



# GENEVA COLLEGE

**College Catalog 2015-2016**  
Volume 96

3200 College Avenue  
Beaver Falls, PA 15010  
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[www.geneva.edu](http://www.geneva.edu)



This catalog is designed to communicate clearly the information needed by students, faculty, and prospective students. It can be accessed on the Geneva website.

The provisions of this catalog should not be regarded as a contract between any student and the college. Course content and regulations are constantly being reviewed and revised. The college reserves the right to withdraw or amend the content of any courses listed if circumstances necessitate such changes.

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### **Nondiscrimination Policy**

Geneva College admits students of any race, color, national and ethnic origin to all the rights, privileges, programs and activities generally accorded or made available to students at the school. It does not discriminate on the basis of race, color, national and ethnic origin in the administration of its educational policies, admissions policies, scholarships and loan programs, and athletic and other school-administered programs.

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# COLLEGE CALENDAR

## Fall Semester 2015–2016

August 28	Fall orientation
August 31	Classes begin 8 a.m.
September 4	Last day to add a class
September 7	Labor Day – classes will meet
September 26	Homecoming
October 23	Fall break begins 5 p.m.
October 27	Classes resume 5 p.m.
November 9	Last day to drop a class
November 24	Thanksgiving break begins 5 p.m.
November 30	Classes resume 5 p.m.
December 1	Last day for <u>new</u> freshmen to drop 1 class
December 14	Evening exams begin
December 15	Reading and review day- no day classes
	Day exams begin 3:30 p.m.
December 18	Final exams end

## Spring Semester 2015–2016

January 11	Classes begin 8 a.m.
January 15	Last day to add a class
January 18	Martin Luther King Day—no day classes
March 04	Spring break begins 5 p.m.
March 14	Last day to drop a class
March 15	Classes resume 8 a.m.—follow Monday day schedule
	No evening classes.
March 23	Easter break begins 5 p.m.
March 28	Classes resume 5 p.m.
March 30	Follow Monday day class schedule
April 4	Last day for <u>new</u> freshmen to drop one class
April 29	Last day of classes
May 2	Reading and review day- no day classes
	Final exams begin- 3:30 p.m.
May 5	Final exams end
May 6	Baccalaureate
May 07	Traditional Undergraduate Commencement 10:00 a.m.
	Graduate and Adult Education Commencement 3:00 p.m.

## Summer Session 2016

May 9–June 3	May@Geneva
June 6–July 8	Summer II
July 11–August 11	Summer III
May 9–June 29	Summer Evening

Summer evening classes meet twice a week for 15 sessions.

*Dates are subject to change.*

# **MISSION STATEMENT**

Geneva College is a Christ-centered academic community that provides a comprehensive education to equip students for faithful and fruitful service to God and neighbor.

## **Foundational Concepts of Christian Education**

The philosophical basis on which Geneva College rests, referred to as the Foundational Concepts of Christian Education, was prepared by a joint committee of the Board of Corporators and Board of Trustees of Geneva College and adopted by the Board of Trustees at its meeting on October 26, 1967. The Board of Corporators and Trustees modified the document in June, 1996.

### **Preface**

Starting with the belief that God is the source of all truth, education becomes the exciting adventure of seeking to appropriate knowledge in all its various facets under the guidance of the Holy Spirit.

Education which is Christian takes for its perspective the Biblical view of God, mankind and the universe in their mutual relations.

While education in a Christian context does not guarantee truth, it does seek to establish the starting point apart from which ultimate truth can never be learned. It becomes essential, therefore, to establish the direction for education from this Christian perspective and the following Statement has been drawn up in an attempt to make this clear as related to Geneva College. In no sense should it be considered as the last word, but it purports to be the foundational concept upon which scholarship under God may thrive and expand.

This view of education rests upon the historic Christian faith contained in the Scriptures, symbolized by the open Bible on the seal of the college. Holding to the summary of this faith as contained in the Westminster Confession of Faith of the mid-17th century, the Reformed Presbyterian Church of North America has endeavored for over a century to offer through Geneva College an education which articulates the implications of the sovereignty of Jesus Christ over all of His creation.

“For with Thee is the fountain of life; in Thy light shall we see light.” Psalm 36:9

## **The Theological Basis of Christian Higher Education**

### **The Christian View of God**

God is one being, existing in three persons, the Father, the Son and the Holy Spirit. He is a personal being, possessing in Himself all that personality means but without limitation. He is the self-existent Creator, Preserver and Controller of the universe in its totality.

### **The Christian View of Mankind**

Men and women are unique among all living creatures, being distinguished from the animals by being created in the image of God as rational, moral and spiritual beings. The purpose of human life is to glorify and to enjoy God, and only when life is so viewed can the highest happiness, welfare and honor be experienced. We are created as immortal beings. Earthly life is therefore preparatory to the life after death, and should not be regarded as an end in itself, though as God’s creation the present earthly life has a real value of its own.

By our relationship to Adam as representative of the human race, we are fallen creatures. By moral revolt against God, we lost both our position of communion with God and our ability to consciously reflect God’s glory, and instead became devoted to the worship and aggrandizement of self. Our fall into sin affected not only our moral nature but also our intellect, making us prone to error, and requiring divine revelation to determine ultimate standards and values in all fields. The moral and intellectual effects of sin are such that we are incapable of removing them by our own effort.

Jesus Christ, as the second Adam, died and rose again as our representative, in order that we who are chosen of God, regenerated by the Spirit, and by faith identified with Christ in His death and resurrection might be restored to fellowship with God in the Holy Spirit and enabled to glorify God actively in our lives. As believing Christians, having realized our union with Christ and hence our own death to sin and rising to newness of life in the Spirit, we renounce self-centeredness as a lifestyle and seek in every phase of our experience to understand and reflect God’s glory.

## **The Christian View of the Universe**

The universe, as the creation of God, serves to reveal God; and its revelation is true, valid, and useful in itself. The created universe, being full of God's glory, is to be understood, appreciated, ruled and used by us. God in His goodness has bestowed upon us the ability to discover and use truths about the universe, which may be learned irrespective of a person's spiritual relationship with Him. In seeking to understand the truth of the universe in all of its dimensions, we are responsible to use every faculty and effort, but the facts of the universe can be understood in the fullest sense only when viewed in relationship to God. Ultimate judgments must finally be made in the light of God's Word, the Holy Scripture, which is the only adequate and inerrant standard of truth.

## **The Purpose of Christian Education**

Inasmuch as we were created to glorify God, Christian education seeks to develop the students' abilities to know God and to relate themselves and the created universe to God through the study of His Word and Works. Christian education emphasizes the Person and Work of the Lord Jesus Christ in order that students may be yielded to Him as their Saviour from sin and that they may see in Christ the ultimate purpose and meaning of the whole universe.

It is the purpose of Christian education to seek the realization of the potential of the individual as the image of God through the development of God-given capacities. The fulfillment of those potentialities is reached insofar as students devote those capacities to God's glory in their vocations and daily lives. Christian education endeavors to develop each student's capacity for the enjoyment of the world as God's creation, in all its cultural richness, realizing that all of life as a coherent whole is related to God and His redemptive activity. The goal of Christian education is the development of mature students who, as individuals, have well-integrated personalities; and who, as well-oriented members of society, are building the Kingdom of God in the family, the church, the nation and the world.

## **The Implications of Christian Education**

### **Implications for the School**

All persons responsible in any way for the functioning of an educational institution share in the pursuit of its goals. In Christian education this becomes particularly significant since no task, teaching or other, is unrelated to God; and also because all personnel should demonstrate in their lives the end-purpose of Christian education. Everyone shares in the transmission of knowledge, but only those consciously committed to Jesus Christ as revealed in the Scriptures can envision and reach the goals of Christian education. To realize the goals of Christian education all faculty members should seek to understand more completely and to teach more effectively their particular disciplines with academic excellence within a consistent Biblical world and life view.

### **Implications for the Student**

While students may attain a high degree of knowledge through the grace given to all, in order for them to attain the goals of Christian education, they must be in submission to the person of Jesus Christ, that sin and its effects in their own personalities may be overcome. Students, as creatures of God, are under His mandate both to learn and to apply all knowledge for the purpose of knowing and glorifying God. They should not be sheltered from non-Christian viewpoints, but must become able to evaluate all knowledge critically, to gain from that which is true and to discard error. Students should be aware of God's call on their lives and thus see their education as an opportunity to prepare for their life work, whatever those fields of endeavor may be.

### **Implications for the Curriculum**

In Christian education the curriculum is built upon the foundation that the historic Christian Faith is permanently true, and that it is the integrating factor of a truly Christian educational program. Since Christian education leads toward an understanding of God, mankind and the universe in their inter-relatedness, the curriculum will have a strong emphasis on both the Humanities and the Sciences, theoretic and applied, as well as a basic core of Biblical studies. The curriculum should lead students to grasp the foundations of learning so that they can live a life glorifying to God, confronting honestly and confidently the problems and challenges of new knowledge, and contributing to the welfare of society under God.

### **Implications for Moral Discipline**

Standards of moral discipline must be maintained according to the moral law of God which He has set forth in Scripture. Therefore discipline is to be exercised on the basis of God's Word. Discipline exercised in Christian love and firmness not only deters licentiousness, but also teaches in principle how to live under Christ's Lordship and how to live with other people on the basis of righteousness. Moral discipline must always be exercised in an attitude of helping the offender in the context of the doctrine of sin and its solution in Jesus Christ.



## Student Outcomes

Education at Geneva College is firmly rooted in its Mission and Doctrinal Statements, Foundational Concepts of Christian Education, Aims, and Statement of Commitment. Relying on these statements as the appropriate points of departure, and acknowledging that our central interest is to understand the implications of a Christian worldview for all that we do, we desire that all students graduating from Geneva College will:

- 1) **Worldview:** Students can articulate the nature, strengths and weaknesses, and uses of worldviews, can use worldview analyses critically, articulate the critical elements of an evangelical, reformed Christian worldview.
- 2) **Bible knowledge and Christian life:** Students can articulate the essential Biblical truths of the Christian faith, have evaluated their own faith with respect to those truths, have considered the claims of Christ on their own life, and articulate their calling to participate biblically in relationships, family, church and vocation.
- 3) **Communication:** Students communicate clearly, responsibly, and with integrity in written and oral forms, and evaluate the written, oral and artistic communications of others based on the same criteria.
- 4) **Liberal Arts and Critical Thinking:** Students demonstrate value in developing the lifelong learning skills necessary to critically respond to world-shaping intellectual and artistic works, and complement those skills with lifelong habits that nurture physical, mental and emotional well-being.
- 5) **Cultural Engagement:** Students offer analyses of both historic and current causes and effects of contemporary cultural issues and consider active participation in civic life as shaped by principles of Biblical justice.
- 6) **Professional:** Students acknowledge that all vocations are arenas for honoring God and demonstrate competency in the essential skills, literacies, data, theory, and methods of their major field to a professionally recognized standard for a graduate and sufficiently for their vocational calling.

(Adopted by the Geneva College Faculty Senate, 2010.)

## Academics at Geneva

### Accreditation and Membership

Since 1923 Geneva College has been fully accredited by the Middle States Association of Colleges and Schools, 3624 Market Street, Philadelphia, PA 19104. (267-284-5000). The Middle States Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation.

In addition, the College maintains institutional memberships in the following:

American Association of Colleges for Teacher Education  
Association of Reformed Institutions of Higher Education  
Beaver County Council of Higher Learning  
Council of Christian Colleges and Universities  
College Entrance Examination Board  
Council for Higher Education Accreditation  
Council of Independent Colleges  
National Association of Independent Colleges and Universities  
Pennsylvania Association of Colleges and Universities

The Chemistry Program is approved by the American Chemical Society for professional training in chemistry.

The General Engineering Program (BSE) is accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org>.

The Business Program is accredited by the Association of Collegiate Business Schools and Programs (ACBSP).

The Cardiovascular Technology Program (“invasive cardiology”) is accredited by the Commission for the Accreditation of Allied Health Education Programs.

The Teacher Certification Program is approved by the Departments of Education in Pennsylvania, Ohio, New Jersey, New York, and other states.

The Master of Arts in Counseling Program is accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP).

## **Effective Date of the Catalog**

The most current version of the college catalog is available on-line. The catalog was first published on-line in 2006-2007. Previous versions, which were published every two years, are available in print in the library and the Registrar’s office.

The college catalog is designed to communicate clearly the information needed by students, faculty, and prospective students. The most recent college catalog is published in August. An addendum containing significant changes or updates to catalog content may be published during the academic year.

In order to graduate, students must meet the graduation requirements in the catalog in effect at the time that they entered Geneva, provided they complete their work within seven years. Adjustments will be made on an individual basis for completion of courses no longer offered. Students who are still at Geneva beyond seven years from first enrollment are subject to the requirements of the most current published catalog. The college will consider exceptions to these catalog requirements on a case-by-case basis.

The provisions of the catalog should not be regarded as a contract between any student and the college. Graduation requirements, curriculum content and regulations are constantly being reviewed and revised. Policies and regulations are subject to change at any time. Specifically, tuition increases generally take effect at the beginning of the first summer session. The college reserves the right to make changes to any part of the college catalog if circumstances necessitate such changes. If these changes create undo hardship for the student, an appeal may be made to the appropriate academic dean.

## **Degree Requirements**

### **General Requirements for Bachelor’s Degree**

- 1) Removal of all entrance deficiencies. See page 193.
- 2) Minimum of 126 semester hours.
- 3) Completion of required core courses. See below.
- 4) Fulfillment of requirements for at least one major. See list of majors on page 24.
- 5) Enrollment at Geneva or one of its affiliate programs is required for at least 12 credit hours of a senior’s final year.
- 6) Fulfillment of the college chapel requirement
- 7) Grade point average of 2.0 or above overall and in the majors and minors.
- 8) A minimum of 1/3 of the required credit hours in the core, major, and minor must be earned at Geneva.
- 9) Payment of all financial obligations to the college.

### **Bachelor’s Degree—Core Requirements**

Students are strongly encouraged to take these core courses during the recommended years whenever possible. A minimum of one-third of the required credit hours in the core must be earned at Geneva. To accomplish our goal of the integration of faith with an introduction to the liberal arts, we encourage students to take these core requirements at Geneva College. However, Geneva welcomes students who wish to transfer credits from other institutions. Policies governing transfer credit can be found starting on page 193.

