
Dissertation Signed Approval Sheets Due (Midyear Commencement Participation)	5:00 pm, December 1, 2017
Study Day (Traditional Undergraduate)	December 11, 2017
Final Exams (Traditional Undergraduate)	December 11-15, 2017
Fall Semester Ends	December 15, 2017
Midyear Commencement	December 16, 2017
Christmas/New Year's Break	December 16, 2017 – January 7, 2018
Final Grade Entry Deadline	December 24, 2017

Spring Semester

Spring Semester Begins	January 8, 2018
Last Date for Special Student Class Registration	January 12, 2018
Last Date for Adding Classes Online (without Instructor Approval)	January 14, 2018
Martin Luther King Jr. Holiday	January 15, 2018
Last Day to Change Registration (Add/Drop)	January 21, 2018
Last Day to Submit Application for Degree (Spring Commencement Participation)	January 21, 2018
Census Date	January 23, 2018
Last Day to Exercise Pass/No Pass or Audit Option	February 2, 2018
Registration for Summer Semester Opens	February 19, 2018
Mid-Semester Grade Entry	February 28 - March 4, 2018
Juniors Abroad Registration	March 16, 2018
Last Day to Withdraw from Class without Grade Responsibility	March 18, 2018
Registration for Fall 2017 and Spring 2018 Opens for Traditional Undergraduates	March 19-23, 2018
Spring Break	March 26-30, 2018
Good Friday Holiday	March 30, 2018
Transfer Credit Transcript Due Date (Spring Commencement Participation)	5:00 pm, March 30, 2018
Last Day to Request Participation in Spring Commencement with Incomplete Requirements	April 1, 2018
Registration for Fall Semester Opens for Graduate and ADP Students	April 9, 2018
Dissertation Signed Approval Sheets Due (Spring Commencement Participation)	5:00 pm, April 13, 2018
Study Day (Traditional Undergraduate)	April 23, 2018
Final Exams (Traditional Undergraduate)	April 23-27, 2018
Spring Semester Ends	April 27, 2018
Spring Commencement	April 28, 2018
Final Grade Entry Deadline	May 6, 2018

Last Updated: 2017.01.13

Melissa Thomas, Registrar

Academic Calendar 2017-2018

Summer Semester/May Term

Summer Semester/May Term Begins	April 30, 2018
Last Day to Change May Term Registration (Add/Drop)	May 1, 2018
Last Day to Withdraw from May Term Class without Grade Responsibility	May 3, 2018
Last Day to Change Summer Registration for Full Semester Classes (Add/Drop)	May 13, 2018
May Term Ends	May 18, 2018
May Term Final Grade Entry Deadline	May 27, 2018
Memorial Day Holiday	May 28, 2018
Summer Online Session Begins	June 4, 2018
Last Day to Change Summer Online Registration (Add/Drop)	June 10, 2018
Census Date for Summer	July 1, 2018
Independence Day Holiday	July 4, 2018
Last Day to Withdraw from Summer Online Session Class without Grade Responsibility	July 8, 2018
Last Day to Withdraw from Full Semester Summer Class without Grade Responsibility	July 8, 2018
Summer Online Session Ends	July 29, 2018
Summer Online Session Grade Entry Deadline	August 5, 2018
Summer Semester Ends	August 17, 2018
Final Grade Entry Deadline	August 26, 2018

Last Updated: 2017.01.13

Melissa Thomas, Registrar

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