- 1) Freshman experience—One hour. SSC 101 Learning and Transition. Required of all freshmen but not transfer students who have 12 or more credit hours.

- 2) Biblical studies—Nine credit hours. BIB 112 and 113 Biblical Introduction during freshman or sophomore years. BIB 300 Foundations of Christian Thought during junior or senior years. Based on testing, students with superior Bible knowledge will be permitted to substitute BIB 151 and 152 for BIB 112 and 113. Students may substitute PHI 310 for BIB 300 by permission of the Department of Biblical Studies, Christian Ministries, and Philosophy.
- 3) Communications—Six credit hours. ENG 101 Composition and COM 101 Principles of Communication. The typical student takes these courses during the freshman year. Upon recommendation of the English department, one of the following courses may substitute for ENG 101: ENG 102 Academic Research and Writing; ENG 151, Honors English Composition, ENG 201 Introduction to Creative Writing, ENG 205 Advanced Composition; or ENG 232 Introduction to Rhetoric,. The ENG 101 (or substitute) requirement is met only with a grade of C- or better.

Students who earn a score of 4 or 5 on the English Language and Composition Advanced Placement (AP) exam will earn 3 credits for ENG 101. Students who earn a score of 4 or more on the English Literature and Composition Advanced Placement exam will earn 3 elective credits and are required to take another writing course; we strongly recommend ENG 151 to fulfill this requirement.

- 4) Humanities—12 credit hours. HUM 103 Invitation to the Humanities, HUM 203 Making the West, HUM 303 Perspectives: Faith, Culture, Identity and HUM 304 Focused Options in Humanities. Students who take HUM 300 (9 credits) by participation in the Rome Program may substitute this for HUM 203, HUM 303, and HUM 304.
- 5) Natural Science—Eight to ten credit hours. SCS 110 Introduction to Natural Science, plus either one other laboratory natural science or two non-laboratory natural science courses; or 12 credit hours of laboratory science in at least two different natural science fields.

Non-laboratory options:

BIO 101	Topics in Biology
BIO 210	ID and Evolution
BIO 218	Introduction to Nutrition
CHM 100	Introductory Applied Chemistry
CHM 160	Chemistry in Art
PHY 160	Introduction to Acoustics
PHY 250	Observational Astronomy (prerequisite MAT 161)
SCS 105	Environmental Science
SCS 201	Astronomy
SCS 215	Earth and Space Science

Laboratory options (or any other four-hour laboratory course):

CHM 111	General College Chemistry
CHM 221	Organic Chemistry 1
PHY 181	General Physics I
PHY 182	General Physics II
PHY 201	College Physics I
PHY 202	College Physics II

- 6) Physical education—Two credit hours. PED 103 Physical Fitness plus one activities course from the following: PED 101, Varsity Sport, or Marching Band. Military veterans earn two PED credit hours by presentation of separation papers.
- 7) Social science—Six credit hours from the following: (Must be from two different disciplines.)
  - ECO 100 Fundamentals of Economics or ECO 211 Micro Economics or ECO 212 Macro Economics
  - HIS 150 Survey of American History or HIS 250 US I: Colonial or HIS 251 US II: 19<sup>th</sup> Century or HIS 252 US III: 20<sup>th</sup> Century
  - POL 151 American Government
  - PSY 201 Introduction to Psychology
  - SOC 120 Society or SOC 202 Italy's Timeless Cities and Their People

EDU 211/PSY 211 will fulfill a social science requirement for **Secondary Education programs only**. Students must choose a second course from another discipline.

- 8) Political science—Three credit hours. POL 352 Great Issues in Politics is required of all students and must be taken at Geneva College during the junior or senior year. Prerequisites: successful completion of BIB 112 and 113; HUM 103, 203, and 303 and junior or senior standing (completion of 60 credit hours).

## **Associate's Degree—Core Requirements**

- 1) Freshman experience—One credit hour. SSC 101 Learning and Transition. Required of all freshmen but not transfer students with 12 or more credit hours.
- 2) Biblical studies—Six credit hours. BIB 112 and 113 Biblical Introduction.
- 3) Communications—Six credit hours. ENG 101 Composition and COM 101 Principles of Communication. The typical student takes these courses during the freshman year. Upon recommendation of the English department, one of the following courses may substitute for ENG 101: ENG 102 Academic Research and Writing; ENG 151, Honors English Composition; ENG 201 Introduction to Creative Writing; ENG 205 Advanced Composition; or ENG 232 Introduction to Rhetoric. The ENG 101 (or substitute) requirement is met only with a grade of C- or better.
- 4) Humanities—Six credit hours from approved department list. Most often this is HUM 103 and 203.
- 5) Natural science—Four credit hours. SCS 110 Introduction to Natural Science or any other laboratory science course.
- 6) Physical education—One credit hour. PED 103 Health and Fitness. See note under physical education above.
- 7) Social science—Three credit hours. One course from the social science list above.

## **Core Curriculum**

### **Rationale**

The Geneva College core provides the framework for a student's education. The core curriculum is rooted in the Foundational Concepts of Christian Education (page 7) and helps to achieve the college's aims and outcomes, (page 9) by providing a common core of liberal studies intended to promote growth in the student's knowledge, skills, understanding, and attitude. The first five institutional student learning outcomes (page 9) are also designated as outcomes of the Core.

The parts of the core relate to each other in a network of intentional support, application, reinforcement, and development. In a similar way, major programs and electives are designed to reinforce and build upon the skills, knowledge, and perspectives developed in the core. As a result of this total educational experience, students are encouraged to realize and embrace the Biblical concept of servanthood and to recognize their calling as stewards of all that God has granted to their care: their personal lives, their dealings with others, and their treatment of the whole creation. In attitude, understanding, leading and serving, they should exhibit a commitment to honor God.

### **Majors**

Every four-year degree requires the completion of a major and a concentration of study in one field. A student must maintain a 2.0 grade point average for their major courses. A minimum of one-third of the required credit hours in the major must be earned at Geneva. Whenever the general and major course requirements involve fewer credit hours than needed for a degree, the student may choose a second major, one or more minors, or elective courses. For a complete list of majors, see page 24.

### **Independent Major - BA or BS**

Academic majors and minors typically exist within the context of academic departments. Geneva believes, however, that this educational convention need not prevent students from intentionally designing a course of study that may simultaneously correspond with their particular interests and/or calling and thoughtfully blend inquiry in two or two or more fields. To this end, Geneva makes available an Independent Major and/or Minor.

Students interested in pursuing an Independent Major and/or Minor must develop an Independent Major/Minor proposal in consultation with the Independent Major/Minor Adviser, and have the proposal submitted no later than February 1 of their

sophomore year. Information regarding the Independent Major/Minor Proposal may be obtained from the Independent Major/Minor adviser.

## **Minors**

Though not required for graduation, minors are offered to provide limited concentration in a field. A student must maintain a grade point average of 2.0 in the minor. A minimum of 1/3 of the required credit hours in the minor must be earned at Geneva. For a complete list of minors see page 25.

## **Practicum, Special Study, Internship, Honors Courses, Independent Study, Specialized Summer Courses**

Most majors include special study opportunities that provide flexibility for students beyond the regular structured courses. This section is meant to describe these courses and to prevent abuses such as attempting to register retroactively (following the experience) and the situation where there is little planning or development of student requirements for the class. The following course numbers, titles, and descriptions apply to every department offering them.

Students interested in any of these courses must develop a course plan in consultation with a faculty member prior to the beginning of the course. In turn, students then must complete and submit the required paperwork to the Registrar. Students may not register for these courses retroactively.

Acceptable personal and professional qualities and habits are required for field and internship placement. When it is determined that deficits exist which impede the student's ability to successfully complete any type of fieldwork or internship experience, remedial assistance may be recommended. Because many qualities affect the field experience process and success, a student can be evaluated on non academic performance issues which may include adherence to ethical standards, personal maturity, motivation, dependability, and personal/psychological growth. Significant concerns can lead to the college decision to prohibit the student from participating in fieldwork or internship. A student may also be asked to participate in some form of assessment.

199 Special Study (1-3) A seminar or directed study on an announced topic or set of topics. Credit specified at registration. Repeated for credit with a new topic.

292 Practicum (1-4) The practicum is an introductory, hands-on experience in an applied area, with guidance from a faculty member or other professional. The practicum should be connected to the mission and objectives of the department. The student outcomes and requirements will be generated with and assessed by a faculty member. A student can enroll in a maximum of 4 credits with no more than 2 credits per semester.

491 Special Study (1-3) A seminar or directed study on an announced topic or set of topics. Credit specified at registration. Repeatable for credit with a new topic.

493 Internship (1-12) A work-study type project either on or off campus, designed to expose the student to an actual workplace experience. Undertaken with the consent, regular guidance and direction of an instructor qualified in the area, and with written permission of the instructor and department chair. A student should spend 45 hours at the workplace site for each semester-hour credit. Internships used for elective credit may be taken credit/no credit, but those taken for major or minor requirements must be letter-graded. Normally, internships are limited to juniors and seniors with at least a 2.5 GPA in courses taken in the department in which the internship is taken.

494 Honors Courses (1-3) Specialized study of an area not covered by a regular course. Prerequisite: honors scholar standing or membership in Alpha Chi, and approval by the instructor and the honors program coordinator.

495 Independent Study (1-3) Individualized advanced study, research, or project development in a clearly defined and limited area not covered by a regular course. The work should be primarily initiated by the student but undertaken with the consent, regular guidance, and direction of an instructor qualified in the area. Prerequisites: junior standing, a GPA of 2.5 or above in departmental offerings, and approval by the instructor and department chair.

499 Specialized Summer Courses (1-4) Experience-oriented group study, usually of an experimental or innovative nature, and frequently involving off-campus activity or travel abroad. Offered during the summer sessions. Credit formula:

approximately one week (or 50 hours) per hour of academic credit. Not applicable toward general or major requirements unless specifically approved for that purpose. Grading system varies.

## **Limitations**

The following courses may be repeated, but only eight credit hours will count towards a bachelor's degree and four credit hours maximum for an associate degree: COM 201, COM 202, COM 203, COM 204; EDU 220; ENG 221, ENG 223; HMN 491; MUS 212, MUS 213, MUS 214, MUS 215, MUS 216, MUS 218, PED 104.

Courses numbered under 100 (i.e., 095, 096) do not earn credit for graduation.

No more than two semester credit hours in the required PED 101 and PED 103 Physical Education can be applied toward any degree.

Maximum credit hours accepted in transfer are described on page 193.

## **Classification of Students**

In determining each student's classification, all credit hours applied toward graduation requirements are counted.

Freshman	0–27 credit hours
Sophomore	28–59 credit hours
Junior	60–89 credit hours
Senior	90 credit hours or more

## **Academic Policies**

### **Registration**

New students and transfer students receive registration materials via the Geneva website and are encouraged to seek counsel from faculty advisers or the Registrar during orientation sessions or by special appointment or correspondence. Late in each semester, enrolled students prepare schedules using Web registration for the following term in consultation with faculty advisers.

Late registration is permitted up to the beginning of the second week of day classes or the second meeting of an evening class.

### **Adding and Dropping Courses**

Students may add a course to their registration for a term up through the first week of the class for traditional students or the first meeting of the course for non-traditional courses. Dates reflecting the last day to add a course are posted for each term and by academic program as needed.

Students may drop a course and not have the course appear on their transcript through approximately 20% of the course, approximately the first two weeks of a traditional semester. Dates reflecting the last day to drop a course are posted for each term and for non-traditional terms and other academic programs as needed.

Students may withdraw from a course after 20% of the course has transpired through 66% of the course. The grade on the transcript will be listed as WX (withdrawal before judgment could be formed), WP (Withdrawal, passing), and WF (Withdrawal, failing) as assigned by the course instructor. The grade will not impact the student's GPA. Dates reflecting the last day to withdraw from a course are posted each term and by academic program as needed. After 66% of the course has occurred, students are not able to withdraw from a course and will receive the grade assigned by the course instructor. New Freshman are allowed to drop one course during their first semester at a later date published in the academic calendar each semester.

For details on the financial ramifications for dropping or withdrawing from a course please see the following:

[http://www.geneva.edu/page/studentacc\\_policies](http://www.geneva.edu/page/studentacc_policies).

## **Drop Policy**

If it becomes necessary to drop a class, a student should talk with his/her advisor, get a drop slip from the Registrar, have it signed by the advisor and the course instructor and return it to the Registrar before the drop date for the semester. The dean of student development or appropriate academic dean may also be consulted for assistance. Students should not drop courses without talking to their advisor, as dropping below 12 credits can negatively impact financial aid, athletic eligibility, insurance coverage, and/or the timely completion of academic requirements.

Courses dropped within the first two weeks of the semester will not appear on the student's transcript. After two weeks, a course may be dropped with both the professor's and advisor's signatures, but it will remain on the transcript with a "W" (withdrew) grade. See the college calendar for the final day to drop a class. First semester freshman may drop a single course up to three weeks after the standard drop date. Grades of "WX" (withdrew before grade could be determined), "WP" (withdrew passing), or "WF" (withdrew failing) are submitted by the instructor and are entered on the student's permanent record but will not affect the student's GPA.

Courses can be dropped and added online via Web Registration through the first week of the semester. After this date students can only drop classes at the Registrar's office.

## **Class Load**

The maximum is 20 credit hours per semester without an additional charge. Students typically take 15-17 credit hours per semester. The following courses are not included in this limitation and may be taken beyond the 17 hour limit without special permission: COM 201, 203, 204; EDU 220; ENG 221, 222, 223; HMN 491; MUS 212, 213, 214, 215, 216, 218; PED 101, 102, 104. Additional credit hours in other courses beyond the 17 credit hours limit are permitted with the approval of the student's academic adviser.

Charge for additional credit hours is the regular per hour tuition rate (see page 197).

## **Finals Week Policy**

Final exams must be taken at their scheduled times, which are announced in writing at the beginning of each semester. Students desiring an exception must submit a written request to the faculty member(s) involved. Exceptions will only be made in the case of serious illness or the death of an immediate family member. Reasons such as plane schedules, availability of flights, and rides leaving early are not acceptable.

Students having three or more final exams scheduled in one day may arrange to have one of them moved to a different time during finals week. If the student is unable to arrange this change with the instructor(s), he/she should seek assistance from the appropriate academic dean. This should be done at least ten days prior to the beginning of finals week.

## **Class Attendance**

### **General Policy**

Students' presence and participation in the classroom is an integral component of the opportunity and responsibility that attends membership in a community of Christian learning. As such, students should attend all of the scheduled class sessions of each of their courses.

### **Excused Absences**

When appropriate documentation is provided to the Student Development Office, students will be excused from class without penalty under any of the following circumstances: a family member's serious hospitalization or death; personal physical or emotional illness; military or jury duty.

In addition, students will be excused from class to participate in the following, college-sponsored activities:

- Performances, varsity and junior-varsity scrimmages against external programs and games, including travel time; make-up games that were postponed due to inclement weather; and official tournament games, both pre-and post-season.
- Class requirements such as field trips and labs. These must be approved through the department chair and the appropriate academic dean.

- Internships and field placements which are required for a major or academic program. These should be arranged in such a way that they do not conflict with other classes for which the student is registered or is required to take.
- Educational travel, including professional meetings, touring groups, and missions trips. These must be approved through the department chair and the appropriate academic dean.
- Campus work-related training that is directly relevant to a student's campus work assignment. These must be approved through the department chair and the appropriate academic dean if the assignment is an academic program area and through the office of the vice president for academic affairs in all other cases.

Several other comments regarding these particular activities are warranted. First, practices and rehearsals are not considered excusable absences. Second, faculty, coaches, and staff should take great care in the scheduling process to prevent students from having to miss multiple classes. It may even become the case where it will be wise for a faculty member, coach, or staff member to encourage a student not to participate in a particular activity if a student's academic progress may be unduly jeopardized by doing so. Third, faculty, coaches, and staff should be proactive in encouraging students to report an excused absence in advance to the faculty member(s) of the class(es) that they miss, and in completing any missed assignments/exams. And, fourth, students should take the initiative in communicating an excused absence clearly and in advance to the faculty member(s) of the class(es) that they miss, and in arranging for the completion of any missed assignments/exams.

### **Adverse Weather**

From time to time it is necessary to close the college and to cancel classes due to inclement weather. On other occasions, there may be adverse weather conditions, but they are not sufficient to justify cancellation of classes. In such cases, commuting students who honestly believe that travel to campus may be hazardous may choose not to travel to campus. These absences will be considered as "excused," provided that the student contact the professor on the day of the absence.

The faculty member, at his/her discretion, may arrange a make-up date with the student if a class is canceled due to inclement weather. If the student has a valid conflict with the established time, it will be considered an excused absence. (See College Catalog for a list of acceptable excused absences. In this situation, a work scheduling conflict would also be considered an excused absence.)

### **Unexcused Absences**

Unexcused absences are those absences for any reason other than those listed above under the "Excused Absences." Faculty members may decide whether or not to penalize students for unexcused absences. Such penalties, if any, will be clearly noted in the course syllabus. Faculty members have no obligation to allow students to complete missed assignments/exams for unexcused absences.

## **Grading System**

<b>Grade</b>	<b>Evaluation</b>	<b>Points per hour</b>
A+	Excellent (Plus)	4.0
A	Excellent	4.0
A-	Excellent (minus)	3.7
B+	Good (plus)	3.3
B	Good	3.0
B-	Good (minus)	2.7
C+	Satisfactory (plus)	2.3
C	Satisfactory	2.0
C-	Satisfactory (minus)	1.7
D+	Poor (plus)	1.3
D	Poor	1.0
D-	Poor (minus)	.7
F	Failure (no credit)	0
IN	Incomplete	
IP	In progress	
CR	Credit (CR/NC option)	
NC	No Credit (CR/NC option)	
WX	Withdrawal before judgment	



	could be formed
WP	Withdrawal, passing
WF	Withdrawal, failing
AU	Audit (no credit)

## Grade Point Average (GPA)

The grade point average is the number of grade points earned divided by the semester credit hours receiving grades A through F. Each semester a term GPA and a cumulative GPA are calculated and reported on the grade report. These two averages are used to determine the student's academic status and eligibility for various offices, honors, or courses and for eligibility for athletic competition.

Credit hours graded F are included in the computation of the GPA but do not count toward graduation requirements. Repeating a course which was graded F does not increase the credit hours used to determine the GPA but will increase both grade points and credit hours toward graduation according to the new grade earned.

Repeating a course for which credit has been granted will not increase the credit hours toward graduation, but the new grade earned may be substituted for the old in determining grade points. It is the student's responsibility to notify the Registrar if a course is repeated.

## Incomplete Grade

An incomplete grade is awarded only when a student has been unable to complete the work due to circumstances beyond his or her control. The student must be doing satisfactory work within four weeks of the end of the semester. The incomplete grade is considered temporary and the student must make up the work without repeating the course. The incomplete grade must be replaced with a letter grade by the date specified by the instructor or within eight weeks of the semester's end, whichever date comes first for traditional semester courses. Non-traditional academic programs may have different time frames based on length of course. If the work is not completed, the incomplete will be converted to the grade specified on the incomplete grade form. Exceptions to the policy require approval of the appropriate academic dean.

## In Progress Grade

The in progress (IP) grade may be used for practica, internships, and research or project courses or independent studies. It is a temporary grade that must be replaced by a letter or credit grade, and it may be used only for course work that is expected to continue beyond one semester.

## Grade Reports

### Preliminary Reports

At the end of seven weeks in every regular semester, instructors report the current grade of any student who at that point has achieved below the C level. These grades are sent to the student's academic adviser.

### Regular Reports

At the end of each semester, students' final grades for the semester are accessible on-line.

### Change of Grade

When a final grade has been reported to the Registrar it cannot be changed except by the provost in consultation with the instructor.

### Transcripts

Official transcripts are issued by the Registrar, for a fee, within one week after receipt of a formal request signed by the student. All indebtedness to the college must be satisfied before any official transcript of record will be issued.

## Academic Grievance

Whenever a student believes he or she has been unfairly treated in matters of grades or other evaluations, course policies or expectations, or is facing allegations of cheating or plagiarism, the following grievance procedure should be followed.

Students who are dissatisfied with the grade awarded for a course component or for the course itself should take their grievance to the faculty member involved. If the student is not satisfied with the response from the faculty member, they

should take their concern to the Department Chairperson. Only if they are still not satisfied should they go to the appropriate academic dean. The decision of the appropriate academic dean in such matters is final. At each level the student should expect to receive an explanation in writing. **Such grievances must be initiated within six weeks after the final day of class in question and should be documented in writing.**

## Academic Integrity

Academic integrity is a serious matter. Dishonesty is an affront to the character and law of God and an insult to the academy and to its professors. It destroys the basic building blocks for community and has been called a “crime against nature” and an “obscenity” within the educational context because it violates freedom and trust, which are absolutely essential for effective learning. It limits the ability of the student to reach his or her potential as a child of God and citizen of the Kingdom. For these reasons it must be fully understood and closely monitored.

### Definitions

Honesty is a personal quality of being authentic, truthful, whole or complete, and responsible. People who are honest will be trusted and respected by others. Dishonesty is the quality of being inauthentic and deceitful to others. It involves abusing or hiding the truth. It breaks trust between people, robs its victims of their sense of security and justice, and shows disrespect for Biblical standards of righteousness.

There are several types of dishonesty that are specific to the academic community. Some of these behaviors typically occur within the context of a specific academic course addressed in points one through five below. Others occur outside the classroom and therefore have broader community implications, as outlined by points five and six.

- 1) Plagiarism: the misattribution or misrepresentation of the intellectual work of another person as one’s own, including their ideas, pictorial or graphic materials, and works.
- 2) Inventing or falsifying information in an academic exercise, for example, making up a fictitious source or quote or intentionally giving an incorrect citation.
- 3) Cheating: obtaining or attempting to obtain answers from another student for an academic test or exercise, or using unauthorized notes during an exam.
- 4) Allowing one’s own intellectual work to be dishonestly used by others, including sharing a term paper, examination, or diskette so that another student may cheat.
- 5) Misrepresenting or disguising one’s actions in order to deceive the instructor, including fabricating a reason for having missed a class or a deadline or turning in a paper for one class that was originally written for another class.
- 6) Preventing other students from successfully completing an academic assignment for example, stealing materials from the library; stealing a diskette, textbook, or notes from another student; hiding materials in the library; or ruining a laboratory experiment.
- 7) Forging a signature on, or unauthorized alteration of, academic documents such as transcripts, registration and drop-add forms, grade books.

### Procedural Guidelines for Intellectual Dishonesty Cases

**Definitions**—Each syllabus should include a statement about academic dishonesty for that course. Instructors are encouraged to reference the college integrity policy and openly articulate their personal philosophy about dishonesty in class.

**Detection**—Where the instructor has reason to believe that dishonest behavior has occurred, the parties involved should be confronted as soon as possible and all relevant materials confiscated where possible. If there is reasonable doubt about whether an offense has occurred, the instructor should warn the student or students. While instructors must be careful to avoid false accusation, they are free to exercise their professional judgment.

**Reporting Procedure**—The instructor will confront the student or students involved and report the offense to the department chairperson for consultation. Prior to making a course-specific judgment about penalties to be imposed, the appropriate academic dean will be notified about the offense, who will determine if additional disciplinary action may be warranted. The appropriate academic dean will inform the dean of student development for the purpose of record keeping and, if applicable, consideration of additional disciplinary measures to be taken. A staff member or administrator who

discovers a case of academic dishonesty should report it to the appropriate academic dean, who shall then follow the procedures of this document.

**Sanctions**—For an offense in categories one through five, several penalty options are available to the instructor, including, but not limited to the following:

- Informal or formal warning to the student or students involved.
- Requiring the assignment or test in question to be retaken, with a lower grade.
- Requiring makeup work, with or without a lower grade being assigned.
- Assigning a grade of zero for the assignment or test in question.
- Lowering the final grade for the course.
- Giving the student a failing grade for the course.

In addition to the above sanctions, the instructor, appropriate academic dean, provost, or dean of student development may require for an offense in categories six or seven, sanctions that may include, but are not limited to, the following:

- Informal or formal apologies to the victim or victims,
- Restitution for lost or damaged material.

Upon recommendation of the appropriate academic dean, provost, or dean of student development may invoke further penalties as warranted by an offense, including:

- Charging fines,
- Placing the student on academic and/or disciplinary probation,
- Suspension or dismissal from the institution,
- Reporting the offense to external authorities.

For multiple or repeat offenses, the penalty imposed will normally be of greater severity. College policy allows for the possibility of suspension upon the commission of a second offense.

**Appeals**—Students have the right to appeal disciplinary actions taken in response to academic dishonesty. A faculty member's ruling can be appealed to the department chairperson. If needed, further appeals are taken to: an ad hoc committee of three faculty members appointed by the appropriate academic dean, the provost, and finally, to the president whose decision is final.

## **Academic Standing**

### **Dean's List**

At the end of each semester the names of undergraduate students with high achievement are published and a congratulatory note is sent to each student by the appropriate academic dean.

To be eligible for this recognition, the student must for that semester:

- 1) Pass at least 12 credit hours.
- 2) Earn a GPA of at least 3.6.
- 3) Receive no grades of F, WF, IN, or NC.

### **Athletic Eligibility**

Geneva College complies with the eligibility standards established by Division III of the National Collegiate Athletic Association.

“To be eligible to represent an institution in intercollegiate athletics competition, a student-athlete shall be enrolled in at least a minimum full-time program of studies, be in good academic standing and maintain satisfactory progress toward a baccalaureate or equivalent degree... A waiver of the minimum full-time enrollment requirement may be granted for a student enrolled in the final term of the baccalaureate program. Also, a student may represent the institution while enrolled as a graduate or professional student or while enrolled and seeking a second baccalaureate degree at the same institution.” (NCAA Div III Manual 2006-2007, pg. 85)

## **Academic Continuation**

The academic status of each student is determined at the end of every grading period and is normally based on the decision criteria described below. Students are normally considered to be in “Academic Good Standing” unless their cumulative

GPA falls below 2.00. Students who are not in “Academic Good Standing” fall into one of three categories: Probation, Suspension, or Dismissal. Normally, students are placed in one of these categories based on academic performance as described below. Students who have GPAs that qualify them for these categories may be explicitly notified, but absence of such explicit notification does not exempt a student from the status or the consequences of the status.

The college administration reserves the right to place a student on probation, suspension, or dismissal for reasons other than the criteria described here. Criteria that might be used to make these judgments include, but are not limited to, specific patterns of poor academic performance, weak progress in completing attempted credit hours, student disciplinary history, poor class attendance, problematic behavior in and/or out of class, lack of conformance to academic regulations, and so forth.

If a student’s cumulative GPA is below the following values in the appropriate Hours Attempted category, the student’s Academic Status is as listed. [Note that “cumulative GPA” has a specific meaning for students who have transferred credit to Geneva. In short, “cumulative GPA” is based only on course work that was taken after a student matriculated at Geneva. Courses taken prior to that date may be accepted in transfer, but the GPA’s associated with those courses are not carried forward, except Education majors. See the section on Transfer Policies (page 193) for more details on this policy and other matters that effect transfer students.]

<u>Hours Attempted</u>	<u>Warning</u>	<u>Probation</u>	<u>Suspension</u>	<u>Dismissal</u>
0-17	2.20	2.00	1.50	--
18-34	2.20	2.00	1.70	0.50
35-68	2.20	2.00	1.70	1.00
69-90	2.20	2.00	1.85	1.50
91 or above	2.20	2.00	1.95	1.85

### **Academic Warning**

Students who have a cumulative GPA less than 2.20 at the end of a grading period are on Academic Warning. This indicates that this student has a GPA that is sufficiently low to warrant concern about the student’s ability to successfully meet the 2.00 minimum GPA required for graduation. However, as long as the student’s cumulative GPA remains at 2.00 or above, the student is in “Academic Good Standing.”

### **Academic Probation**

Students who have a cumulative GPA less than 2.00 at the end of a grading period (or whose admission to the college is as a probationary student) are on academic probation. Academic probation status indicates that the student is not making satisfactory progress towards graduation. In order to help students become academically successful, students on academic probation are under the following restrictions:

- May not enroll for more than 14 credit hours in any single semester.
- Are ineligible for the following co-curricular activities: varsity, junior varsity or club athletics (including off-season team practices), Geneva-sponsored music ensembles, theatre productions (any capacity), student leadership, and student publications.
- May not be resident assistants or hold any other compensated student leadership roles.
- May be subject to further conditions determined by the college administration based on individual circumstances.

Students on academic probation are strongly encouraged to seek assistance from Geneva’s ACCESS office for assistance in academic skills such as effective study habits, time management, and note taking. Students on academic probation are also encouraged to re-take courses in which they have failed as the quickest means to raise their GPA.

A student may appeal one or more of the restrictions associated with Academic Probation by submitting a written request, along with any supporting documentation, to the appropriate academic dean. The appeal must be based on the assurance of improved academic performance, and the assurance that past difficulties that have affected academic performance can be overcome. The appropriate academic dean may consult with appropriate college staff concerning the student’s appeal, including, but not limited to, staff in student development, the business office, and the student’s academic adviser. Such an appeal must be made at least three business days prior to the start of a spring semester, and at least one week prior to the start of a fall semester.

## **Academic Suspension**

Students are on academic suspension if their GPA is less than the value indicated in the chart above. Students on academic suspension are prohibited from taking any classes at Geneva for at least one regular academic semester (Fall or Spring). Further, any course work taken elsewhere while on academic suspension will not be accepted as transfer credit, except upon successful readmission and Registrar course approval. (Note: For students pursuing teaching certification, courses will transfer and will count toward the career GPA.)

A student on academic suspension may appeal to be moved to academic probation status by submitting a written request, along with any supporting documentation, to the appropriate academic dean. The appeal must be based on the assurance of improved academic performance. Such appeals will be granted only in cases where there is clear reason to expect immediate and marked improvement in academic performance and the demonstration that factors that have disrupted academic progress have been successfully addressed. The appropriate academic dean may consult with appropriate college staff concerning the student's appeal, including, but not limited to, staff in student development, the business office, and the student's academic adviser. Such an appeal must be made at least three business days prior to the start of a spring semester, and at least one week prior to the start of a Fall semester.

Readmission following suspension will be based on evidence of improved academic performance or evidence that past difficulties that have affected academic performance have been overcome, and that eventual completion of the requirements for a degree can be reasonably expected. Students on academic suspension who wish to be readmitted should send a letter of application, along with any supporting documents, to the appropriate academic dean no later than 60 days prior to the first day of class in the semester for which they are seeking readmission. Students who are readmitted following suspension will be on academic probation until such time as their cumulative GPA rises above 2.00, they are placed on Academic Suspension again, or they are placed on Academic Dismissal.

## **Academic Dismissal**

Academic dismissal occurs when the student's academic performance indicates that it is unreasonable to anticipate eventual completion of degree requirements (normally determined by the chart above). Since the dismissal is intended to be permanent, only the lapse of a year or more and a drastic change in circumstances can justify application for readmission to the appropriate academic dean. The appropriate academic dean will grant readmission of a dismissed student only in rare instances.

## **Withdrawal From The College**

To withdraw from the college, a student must complete a withdrawal form available from the Student Development Office. If the student receives financial aid, he or she should notify the director of financial aid. Part-time students may withdraw by calling the Registrar's office. A resident student may not reduce class load below 12 semester credit hours without approval by the Dean of Student Development. Since college housing is intended for full-time students, a student who drops below 12 credit hours must petition the Residence Life Office in order to remain in college housing.

## **Readmission After Withdrawal**

A full-time or part-time degree candidate who for any reason is out of college for a semester or more must apply for readmission to the Registrar. The application must include official transcripts of all grades earned at other institutions since leaving Geneva and should be filed at least 60 days prior to registration to assure proper clearance. See page 21 for readmission following academic suspension.

Geneva College will readmit veterans who left in order to perform military service. The veteran will be readmitted with the same academic status he or she had when last they attended the institution. In most cases, the length of the absence from the institution cannot exceed five years. Exceptions to this policy would include the veteran receiving a dishonorable discharge or bad conduct discharge, or who are sentenced in a court-martial.

## **Credit-No Credit Option**

Any junior or senior with a cumulative average at registration of 2.5 or higher may choose to take one course per semester on a credit-no credit basis. The student must decide by the normal drop date (see above) whether to be graded credit-no credit or in the regular manner. Credit-no credit grading is not allowed for any course used to meet a core, a major, or a minor requirement. To receive a grade of credit, performance equivalent to a grade of C or better is required.

## Credit-No Credit Courses

The following courses, also graded credit-no credit (CR/NC), are repeatable, but not more than a combined total of eight semester credit hours in all can be applied toward minimum graduation requirements: COM 201, 203, 204; EDU 220; ENG 221, 223; HMN 491; MUS 212, 213, 214, 215, 216, 218, PED 104.

## Transfer Policies

Detailed information for students transferring to Geneva and for Geneva students who wish to transfer credits to Geneva is found on page 193.

## Applied Music Policies

College students taking music lessons, whether for credit or not, are required to register at the regular time and place for college registration. They will be charged for 14 lessons for the semester. Absences may be made up at the discretion of the instructor. In certain areas of performance, private weekly instruction is available to non-students.

## Auditing

Any student may audit a course with the instructor's permission. Full-time students who wish to have a course recorded as AU must register for it within the first two weeks of the beginning of the regular semester, and pay half the per-hour tuition rate for any credit hours above the load limit described on page 197. All part-time students pay half tuition for the auditing privilege. Audited courses do not apply toward graduation requirements. Exceptions to this policy must be approved by the appropriate academic dean.

## Veteran's Education

Geneva College is approved for the education of veterans under Public Law 894, and Chapter 34 of the G.I. Bill. Veterans should check with the Veterans Administration regarding their eligibility for educational or other veteran benefits. Veterans may receive two credit hours in physical education by filing in the Registrar's office a photostatic copy of their separation record. Upon presentation of appropriate records, credit for service school courses may also be granted as recommended in "A Guide For The Evaluation of Educational Experiences in the Armed Forces."

## Program for Adult Continuing Education (PACE)

PACE provides an avenue for students to take courses as non-degree candidates without formal admission. A maximum of 30 credit hours (attempted and completed) may be taken, at which time formal application for admission must be made. The student, however, is permitted to apply for admission any time during the course of the 30 credit hours. The student is required to maintain a satisfactory grade point average in order to be permitted to register for future courses.

## Graduation Arrangements

Upon completion of degree requirements and application to the Registrar's Office, a student may be graduated at the end of either semester or of the summer session. At the conclusion of the spring semester each year, commencement exercises are held for all students who have completed graduation requirements at that time or the preceding January, or who expect to complete their final 9 credit hours (or less) by August. Three commencement ceremonies are held: a more informal one in December, and two more formal ones in May. On the evening before the traditional undergraduate commencement day, graduates are invited to participate in a public baccalaureate worship service.

## Undergraduate Honors and Awards

Special recognition is given to members of the graduating class who have maintained high scholastic standing. The selection for graduation honors is based on the student's cumulative grade point average. To qualify for honors a student must have completed 60 or more credit hours while matriculated at Geneva, including affiliate programs. The following recognition is provided:

### Valedictorian

The person or persons with the highest GPA in the graduating class based on Fall semester grades with no repeated course.

### Summa Cum Laude (with highest honor)

GPA of 3.8 or higher

**Magna Cum Laude** (with high honor)  
GPA of at least 3.6 but less than 3.8

**Cum Laude** (with honor)  
GPA of at least 3.4 but less than 3.6

### **Departmental Honors**

Honors are awarded to students who have completed research or creative projects, or performance activities judged to be of high quality by the faculty of an academic department, including a public presentation of the projects at a special honors symposium.

# DEGREES AND PROGRAMS

## Degrees

### Bachelor's Degrees

These require a minimum of 126 semester credit hours. Majors which require more than 126 credit hours are identified under Programs of Instruction.

- Bachelor of Arts
- Bachelor of Science
- Bachelor of Science in Business Administration
- Bachelor of Science in Education
- Bachelor of Science in Engineering
- Bachelor of Professional Studies (120 semester credit hours)

### Associate's Degrees

These require a minimum of 63 semester credit hours.

- Associate in Business Administration
- Associate in Engineering

### Master's Degrees

Each requires a minimum of 33 semester credit hours.

- Master of Arts in Counseling (requires 60 credit hours)
- Master of Arts in Higher Education
- Master of Business Administration
- Master of Science in Organizational Leadership

### Second Degrees

A student who has earned a bachelor's degree from another institution may be granted a second degree by fulfilling all of the following requirements:

- 1) A minimum of 48 credit hours earned in residence at Geneva.
- 2) A minimum of 15 credit hours earned in a new major at Geneva.
- 3) All of Geneva's core requirements not fulfilled in the first degree.

A Geneva graduate may earn a second degree or major by completing the requirements, including at least 15 credit hours in the major earned at Geneva. Once a student graduates, the requirements for a second degree or major are determined by the catalog current at the time of re-enrollment.

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# TRADITIONAL UNDERGRADUATE PROGRAMS

## Department of Biblical Studies, Ministry and Philosophy

Following the guidelines established in the Foundational Concepts of Christian Education, the instructors in this department are committed to the historic Reformed doctrine of Scripture as the inspired, infallible, and authoritative Word of God.

Biblical studies are designed to develop the basis for Christian perspectives in the study of the liberal arts, to encourage the formulation of a scripturally informed conception of life and of the world, to equip for ministry, and to provide a foundation for advanced study and professional specialization.

The offerings in philosophy confront the student with fundamental ideas of Western thought, ancient and modern, encourage critical evaluation of various philosophic positions in the light of the Christian revelation, and seek to develop a systematic view of reality that is consonant with the Christian faith.

Besides supervising the majors and minors described in this section, and the Christian Ministries Major, the department shares responsibility for the minor in Christian school teaching, described on page 56.

### Biblical Studies Major • BA - Program requirements 36 credit hours

In addition to the nine credit hours required in the college core:

BIB 200	How to Read the Bible	3
BIB 308	Luke	3
or BIB 311	Matthew	3
or BIB 313	John	3

One Old Testament course from:

BIB 301	Old Testament Prophecy	3
BIB 302	Wisdom Literature	3
BIB 303	Old Testament Studies	3
BIB 304	Psalms	3
BIB 305	Isaiah	3
BIB 306	Daniel	3
BIB 307	Judah's Exile/Restoration	3
BIB 340	Inter-Testamental Literature	3
BIB 341	Archeology and Geography of Israel	3

Nine credit hours in philosophy selected from:

PHI 100	Critical Thinking	3
PHI 110	The Philosophical Conversation	3
PHI 112	Ethics *	3
PHI 113	C.S. Lewis *	3
PHI 200	Plato	3
PHI 202	Augustine *	3
PHI 204	Aristotle *	3
PHI 206	Aquinas *	3
PHI 300	History of Modern Philosophy	3
PHI 301	Kant	3
PHI 304	Nineteenth-Century Social Philosophers and Pragmatism	3
PHI 305	Contemporary Philosophy: The Analytic Tradition	3
PHI 306	Postmodern Philosophers	3
PHI 307	Women Philosophers	3
PHI 308	Contemporary Continental Philosophy	3
PHI 309	Kierkegaard & Nietzsche	3
PHI 310	Christian Understanding of Life *	3
PHI 353	Philosophy of Science	3
PHI 354	Political Philosophy	3
PHI 355	Philosophy for Theology	3
PHI 356	Knowledge and Reality	3

PHI 430	Philosophy of History	3
(Priority should be given to * courses)		
Three credit hours in church history:		
BIB 350	History of the Christian Church	
or BIB 351	Church History I: Patristic and Medieval	
or BIB 352	Church History II: Reformation and Modern	
or BIB 353	Covenanter History and Theology (Scotland)	3
Three credit hours in theology selected from:		
BIB 320	Special Topics in Theology	3
BIB 322	Calvin's Institutes	3
BIB 325	Biblical Theology	3
Three credit hours in evangelism:		
MIN 210	Evangelism	3
Three credit hours in practical theology selected from:		
MIN 205	Christian Education in the Local Church	3
MIN 215	Methods of Teaching the Bible	3
MIN 219	World Christian Movement	3
MIN 220	Topics in Christian Ministry	3
Six additional credit hours in Biblical studies or philosophy		6

### **Biblical Studies Minor**

Requires a minimum of 18 credit hours

Six credit hours in:

BIB 350	History of the Christian Church	
or BIB 351	Church History I: Patristic and Medieval	
or BIB 352	Church History II: Reformation and Modern	
or BIB 353	Covenanter History and Theology (Scotland)	3
PHI 100	Critical Thinking	3

Three credit hours from:

BIB 320	Special Topics in Theology	
or BIB 322	Calvin's Institutes	
or BIB 324	Introduction to Reformed Tradition	
or BIB 325	Biblical Theology	3

Three credit hours from:

BIB 301	Old Testament Prophecy	3
BIB 302	Wisdom Literature	3
BIB 303	Old Testament Studies	3
BIB 304	Psalms	3
BIB 305	Isaiah	3
BIB 306	Daniel	3
BIB 307	Judah's Exile/Restoration	3
BIB 308	Luke	3
BIB 309	Revelation	3
BIB 310	Pauline Epistles	3
BIB 311	Matthew	3
BIB 313	John	3
BIB 314	New Testament Studies	3
BIB 315	Acts	3
BIB 316	Romans	3
BIB 317	Ephesians/Pastorals	3

BIB 318	Hebrews	3
Three credit hours from:		
MIN 205	Christian Education in the Local Church	3
MIN 210	Evangelism	3
MIN 215	Methods of Teaching the Bible	3
MIN 219	World Christian Movements	3
Three credit hours from:		
PHI 310	Christian Understanding of Life	3
	or another philosophy course approved by the department	

### **Missions Major • BA- Program requirements 39 credit hours**

This track helps to equip a student for cross-cultural ministry, ordinarily for service under the supervision of a mission agency.

Three credit hours in Bible interpretation:		
BIB 200	How to Read the Bible	3
Nine credit hours in Bible content courses, including at least three credit hours in Old Testament and three credit hours in New Testament:		
BIB 301	Old Testament Prophecy	3
BIB 302	Wisdom Literature	3
BIB 303	Old Testament Studies	3
BIB 304	Psalms	3
BIB 305	Isaiah	3
BIB 306	Daniel	3
BIB 307	Judah's Exile/Restoration	3
BIB 308	Luke	3
BIB 309	Revelation	3
BIB 310	Pauline Epistles	3
BIB 311	Matthew	3
BIB 313	John	3
BIB 314	New Testament Studies	3
BIB 315	Acts	3
BIB 316	Romans	3
BIB 317	Ephesians/Pastorals	3
BIB 318	Hebrews	3
Three credit hours in philosophy from:		
PHI 310	Christian Understanding of Life	3
PHI 318	Philosophies of World Religions	3
Three credit hours in evangelism:		
MIN 210	Evangelism	3
Nine credit hours in missions from:		
MIN 201	Cultural Anthropology	3
MIN 219	World Christian Movement	3
MIN 224	Missions and Culture	3
MIN 225	Globalism and Multiculturalism	3
LIN 219	Introduction to Linguistics	3
LIN 220	Applied Linguistics	3
Three credit hours in theology selected from:		
BIB 320	Special Topics in Theology	3
BIB 322	Calvin's Institutes	3
BIB 324	Introduction to Reformed Tradition	3

BIB 325	Biblical Theology	3
Three credit hours in church history:		
BIB 350	History of the Christian Church	
or BIB 351	Church History I: Patristic and Medieval	
or BIB 352	Church History II: Reformation and Modern	
or BIB 353	Covenanter History and Theology (Scotland)	3
Six credit hours Internship involving guided experiences in cross-cultural outreach (MIN 493)		
		6

### **Pre-Seminary Major · BA - Program requirements 39 credit hours**

This track leads to seminary studies and is intended for the student aiming towards ordination to the Christian ministry.

Three credit hours in Bible Interpretation:		
BIB 200	How to Read the Bible	3
Six credit hours in Bible content courses divided between 3 credit hours Old Testament and 3 credit hours New Testament studies, and selected from:		
BIB 301	Old Testament Prophecy	3
BIB 302	Wisdom Literature	3
BIB 303	Old Testament Studies	3
BIB 304	Psalms	3
BIB 305	Isaiah	3
BIB 306	Daniel	3
BIB 307	Judah's Exile/Restoration	3
BIB 308	Luke	3
BIB 309	Revelation	3
BIB 310	Pauline Epistles	3
BIB 311	Matthew	3
BIB 313	John	3
BIB 314	New Testament Studies	3
BIB 315	Acts	3
BIB 316	Romans	3
BIB 317	Ephesians/Pastorals	3
BIB 318	Hebrews	3
Six credit hours in Hellenistic Greek or in Biblical Hebrew		
		6
Nine credit hours in philosophy selected from:		
PHI 100	Critical Thinking	3
PHI 110	The Philosophical Conversation	3
PHI 112	Ethics	3
PHI 200	Plato	3
PHI 202	Augustine	3
PHI 310	Christian Understanding of life	3
Three credit hours in church history:		
BIB 350	History of the Christian Church	
or BIB 351	Church History I: Patristic and Medieval	
or BIB 352	Church History II: Reformation and Modern	
or BIB 353	Covenanter History and Theology (Scotland)	3

Three credit hours in theology selected from:		
BIB 320	Special Topics in Theology	3
BIB 322	Calvin's Institutes	3
BIB 324	Introduction to Reformed Tradition	3
BIB 325	Biblical Theology	3

Three credit hours in evangelism:		
MIN 210	Evangelism	3

Three credit hours in internship:		
MIN 493	A Christian Ministries Internship	3

Three credit hours in electives chosen from any of the BIB, MIN or PHI categories.

As part of its Pre-Seminary program, Geneva's Bible department has entered into a 3-3 program with the Reformed Presbyterian Theological Seminary in Pittsburgh. This program is designed to make it possible for an undergraduate student to take three years of coursework at Geneva, and three years of coursework at the Reformed Presbyterian Theological Seminary and thus earn both an undergraduate degree in Christian Ministries at Geneva and a Master of Divinity at RPTS in the space of six years.

### **Missions/Aviation Dual Degrees • AAS and BA – 64 credit hours max CCBC**

In cooperation with the Community College of Beaver County, Geneva College has developed a dual degree program by which a student may earn the Associate in Applied Science degree (AAS) in professional piloting from the community college and the Bachelor of Arts in Christian Ministries- Missions degree (BA) from Geneva College. The program enhances the graduate's career potential by blending specific vocational training in aviation with the broader education experience involved in earning a baccalaureate degree.

Community College of Beaver County's AAS in aviation can be earned before, after, or entirely apart from fulfillment of requirements for Geneva's BA.

### **Community Development Minor**

18 credit hours		
MIN 201	Cultural Anthropology	3
MIN 225	Globalism and Multiculturalism	
or SOC 245	Gender, Class and Race	3
MIN 491	Sustainable Missions	3
SOC 230	Introduction to Community Development	3
SOC 271	Restoring the City	3
SOC 311	Sociology of the City	3

### **Missions Minor**

Requires a minimum of 18 credit hours		
Choose three courses selected from:		
MIN 201	Cultural Anthropology	3
MIN 219	World Christian Movement	3
MIN 224	Missions and Culture	3
MIN 225	Globalism and Multiculturalism	3
or approved course substitution or up to one 3-credit internship containing cross-cultural experience		

Six credits from BIB 301-BIB 314 (these are upper level OT and NT content courses)

Three credit hours of church history or theology.		
BIB 322	Calvin's Institutes	3
BIB 324	Introduction to Reformed Tradition	3
BIB 325	Biblical Theology	3

BIB 340	Inter-Testamental Literature	3
BIB 341	Archaeology & Geography of Israel	3
BIB 350	History of the Christian Church	3
BIB 351	Church History I: Patristic and Medieval	3
HIS 352	Church History II: Reformation and Modern	3

### Pre-Seminary Minor

Requires a minimum of 18 credit hours  
 Six credit hours of Bible content  
 Six credit hours of philosophy content  
 Three credit hours of theology  
 Three credit hours of practical theology

### Philosophy Major • BA - Program requirements 36 credit hours

Three credit hours introduction:

PHI 110	The Philosophical Conversation	3
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Three credit hours from:

PHI 112	Ethics	3
PHI 113	C. S. Lewis	3

Nine credit hours historic sequences from:

PHI 200	Plato	3
PHI 202	Augustine	3
PHI 204	Aristotle	3
PHI 206	Aquinas	3
PHI 308	Contemporary Continental Philosophy	3

Nine credit hours philosophy electives from:

PHI 300	History of Modern Philosophy	3
PHI 301	Kant	3
PHI 304	Nineteenth –Century Social Philosophers and Pragmatism	3
PHI 305	Contemporary Philosophy: The Analytic Tradition	3
PHI 306	Post Modernism	3
PHI 307	Women Philosophers	3
PHI 309	Kierkegaard and Nietzsche	3
PHI 310	Christian Understanding of Life	3
Note: Philosophy majors may substitute PHI 310 for BIB 300		
PHI 355	Philosophy for Theology	3

Three credit hours Bible requirements:

BIB 200	How to Read the Bible	3
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Three credit hours Bible electives from:

BIB 320	Special Topics in Theology	3
BIB 322	Calvin's Institutes	3
BIB 324	Introduction to Reformed Tradition	3
BIB 325	Biblical Theology	3

Three credit hours advanced philosophic topics from:

PHI 100	Critical Thinking	3
PHI 318	Philosophies of World Religions	3
PHI 353	Philosophy of Science	3
PHI 354	Political Philosophy	3
PHI 430	Philosophy of History	3

Three credit hours Senior Seminar:



**Philosophy Minor**

Eighteen credit hours in philosophy (PHI) courses, including PHI 110.

**Student Ministry Major • BA - Program requirements 52 credit hours**

This major prepares a student for ministry within the church, parachurch, or a variety of other organizations that work with students – children through college age. Adding substantial ministry experience to a solid Biblical, theoretical, and methods core, the major allows a student to concentrate on the area within their understood sense of personal calling, including: church and parachurch ministry; urban ministry; children’s ministry, adventure education; and campus ministry.

**Bible core (12 credit hours)**

Six credit hours from:

BIB 200	How to Read the Bible	3
BIB 308	Luke	3
BIB 311	Matthew	3
BIB 313	John	3

Three credit hours Old Testament course from:

BIB 301	Old Testament Prophecy	3
BIB 302	Wisdom Literature	3
BIB 303	Old Testament Studies	3
BIB 304	Psalms	3
BIB 305	Isaiah	3
BIB 306	Daniel	3
BIB 307	Judah’s Exile/Restoration	3

Three credit hours New Testament course from:

BIB 309	Revelation	3
BIB 310	Pauline Epistles	3
BIB 314	New Testament Studies	3
BIB 315	Acts	3
BIB 316	Romans	3
BIB 317	Ephesians/Pastorals	3
BIB 318	Hebrews	3

**Theory core (9 credit Hours)**

Three credit hours from:

MIN 319	Contemporary Adolescent Culture	3
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Three credit hours theology course from:

BIB 320	Special Topics in Theology	3
BIB 322	Calvin's Institutes	3
BIB 324	Introduction to Reformed Tradition	3
BIB 325	Biblical Theology	3

Three credit hours philosophy course from:

PHI 112	Ethics	3
PHI 113	C.S. Lewis	3
PHI 202	Augustine	3
PHI 206	Aquinas	3

**Methods core (12 credit hours)**

Nine credit hours from:

MIN 210	Evangelism	3
MIN 240	Introduction to Student Ministry	3
MIN 241	Methods of Student Ministry	3

Three additional credit hours methods course from:		
MIN 215	Methods of Teaching the Bible	3
PSY 252	Adolescent Development	3

**Specialization core** (3 credit hours)

Three credit hours from:		
MIN 242	Children’s Ministry	3
MIN 244	Urban Student Ministry	3
MIN 246	Campus Ministry	3
MIN 250	Theory and Practice of Experiential Education	3
MIN 253	Challenge Course Facilitation	3
SOC 230	Introduction to Community Development	3

**Experiential core** (16 credit hours)

Sixteen credit hours from:		
MIN 292	Ministries Practicum (two credit hours per course for two semesters)	4
MIN 430	Senior Seminar	3
MIN 493	Student Ministry Internship (taken with MIN 430)	9

**Student Ministry Minor**

- 18 credit hours:
- Six credit hours of BIB core—BIB 200 required plus one other course
- Three credit hours of Theory core
- Six credit hours of Methods core—MIN 240 or MIN 241 required plus one other course
- Three credit hours of Experiential core—MIN 292 or MIN 493

**Study Abroad Possibilities**

The Jerusalem University College program and the Conventer Theological Institute program are housed in the department. Interested students can find additional information regarding these programs on page 145.

**Department of Biology**

The Biology Department’s program is intended to give each student an understanding of and appreciation of the living world as God’s creation, provide an appreciation for the use and limitations of the scientific method of inquiry, and prepare the student majoring in biology for a life of service. Some areas in which the biologist serves are medicine, education, and research.

The department offers the environmental science major and the biology major, with concentrations in environmental biology, cell and molecular biology, and human biology, and supervises the pre-medical program (page 89) and programs in medical technology (page 37) and pre-nursing (page 37).

Geneva College is affiliated with the Au Sable Institute of Environmental Studies in Mancelona, Michigan. The institute is designed to support and serve evangelical Christian colleges by offering summer courses and programs in various areas of ecology, field biology, land resources, water resources, and environmental studies. The courses available through the institute are listed on page 144.

**Biology Major • BS - Program requirements 60-61 credit hours**

38 credit hours of biology (BIO) courses, including:		
BIO 107	Foundations of Biology	4
BIO 112	Introduction to Cellular Biology	4
BIO 225	Human Anatomy and Physiology I	4
BIO 319	Genetics	4
BIO 326	Human Anatomy and Physiology II	4
BIO 306	General Ecology	4
or EVS 111	Environmental Science	4

or EVS 221	Environmental Ethics	3
One of the following:		
	Embryology, Botany, Neuroscience, or Molecular Biology	4
BIO 419 or BIO 420	Senior Project Senior Paper	1
*BIO Electives above 290 (waived for BIO education majors and medical technology students ) (see list below for BIO electives)		9
CHM 111	General College Chemistry	4
CHM 221	Organic Chemistry I	4
CHM 222	Organic Chemistry II	4
PHY 181–182 or PHY 201–202	General Physics I – II College Physics I – II	4,4
MAT 105 or PSY 205	Elementary Statistical Methods Psychological Statistics	3
*BIO Electives:		
BIO 302	Embryology	4
BIO 305	Microbiology	4
BIO 306	General Ecology	4
BIO 310	Botany	4
BIO 315	Immunology	3
BIO 316	Virology	3
BIO 317	Biochemistry I	3
BIO 331	Biomedical Ethics	3
BIO 405	Molecular Biology	4
BIO 421	Genomics	3
BIO 422	Neuroscience	4
BIO 491	Field Biology Classes (Au Sable)	3-6
CHM 491	Environmental Chemistry (Au Sable)	3-6
SCS 491	Other Environmental Classes (Au Sable)	3-6
BIO 292	Practicum	1-4
BIO 491	Special Study	1-3
BIO 495	Independent Study	1-3

Additional recommendations from related fields: CHM 232 Quantitative Analytical Chemistry or PSY 202 Biological Bases of Behavior.

**Biology with Secondary Education Major • BS- Program requirements 57-58** which includes the following requirements:

BIO 112	Introduction to Cellular Biology	4
BIO 225	Human Anatomy and Physiology I	4
BIO 302	Embryology	4
BIO 306	General Ecology	4
BIO 310	Botany	4
BIO 319	Genetics	4
BIO 420	Senior Paper	1
CHM 111	General College Chemistry	4
CHM 221	Organic Chemistry I	4
MAT 101 or MAT 120 or MAT 161	College Algebra Precalculus Mathematics Calculus 1	3 4

MAT 105	Elementary Statistical Methods	
or PSY 205	Psychological	3
PHY 181	General Physics I	
or PHY 201	College Physics I	4
PHY 182	General Physics II	
or PHY 202	College Physics II	4
SCS 105	Environmental Science	3
SCS 215	Earth and Space Science	3
SCS 403	Teaching of Secondary Science	4

In addition, they must take the professional requirements listed on page 55.

Biology education students may delete either HUM 304 or a social sciences option from their core requirements.

Chapter 354, "Preparation of Professional Educators," was enacted in 2000 in Pennsylvania. This law mandates certain regulations in the preparation of professional educators in the state. Students are responsible to be certain they are meeting regularly with their adviser in regard to this legislation. **Geneva College is not responsible for students who will not be certified because of failure to meet certification requirements at the time of graduation.**

### **Biology Minor**

17-18 credit hours:

BIO 112	Introduction to Cellular Biology	4
BIO 225	Human Anatomy and Physiology I	4
BIO 306	General Ecology	4
or BIO 107	Foundations of Biology	4
or EVS 111	Environmental Science	4
or SCS 105	Environmental Science	3
Additional biology credit hours at 200 level or above		6

### **Environmental Biology Concentration**

18 credit hours:

BIO 306	Ecology	4
BIO 310	Botany	4
EVS 111	Environmental Science	3

Plus six credits of courses at the AuSable Institute of Environmental Studies 6

### **Cell and Molecular Biology Concentration**

19 credit hours:

BIO 112	Introduction to Cell Biology	4
BIO 317	Biochemistry	3
BIO 319	Genetics	4
BIO 405	Molecular Biology	4
BIO 421	Genomics	3
CHM 313	Biochemistry Laboratory	1

### **Human Biology Concentration**

22 credit hours:

BIO 225	Human Anatomy and Physiology I	4
BIO 326	Human Anatomy and Physiology II	4
Plus 14 credits from the following:		
BIO 302	Embryology	4
BIO 305	Microbiology	4
BIO 315	Immunology	3
BIO 316	Virology	3
BIO 331	Biomedical Ethics	3
BIO 422	Neuroscience	4

## Environmental Science Major • Program requirements 60 credit hours

The environmental science major is an interdisciplinary curriculum that focuses on the functioning of the natural world, environmental problems and solutions, and management of natural resources. As students seek to understand the role of humans as stewards of God's creation, they will gain a strong foundation in the natural sciences along with an understanding of ethics and public policy as they relate to environmental decision-making. Field-based courses at Au Sable Institute of Environmental Studies (see page 144) provide hands-on experience in the environment as well as additional opportunities to integrate faith and learning.

BIO 112	Cell Biology	4
BIO 225	Human Anatomy and Physiology I (lecture only)	3
BIO 306	General Ecology	4
BIO 310	Botany	4
BIO 319	Genetics	4
CHM 111	General College Chemistry	4
CHM 221	Organic Chemistry I	4
CHM 222	Organic Chemistry II	4
or CHM 232	Quantitative Analytical Chemistry	4
EVS 111	Environmental Science	4
EVS 221	Environmental Ethics	3
MAT 105	Elementary Statistical Methods	3
POL 361	American Public Policy	3
SCS 360	Land Resources (at Au Sable Institute)	4
Three additional courses at Au Sable Institute (See page 144 for a list of available courses.)		12

Additional recommendations: ENG 102, Academic Writing and Research Process, BIO 305, Microbiology, BIO 210, ID & Evolution, CHM 170, Worth of Water.

## Environmental Science Minor

18 credit hours

BIO 306	General Ecology	4
BIO 310	Botany	4
EVS 111	Environmental Science	4

Plus two courses taken at the Au Sable Institute of Environmental Studies 6

## Medical Technology Affiliate Degree Program

A three-year sequence at Geneva totaling at least 94 semester credit hours can be combined with a year of training in an approved school of medical technology to earn a bachelor of science degree from Geneva. The three-year program includes all the core requirements for Geneva's degree and 28 credit hours of biology and 16 credit hours of chemistry. See page 34 for the specific courses required for a biology major. Medical technology students are required to take BIO 305 Microbiology and BIO 315 Immunology, but they are not required to take physics or BIO 419 /BIO 420. The National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) requirements for medical technology include anatomy and physiology (BIO 225, BIO 326), immunology (BIO 315), genetics (BIO 319), microbiology (BIO 305), chemistry (CHM 111 General College Chemistry, CHM 221 Organic Chemistry I, CHM 222 Organic Chemistry II, CHM 232 Quantitative Analytical Chemistry, and statistics (MAT 105). Courses regularly offered at Geneva can satisfy the three-year curriculum requirements for the Board of Registry of Medical Technologists. The year of training at an approved school of medical technology is accepted as equivalent to the senior year in fulfilling Geneva's degree requirements.

## Nursing: Affiliate 2-2 • BSN

Geneva College has an affiliate relationship with Roberts Wesleyan University in Rochester, New York. This enables a student to earn a BSN degree by combining two years at Geneva College with two years at Roberts Wesleyan.

This program permits students to participate in Geneva's Reformed approach to the liberal arts and sciences for two years. The credit hours are then transferred to Roberts Wesleyan University and applied toward their four-year BSN degree. All nursing theory and clinical courses are included in the last two years of this program.

Completion of the prescribed courses at Geneva with a cumulative GPA and a science GPA of 2.50 or higher guarantees admission to the final two years at Roberts Wesleyan University. All the Geneva courses may also be applied toward a Geneva degree if so desired.

**Program requirements**

BIB 112, 113	Biblical Introduction I & II	3,3
BIO 112	Introduction to Cellular Biology	4
BIO 218	Introduction to Nutrition	3
BIO 225, 326	Human Anatomy and Physiology I & II	4,4
BIO 305	Microbiology	4
CHM 111	General College Chemistry	4
CHM 221	Organic Chemistry I	4
COM 101	Principles of Communication	3
ENG 101	English Composition	3
ENG 112	Introduction to Literacy Study and Research	3
HIS 150	Survey of American History	
or HIS 220	Europe I: Ancient through Medieval	
or HIS 221	Europe II: 1500-1815	3
HUM 203	Making the West	3
MAT 105	Elementary Statistical Methods	3
PED 101	Physical Education	1
PED 103	Physical Fitness	1
PSY 201	Introduction to Psychology	3
PSY 250	Life Span Development	3
SOC 120	Society	3

\*Two summer nursing courses are required at Roberts Wesleyan University before beginning the junior year there. CPR certification is also a prerequisite.

This program may prepare the student to transfer into other BSN programs. However, each program has its own unique requirements and many are not very accommodating to transfer students. A student interested in transferring into another program should contact that school in their freshman year to determine their requirements and transfer policies.

**Nursing: Affiliate 3-2 Double Degree Program • BS and BSN**

Nursing students wishing to receive a BS degree in biology from Geneva College may complete three years at Geneva before transferring to Roberts Wesleyan University or another BSN program. During those three years they complete all the college’s core requirements for the BS degree and at least 28 credit hours of biology courses, including all the courses required for the biology major except BIO electives and BIO 419 or BIO 420. See page 34 of the catalog for the major requirements. Their program must include all the courses required for admission to the third year of the BSN program into which they wish to transfer. The first year at the nursing school is then accepted as equivalent to the senior year in fulfilling Geneva’s degree requirements. The nursing school conveys the BSN after one additional year.

**It is also possible to complete a Bachelor of Science degree in Biology at Geneva and then enter one of many accelerated BSN programs.**

See page 89 for the college’s pre-medical program.

**Department of Business, Accounting, and Management**

The mission of the Business, Accounting, and Management Department is to develop competent business practitioners who can be effective witnesses for our Lord in the workplace. We believe that business is a calling by God that involves integrating Biblical concepts such as wisdom, stewardship, justice, righteousness, and integrity. Therefore the department desires to develop graduates who are grounded in Biblical principles and business knowledge equipped to serve Jesus Christ in their vocational endeavors.

The department offers an MBA in the graduate studies division and baccalaureate degrees in accounting, business, aviation and sports management/business. Within in the business major, concentrations are offered in finance/economics, sport management, management/human resource management, marketing, international business and information systems. The

business programs emphasize the application of theory and professional practice; and the faculty possesses both academic competence and professional experience from a variety of employment settings. The department prepares students for responsible positions in business, accounting, not-for-profit, and/or government organizations.

Geneva College is a charter member of the Association of the Accreditation Council for Business Schools and Programs (ACBSP) and received national accreditation in 1997 for their undergraduate program and in 2004 for their graduate program. The accounting major meets the Pennsylvania State Board of Accountancy requirements to sit for the Certified Public Accountant (CPA) examination.

Unique aspects of the business program include the use of computer simulations and projects, the management lunch program with local executives, service in student professional clubs and organizations, and continual opportunities to personally interact with the faculty. Internship placements are available in a variety of work settings. The department may offer intensive classes during periods immediately prior to and following regular semesters. These courses allow students to accommodate work schedules, internships, double majors, and other personal considerations.

In cooperation with the Community College of Beaver County (CCBC), Geneva College offers a four-year “dual degree” program in business and aviation. Students earn the associate in applied science degree (AAS) in professional piloting, aerospace management, or air traffic control from the Community College of Beaver County, plus the Bachelor of Science degree in Business Administration (BSBA) from Geneva College. Those graduating from the CCBC program qualify for the appropriate Federal Aviation Administration (FAA) ratings and certification.

The Business, Accounting, and Management Department also offers an Associate in Business Administration (ABA). All these courses may be applied toward a bachelor’s degree if desired. College minors are offered in business, accounting, and finance/economics.

### **Accounting Major • BSBA - Program requirements 66 credit hours**

The accounting major prepares students for careers in managerial, governmental, or certified public accounting positions. Geneva’s program affords students the opportunity to define their accounting track towards public or private accounting. Both tracks offer students instruction from CPA faculty and potential for internships in their related areas of interest. The public track is designed to meet the requirements of the State Board of Accountancy to sit for the CPA examination. This can be accomplished in a traditional undergraduate setting or in a combined undergraduate-graduate program. Accounting graduates are more than equipped to meet today’s demand for well prepared and ethical accountants who are able to function in the business world.

ACC 151,152	Principles of Accounting I, II	3,3
ACC 256	Managerial Accounting	3
ACC 261, 262	Intermediate Accounting I, II	3,3
ACC 350	Accounting Systems and Software	3
ACC 357	Taxation	3
ACC 363	Advanced Accounting	3
ACC 365	Special Topics in Accounting	
or BUS 335	Financial Statement Analysis	3
ACC 457	Auditing	3
BUS 110	Business Foundations	3
BUS 241, 242	Quantitative Analysis I, II	3,3
BUS 310	Principles of Management	3
BUS 311	Business Law	3
BUS 320	Principles of Marketing	3
BUS 330	Principles of Finance	3
BUS 344	Management of Information Systems	3
BUS 400	Biblical Management and Business Ethics	3
BUS 410	Strategic Management	3
ECO 211, 212	Micro and Macro Economics	3,3

### **Accounting Minor**

Any 18 credit hours from among accounting (ACC) courses except ACC 457 Auditing.

## Business Major • BSBA - Program requirements 66 credit hours

Geneva's business major requires a 54 credit hour core that provides the broad foundation necessary to comprehend the variety of functions and activities in business. The core then integrates the functional components for a strategic view of management. The business major builds upon the core with the choice of a 12 credit hour concentration of upper division courses in a specialized area. Concentrations may be selected in management/entrepreneurship, marketing, finance, human resource management, international business, economics, sport management, and information systems. Majors taking business/aviation use their aviation preparation as their concentration.

### Business Major core courses 54 credit hours

ACC 151	Principles of Accounting I	3
ACC 256	Managerial Accounting	3
BUS 110	Business Foundations	3
BUS 115	Business Communication	3
BUS 241, 242	Quantitative Analysis I, II	3,3
BUS 310	Principles of Management	3
BUS 311	Business Law	3
BUS 314	International Business	3
BUS 320	Principles of Marketing	3
BUS 330	Principles of Finance	3
BUS 344	Management of Information Systems	3
BUS 350	Human Resource Management	3
BUS 400	Biblical Management and Business Ethics	3
BUS 410	Strategic Management	3
BUS 415	Operations Management	3
ECO 211, 212	Micro and Macro Economics	3,3

### Management/Entrepreneurship Concentration

Lead Faculty Member: Robert Reith

12 credit hours:

BUS 312	Supervision	3
BUS 411	Advanced Business Law	3
BUS 417	The Entrepreneur	3
BUS 441	Project Management	3

**Either** BUS 493 Internship **or** BUS 495 Independent Study may be substituted for **one** of the above concentration courses upon approval of the Concentration Lead Faculty Member. Other course substitutions require the approval of the Department Chair or Vice-Chair. In the case of BUS 493, the internship **MUST** be central to the concentration of study.

### Finance Concentration

Lead Faculty Members: Dan Raver and Gary VanderPlaats

12 credit hours:

ACC 357	Taxation	3
BUS 331	Investments	3
BUS 430	Intermediate Finance	3
ECO 311	Money, Credit, and Banking	3

**Either** BUS 493 Internship **or** BUS 495 Independent Study may be substituted for **one** of the above concentration courses upon approval of the Concentration Lead Faculty Member. Other course substitutions require the approval of the Department Chair or Vice-Chair. In the case of BUS 493, the internship **MUST** be central to the concentration of study.

### Marketing Concentration

Lead Faculty Member:

12 credit hours:

BUS 420	Marketing Research	3
BUS 421	Advertising and Promotion	3



or BUS 422	Sales and Sales Management	3
BUS 425	Consumer Behavior	3
BUS 428	Strategic Marketing Policy	3

**Either** BUS 493 Internship **or** BUS 495 Independent Study may be substituted for **one** of the above concentration courses upon approval of the Concentration Lead Faculty Member. Other course substitutions require the approval of the Department Chair or Vice-Chair. In the case of BUS 493, the internship **MUST** be central to the concentration of study.

### **Human Resource Management Concentration**

Lead Faculty Member: Matt Fuss

12 credit hours:

BUS 453	Employee & Labor Relations	3
BUS 454	Compensation & Benefits	3
BUS 455	Strategic Human Resource Management	3
BUS 456	Strategic Staffing	3

**Either** BUS 493 Internship **or** BUS 495 Independent Study may be substituted for **one** of the above concentration courses upon approval of the Concentration Lead Faculty Member. Other course substitutions require the approval of the Department Chair or Vice-Chair. In the case of BUS 493, the internship **MUST** be central to the concentration of study.

### **International Business Concentration**

Lead Faculty Member: Denise Murphy-Gerber

12 credit hours:

COM 225	Culture & Communication	3
BUS 424	International Marketing and Export Management	3
ECO 327	Comparative Economic Systems	3
SPA 101	Elementary Spanish I	
or FLC 101	Foreign Language and Culture I	
or POL 341	Politics of Global Economics	3

**Either** BUS 493 Internship **or** BUS 495 Independent Study may be substituted for **one** of the above concentration courses upon approval of the Concentration Lead Faculty Member. Other course substitutions require the approval of the Department Chair or Vice-Chair. In the case of BUS 493, the internship **MUST** be central to the concentration of study.

### **Sport Management Concentration**

Lead Faculty Member: Denise Murphy-Gerber

12 credit hours:

SPM 101	Introduction to Sport Management	3
SPM 201	Legal Issues in Sport	3
SPM 302	Facility Management and Design	3
SPM 401	Sport in American Culture	3

Either SPM 493 Internship **or** BUS 495 Independent Study may be substituted for any **one** of the above concentration courses upon approval of the Concentration Lead Faculty Member. Other course substitutions require the approval of the Department Chair or Vice-Chair. In the case of SPM 493, the internship **MUST** be central to the concentration of study.

Students should declare a concentration as soon as possible, and no later than the beginning of their junior year.

### **Associate in Business - Program requirements 33 credit hours**

ACC 151,152	Principles of Accounting I, II	3,3
BUS 110	Business Foundations	3
BUS 115	Business Communication	3
BUS 241	Quantitative Analysis I	3
BUS 310	Principles of Management	3

BUS 311	Business Law	3
BUS 320	Principles of Marketing	3
BUS 330	Principles of Finance	3
ECO 211, 212	Micro and Macro Economics	3,3

### **Business Minor**

Eighteen credit hours:

ACC 151	Principles of Accounting I	3
BUS 110	Business Foundations	3
BUS 310	Principles of Management	3
BUS 311	Business Law	3

and any six credit hours of upper-level business courses 6

A minor of an alternative 18 credit hours content may be taken with department chair approval.

### **Finance/Economics Minor for non-business majors**

Eighteen credit hours:

ACC 151	Principles of Accounting I	3
BUS 330	Principles of Finance	3
ECO 211	Micro Economics	3
ECO 212	Macro Economics	3
ECO 311	Money, Credit, and Banking	3

plus either BUS 331 Investments or any other 300 level economics course 3

### **Business Administration and Aviation Dual Degrees • AAS and BSBA - 64 credit hours max CCBC**

In cooperation with the Community College of Beaver County, Geneva College has developed a dual degree program by which a student may earn the Associate in Applied Science degree (AAS) in professional piloting, air traffic control, or aerospace management from the community college and the Bachelor of Science in Business Administration degree (BSBA) from Geneva. The program enhances the graduate's career potential by blending specific vocational training in aviation with the broader educational experience involved in earning a baccalaureate degree.

Community College of Beaver County's AAS in aviation can be earned before, after, or entirely apart from fulfillment of requirements for Geneva's BSBA. Two of the programs involve 129 or more credit hours as compared with 126 credit hours in a usual four-year one-degree program. Some students may prefer to plan for an additional semester or for some summer study.

### **Sport Management/Business Major • BS- Program Requirements 57 credit hours**

The Sport Management major prepares students for positions in the athletic world including athletic administration, sport/recreational facility management, and coaching and event management. Students explore the theories and principles of management as applied to sport programs and facilities. As a joint venture of the Department of Business and the Department of Physical Education, the goal of the sport management major is to prepare students to become a valuable part of the workforce in a variety of venues within the sport culture, thereby fulfilling the Geneva College mission statement, "for the purpose of developing servant-leaders, transforming society for the kingdom of Christ."

Take each of the following Business courses (39 credits):

ACC 151	Principles of Accounting I	3
BUS 110	Business Foundations	3
BUS 115	Business Communication	3
BUS 241	Quantitative Analysis I	3
BUS 310	Principles of Management	3
BUS 311	Business Law	3
BUS 314	International Business	3
BUS 320	Principles of Marketing	3
BUS 330	Principles of Finance	3
BUS 400	Biblical Management and Business Ethics	3
BUS 410	Strategic Management	3

ECO 211	Micro Economics	3
ECO 212	Macro Economics	3
Take each of the following SPM courses (18 credits):		
SPM 101	Introduction to Sport Management	3
SPM 201	Legal Issues in Sport	3
SPM 205	Sport Management Practicum	3
SPM 206	Governance and Organization of Sport	3
SPM 302	Facility Management and Design	3
SPM 401	Sport in American Culture	3

\*An additional 1-9 credits in SPM 493 (Internship) may be taken as elective credits.

## Department of Chemistry, Mathematics, and Physics

This department administers programs in which students learn about the intricate details of God's physical creation. We seek to help students develop their abilities so that they can understand the physical creation deeply and thus be able to serve with excellence in a wide variety of callings and careers.

The programs or majors administered by our department include Biochemistry, Chemistry, Applied Mathematics, and Physics. Within the Chemistry major, there are options for a professional curriculum track, or a more basic track that allows room for more electives. In addition, we offer curricular tracks leading to Pennsylvania certification to teach at the secondary level in Chemistry, Mathematics, or Physics.

Our Chemistry program has been approved by the American Chemical Society's Committee on Professional Training (ACS-CPT) continuously since 1958. Both the Biochemistry major and the Professional Chemistry major lead to certification by the ACS-CPT. The Biochemistry major is an excellent preparation for graduate or medical school.

Students in all of our programs will find opportunities for research and for advanced study in upper-level courses. We emphasize laboratory skills in the chemistry and physics programs, and the applications of mathematics to solve problems.

### Biochemistry Major – BS – Approved by the ACS-CPT– Program requirements 73 credit hours

Chemistry requirements 37 credit hours		
CHM 111	General College Chemistry	4
CHM 221	Organic Chemistry I	4
CHM 222	Organic Chemistry II	4
CHM 232	Quantitative Analytical Chemistry	4
CHM 304	Inorganic Chemistry	3
CHM 306	Instrumental Analysis	3
CHM 307	Physical Chemistry I: Thermodynamics	3
CHM 312	Advanced Laboratory—Physical/Inorganic	2
CHM 313	Biochemistry Laboratory	1
CHM 317	Biochemistry I	3
CHM 318	Biochemistry II	3
CHM 420	Chemical Research	2
CHM 421	Current Topics Seminar	1
Supporting Field requirements 28 credit hours:		
BIO 112	Introduction to Cellular Biology	4
BIO 319	Genetics	4
BIO 405	Molecular Biology	4
MAT 161	Calculus I	4
MAT 162	Calculus II	4
PHY 201	College Physics I	4
PHY 202	College Physics II	4
At least 8 credits chosen from the following Electives:		
BIO 317	Immunology	3

or BIO 421	Genomics	3
CHM 305	Advanced Organic	3
CHM 308	Physical Chemistry II	3
CHM 310	Advanced Laboratory (Organic)	1-2
CHM 311	Advanced Laboratory (Instrumental)	2
CHM 412	Polymer Chemistry	3
CHM 421	Current Topics Seminar	1

A passing grade on a chemistry comprehensive exam is required.

### **Chemistry Major – BS – Basic Chemistry Concentration – Program requirements 47 credit hours**

Chemistry requirements 31+ credit hours

CHM 111	General College Chemistry	4
CHM 221	Organic Chemistry I	4
CHM 222	Organic Chemistry II	4
CHM 232	Quantitative Analytical Chemistry	4
CHM 421	Current Topics Seminar	1
Any Advanced Laboratory (CHM 310-313)		1

At least 13 credit hours of additional courses from the following  
(with due regard for prerequisites):

CHM 304	Inorganic Chemistry	3
CHM 305	Advanced Organic Chemistry	3
CHM 306	Instrumental Analysis	3
CHM 307	Physical Chemistry I: Thermodynamics	3
CHM 308	Physical Chemistry II: Structure and Dynamics	3
CHM 310	Advanced Laboratory (Organic)	1-2
CHM 311	Advanced Laboratory (Instrumental)	2
CHM 312	Advanced Laboratory—Physical/Inorganic	1-2
CHM 313	Biochemistry Laboratory	1
CHM 317	Biochemistry I	3
CHM 318	Biochemistry II	3
CHM 412	Polymer Chemistry	3
CHM 420	Chemical Research	1-2
CHM 421	Current Topics Seminar	1

Supporting Field Requirements 16 credit hours:

MAT 161	Calculus I	4
MAT 162	Calculus II	4
PHY 201	College Physics I	4
PHY 202	College Physics II	4

A passing grade on a chemistry comprehensive exam is required.

### **Chemistry Major· BS – Professional Concentration—Approved by the ACS-CPT– Program requirements 71-72 credit hours**

Chemistry requirements 33 credit hours

CHM 111	General College Chemistry	4
CHM 221	Organic Chemistry I	4
CHM 222	Organic Chemistry II	4
CHM 232	Quantitative Analytical Chemistry	4
CHM 304	Inorganic Chemistry	3
CHM 307	Physical Chemistry I: Thermodynamics	3
CHM 308	Physical Chemistry II: Structure and Dynamics	3
CHM 312	Advanced Laboratory—Physical/Inorganic	2
CHM 317	Biochemistry I	3
CHM 420	Chemical Research	2

CHM 421	Current Topics Seminar	1
Supporting Field requirements 27-28 credit hours:		
BIO 112	Introduction to Cellular Biology	4
MAT 161	Calculus I	4
MAT 162	Calculus II	4
MAT 261	Calculus III	4
PHY 201	College Physics I	4
PHY 202	College Physics II	4
Plus one of the following:		
ELE 309	Electronic Devices and Circuits I	4
MAT 307	Linear Algebra	3
MAT 350	Numerical Methods	3
MAT 405	Differential Equations	3
PHY 408	Modern Physics	3

Plus at least 11 credits chosen from among the following courses, of which at least 2 credits must be from CHM 310, 311, or 313.

CHM 305	Advanced Organic	3
CHM 306	Instrumental Analysis	3
CHM 310	Advanced Laboratory (Organic)	1-2
CHM 311	Advanced Laboratory (Instrumental)	2
CHM 313	Biochemistry Laboratory	1
CHM 318	Biochemistry II	3
CHM 412	Polymer Chemistry	3
CHM 421	Current Topics Seminar	1

A passing grade on a chemistry comprehensive exam is required.

### **Chemistry with Secondary Education Major • BS - Program requirements 88 credit hours**

Chemistry requirements 33 credit hours

CHM 111	General College Chemistry	4
CHM 221	Organic Chemistry I	4
CHM 222	Organic Chemistry II	4
CHM 232	Quantitative Analytical Chemistry	4
CHM 304	Inorganic Chemistry	3
CHM 307	Physical Chemistry I: Thermodynamics	3
CHM 308	Physical Chemistry II: Structure and Dynamics	3
CHM 312	Advanced Laboratory—Physical/Inorganic	2
CHM 317	Biochemistry I	3
CHM 420	Chemical Research	2
CHM 421	Current Topics Seminar	1

Supporting Field requirements 16 credit hours:

MAT 161	Calculus I	4
MAT 162	Calculus II	4
PHY 201	College Physics I	4
PHY 202	College Physics II	4

Plus all required courses and requirements for secondary education certification. See page 55.

A passing grade on a chemistry comprehensive exam is required.

Chemistry majors with secondary education certification are not required to take a HUM 304 core course.

## Chemistry Minor

Twenty credit hours in Chemistry as follows:

CHM 111	General College Chemistry	4
CHM 221	Organic Chemistry I	4
CHM 222	Organic Chemistry II	4
CHM 232	Quantitative Analytical Chemistry	4
CHM 421	Current Topics Seminar	1

And at least 3 additional credit hours in CHM courses at the 300 level or above.

## Applied Mathematics Major • BS – Program requirements 62-64 credit hours

To be stewards of God's creation, we are given the precious gift of mathematics. The department offers training in the tools of mathematics for students in science and engineering, as well as studies of the properties of mathematics for those who will pursue teaching or graduate school.

35 credit hours of mathematics courses including:

MAT 130	Discrete Mathematics	3
MAT 161	Calculus I	4
MAT 162	Calculus II	4
MAT 261	Calculus III	4
MAT 265	Probability and Statistics	3
MAT 307	Linear Algebra	3
MAT 309	Introduction to Abstract Algebra	2
MAT 310	Introduction to Real Analysis	2
MAT 350	Numerical Methods	3
MAT 405	Differential Equations	4
MAT 409	Partial Differential Equations	3

Students must complete an applied mathematics focus area in one of the following ways:

- Complete the Actuarial Science minor (27 credits)
  - Complete 9 credits in CSC courses plus the requirements for a minor in Biology, Business, Chemistry, Engineering, Environmental Science, or Physics. ( 27-29 credits)
  - Complete a Computer Science minor plus enough additional courses in CSC, CPE, ELE, EGR, or PHY to make a total of 27 credits. (27 credits)
- Alternatively, a student could complete a second major in Computer Science.

## Actuarial Science Minor- 27 credits

Only available to Applied Mathematics majors.

27 credit hours including:

ACC 151	Principles of Accounting I	3
ACC 152	Principles of Accounting II	3
BUS 241	Quantitative Analysis I	3
BUS 242	Quantitative Analysis II	3
BUS 310	Principles of Management	3
BUS 330	Principles of Finance	3
CSC 111	Introduction to Engineering Computation	3
ECO 211	Microeconomics	3
ECO 212	Macroeconomics	3

## Mathematics Education Major • BS - Program requirements 82 credit hours

MAT 105	Elementary Statistical Methods	
or MAT 265	Probability and Statistics	3
MAT 130	Discrete Mathematics	3
MAT 161	Calculus I	4
MAT 162	Calculus II	4
MAT 261	Calculus III	4
MAT 307	Linear Algebra	3
MAT 309	Introduction to Abstract Algebra	2

MAT 310	Introduction to Real Analysis	2
MAT 350	Numerical Methods	3
MAT 404	College Geometry	3
CSC 101	Structured Programming	3
EDU 380	History of Mathematics and Mathematics Education	2
EDU 382	Math Curricula in the Middle and Secondary School	2
MAT 403	Methods of Teaching Math (included in secondary certification requirement)	4
PHY 201	College Physics I	4
ECO 100	Fundamentals of Economics	
or ECO 211	Micro Economics	
or ECO 212	Macro Economics	3

Plus required courses and requirements for secondary certification. See page 55.

### Mathematics Minor

Any 18 credit hours above the level of MAT 105.

### Physics Major · BS – Program Requirements 61-65 credit hours

The major provides a basis for entering industrial laboratories as a professional physicist or in a field related to physics, for working toward an advanced degree, or for obtaining certification to teach.

PHY 201	College Physics I	4
PHY 202	College Physics II	4
PHY 303	Advanced Physical Measurement I	1-3
PHY 304	Advanced Physical Measurement II	1-3
CHM 111	General College Chemistry	4
CHM 221	Organic Chemistry I	
or CHM 232	Quantitative Analytical Chemistry	4
ELE 305	Electromagnetic Fields and Waves	4
ELE 309	Electronic Devices and Circuits I	4
ELE 410	Electronic Devices and Circuits II	4
MAT 161	Calculus I	4
MAT 162	Calculus II	4
MAT 261	Calculus III	4
MAT 350	Numerical Methods	
or MAT 409	Partial Differential Equations	3
MAT 405	Differential Equations	4

Plus 12 credit hours of major options selected from physics courses numbered 300 or higher.

### Physics with Secondary Education Major · BS – Program Requirements 63 credits hours

CHM 111	General College Chemistry	4
CHM 221	Organic Chemistry I	
or CHM 232	Quantitative Analytical Chemistry	4
ELE 305	Electromagnetic Fields and Waves	4
ELE 309	Electronic Devices and Circuits I	4
ELE 410	Electronic Devices and Circuits II	4
MAT 161	Calculus I	4
MAT 162	Calculus II	4
MAT 261	Calculus III	4
MAT 350	Numerical Methods	
or MAT 409	Partial Differential Equations	3
MAT 405	Differential Equations	4
PHY 201	College Physics I	4
PHY 202	College Physics II	4
PHY 301	Classical Mechanics	3
PHY 303	Advanced Physical Measurement I	2

PHY 304	Advanced Physical Measurement II	2
PHY 306	Optics	3
PHY 307	Thermodynamics	3
PHY 408	Modern Physics	3

In addition, those preparing to teach must include general and professional education courses and requirements specified on page 55.

### Physics Minor

At least 18 credit hours from:

PHY 160	Introduction to Acoustics	
or SCS 201	Astronomy	3
PHY 201	College Physics I	4
PHY 202	College Physics II	4
PHY 250	Observational Astronomy	3
PHY 301	Classical Mechanics	3
PHY 303	Advanced Physical Measurement I	1-3
PHY 304	Advanced Physical Measurement II	1-3
PHY 306	Optics	3
PHY 307	Thermodynamics	
or CHM 307	Physical Chemistry I: Thermodynamics (course is cross-listed)	3
PHY 408	Modern Physics	3
PHY 491	Special Topics	1-3
ELE 305	Electromagnetic Fields and Waves	4
ELE 309	Electronic Devices and Circuits I	4
ELE 410	Electronic Devices and Circuits II	4

Only one of SCS 201 or PHY 160 may be used toward a physics minor.

## Department of Communication

The Department of Communication at Geneva College offers degrees in both Communication and Communication Disorders.

The Communication major specifically addresses contemporary concerns and trends in human communication. This includes the study of communication theory and media (writing, speaking, graphic, digital). We believe we are called to use communication creatively and compassionately, bridging differences of ability and culture, transforming society for the kingdom of Christ. In addition to taking a core of classes which expose them to the whole realm of communication, each student will choose a concentration of study: communication studies, integrated media, public relations, visual communication, and writing.

The Communication Disorders program is committed to studying typical and disordered human communication from a biblical perspective. It is our goal to prepare well-qualified students for entrance into graduate programs and later into the field of communication disorders. It is rewarding to see our graduates working as Christian speech/language pathologists, modeling the compassion of Jesus when working with people disabled by communication disorders.

### Communication Major • BA - Program requirements 44 credit hours

Communication core 28 credit hours:

COM 111	Introduction to Communication	3
COM 210	Leadership Communication	
or COM 220	Group Communication	3
COM 215	Argumentation and Debate	3
COM 225	Culture & Communication	3
COM 250	Mediated Communication	3
COM 310	Public Speaking	3
COM 315	Communication Process	3
COM 320	Communications Workshop Facilitation	3
COM 400	The Communication Professional	3



-Choose one practicum outside of concentration area  
COM 201, 202, 204, VIS 205, ENG 221, or ENG 223

1

## Concentrations

In addition to the communication core and practicum requirement, each student will choose one of the following concentrations. Students who wish to declare two concentrations may not have more than two courses that overlap. An asterisk\* indicates a course is required for that concentration.

### Communication Studies Concentration

Choose 16 credit hours from the following:

BUS 115	Business Communication	3
*COM 210	Leadership Communication	
or COM 220	Group Communication (the one not taken in the com. core)	3
*COM 230	Interpersonal Communication	3
COM 330	Special Topics in Communication	3
ENG 232	Introduction to Rhetoric	
or ENG 102	Academic Writing and Research Process	3
MAT 105	Elementary Statistical Methods	3
PHI 110	The Philosophical Conversation	3
*One Practicum:	COM 201, 202, 204, or VIS 205	1

### Integrated Media Concentration

Choose 16 credit hours from the following:

*COM 150	Media Literacy	3
*COM 235	Studio Production	3
*COM 245	Writing for Integrated Media	3
COM 255	Field Production	3
COM 280	Public Relations Publications	3
COM 330	Special Topics in Communication	3
COM 340	Advanced Audio Production	3
COM 350	Principles of Multimedia	3
COM 410	Media, Law, Regulation and Ethics	3
*Practicum:	COM 204	1

### Public Relations Concentration

Choose 16 credit hours from the following:

*COM 180	Introduction to Public Relations	3
COM 245	Writing for Integrated Media	
or ENG 241	Contemporary Newswriting	3
*COM 280	Public Relations Publications	3
COM 330	Special Topics in Communication	3
COM 350	Principles of Multimedia	3
*COM 380	Advanced Public Relations	3
ENG 205	Advanced Composition	3
ENG 242	Editing	3
*Practicum:	COM 202	1

### Visual Communication Concentration

Choose 16 credit hours from the following:

CHM 160	Chemistry in Art	3
COM 235	Studio Production	3
COM 280	Public Relations Publications	3
ENG 212	Cinema	3
ENG 213	Topics in Cinema	3
*VIS 201	Art Fundamentals	3
*VIS 202	Painting Techniques (Repeatable with instructor permission)	3
*VIS 300	Drawing Techniques (Repeatable with instructor permission)	3

VIS 330	Topics in Visual Communication or other art courses (Repeatable with instructor permission)	3
*One Practicum:	VIS 205	1

### Writing Concentration

Choose 16 credit hours from the following:

*COM 245	Writing for Integrated Media	3
ENG 205	Advanced Composition	
or ENG 102	Academic Writing and Research Process	3
ENG 215	Creative Writing: Fiction	
and/or ENG 216	Creative Writing: Poetry	3
ENG 241	Contemporary Newswriting	3
ENG 242	Editing	3
ENG 311	Writing for Business and Industry	3
ENG 344	Publishing	3
*Choose one practicum:	ENG 221 or ENG 223	1

### Communication Disorders Major - BA - Program requirements 54 credit hours

Adviser:

CDS 190	Introduction to Communication Disorders	3
CDS 220	Language Development	3
CDS 230	Phonetics	3
CDS 250	Treatment Procedures in Communicative Disorders	3
CDS 260	Introduction to Audiology	3
CDS 270	Aural Rehabilitation	3
CDS 280	Anatomy and Physiology of Speech Mechanism	3
CDS 340	Voice/Fluency Disorders	3
CDS 350	Language Disorders in Children	3
CDS 360	Articulation/Phonological Disorders in Children	3
CDS 370	Neurogenic Communication Disorders in Adults	3
*CDS 450	Clinical Experience in Communication Disorders	6
COM 225	Culture & Communication	3
LIN 219	Introduction to Linguistics	3
LIN 220	Applied Linguistics	3
PHY 160	Introduction to Acoustics	3
MAT 105	Elementary Statistical Methods	
or PSY 205	Psychological Statistics	3

\* Communication Disorders majors must have an overall GPA and major GPA of 3.0 to enroll in CDS 450 Clinical Experience in Communication Disorders.

### Communication Disorders Minor

Any 18 credit hours from the following courses:

CDS 190	Introduction to Communication Disorders	3
CDS 220	Language Development	3
CDS 230	Phonetics	3
CDS 250	Treatment Procedures in Communicative Disorders	3
CDS 260	Introduction to Audiology	3
CDS 270	Aural Rehabilitation	3
CDS 280	Anatomy and Physiology of the Speech Mechanism	3
CDS 340	Voice/Fluency Disorders	3
CDS 350	Language Disorders in Children	3
CDS 360	Articulation/Phonological Disorders in Children	3
CDS 370	Neurogenic Communication Disorders in Adults	3

# Department of Core Studies

## Core Aims

Geneva College believes that diligent study of the core curriculum will enable the student to become:

### I) A biblically spiritual person

Geneva aims to give every student the opportunity to know the cardinal truths of the Christian religion, to consider the claims of Christ as Savior and Lord and to encourage students to embrace a life of glorifying, enjoying and serving God.

*Specifically, we desire that students will:*

1. Know the God of Christianity, His expectations, and His gifts to us.
2. Be skilled in applying Biblical truth to contemporary society.
3. Know the essential Biblical truths of the Christian faith, evaluate their own faith with respect to these truths, and personally consider the claims of Christ as Savior and Lord.
4. Acknowledge the relevance of the church to the Christian faith, examine their motivations for involvement in a worshiping community, and actively participate in a Christian church.

### II) A creational person

*Geneva's aims are:*

1. To apply Christian principles to the pursuit of knowledge by engaging and evaluating a wide range of intellectual and artistic works, including those that demonstrate the current broken and fallen nature of God's creation.
2. To enable students to cultivate skills of communication in speaking, writing, and the fine arts, and to develop the ability to evaluate what is communicated.

*Specifically, we desire that students will:*

1. Be able to apply the insights of science, philosophy, and Christianity, to know, understand, and properly use the natural world and technology.
2. Understand, value, and critically respond to intellectual and artistic works, scientific ideas, and other cultural influences that have shaped and continue to shape the world.
3. Be skilled in problem solving and researching, organizing, and analyzing information and ideas.
4. Communicate clearly, responsibly, and with integrity in written, oral, and nonverbal forms, and evaluate the written, oral, and artistic communications of others based on the same criteria.
5. Develop and use imaginative and expressive skills.

### III) A communal, serving person

*Geneva College's aims are:*

1. To prepare students for active participation and leadership in society, through experiences which will develop the ability to work with other people, and the spirit of loyalty and cooperation.
2. To show the application of Christian principles to the problems of personal and social life, and to offer preparation for leadership in Christian churches.

*Specifically, we desire that students will:*

1. Understand and consider the application of Biblical principles of leadership.
2. Know the communities to which we belong: personal, political, social, cultural, economic, and intellectual.
3. Actively participate in civic life and provide leadership that is shaped by principles of Biblical justice.
4. Understand that all vocations are arenas for honoring God through the development and utilization of gifts, in mutual dependence, and by meeting the needs of others.

### IV) A global person

*Geneva College's aims are:*

1. To develop intelligent concern for the problems of the nation and the world.
2. To help students develop a commitment to equity and justice among all persons since they are created in the image of God and a commitment to bring the critique and standard of the Bible to bear upon all cultures.

*Specifically, we desire that students will:*

1. Know of other cultures.
2. Be skilled in interacting with other cultures and evaluating them from a Biblical perspective.

V) A renewal person

Geneva College's aim is to help students to develop a usable understanding and appreciation of the cultural heritage of mankind through a study of the basic liberal arts subjects, presented from a Christian point of view and with attention to implications for reformation and renewal.

*Specifically, we desire that students will:*

1. Know of the past and its bearing on the present and the future.
2. Know the processes of change, reform, and renewal of the individual and society.
3. Possess skill in citizenship and social reform from a Biblical perspective.
4. Identify and evaluate points of coherence and conflict between a Christian worldview and other worldviews.
5. Offer thoughtful analysis of the causes and effects of contemporary issues in their local and global contexts and present and evaluate possible solutions.

VI) An integrated person

*Geneva College's aims are:*

1. To provide opportunities for the development of skills and interests that will contribute, in college and in later life, to physical and mental health through the satisfying and constructive use of leisure.
2. To help students develop as whole persons with interrelated physical, emotional, intellectual, aesthetic, and spiritual dimensions.

*Specifically, we desire that students will:*

1. Cultivate skills, interests, and habits that nurture physical, mental, and spiritual health both in leisure and in work.
2. Work skillfully with people in interpersonal and socially effective ways.
3. Apply Christian principles as they address personal and interpersonal problems.

## **Department of Education**

The mission of the education department of Geneva College is to prepare competent professional teachers committed to excellence and integrity in teaching; responding to student needs; continuing professional development; collaborating with colleagues, parents, and community members; and identifying and analyzing educational issues from a Christian perspective.

Geneva has a strong interest in preparing well-qualified Christian teachers for careers in both public and Christian schools. The minor in Christian school teaching provides courses in Biblical studies, philosophy, and Christian education to complement the professional education program for students planning to teach in Christian elementary or secondary schools. The option of student teaching overseas in a mission related or international school allows students to experience Christian or international service as well as have a significant cross-cultural experience.

Programs lead to certification in Pennsylvania through the Pennsylvania Department of Education. Through inter-state certification agreements, certification is readily achieved in many other states. A listing of states with which the Pennsylvania Department of Education has negotiated inter-state certification agreements is available in the office of the Geneva College Department of Education. Geneva graduates are assured of general acceptance as teachers of the subject areas for which the college has approved programs.

The department offers The Bachelor of Science in Education with majors in PK-4 Early Childhood and PK-8 Special Education.

The Bachelor of Science in Education is designed to prepare students for professional teaching careers at various levels. Our program seeks to develop in our students a Christian perspective and practice that promotes and affirms the calling that God places on their life. The curriculum assures the graduate of having the skills and knowledge required for initial employment in the public and private schools of this state and around the world. Practical experiences begin with the

freshman and sophomore year and peak with the senior year. The experiences provide opportunities for students to apply the knowledge and skills acquired at Geneva. The practical experiences culminate in the senior year with two to three semesters of field-based training under the mentorship of both local school and college supervisors.

### **Admission to Candidacy in Professional Education Program**

Students must gain admission into the professional education program in order to take 300 and 400 level EDU courses.

This candidacy is initiated through the student's adviser during the sophomore year. The criteria as mandated by state regulation Chapter 354 are:

- 1) Pass the Pre Service Performance Assessment (PAPA)  
OR have a score of no less than 1550 on the SAT. The SAT score of 1550 will include no individual section (Critical Reading, Writing, and Mathematics) score of less than 500. Students may not combine section scores from different test administrations, but they may use their best score earned from one test administration.  
OR have a composite score of 23 on the American College Test Plus Writing. The composite score of 23 shall be accompanied by a combined English/Writing score of 22 and a Math score of 21.
- 2) Complete 48 credit hours or more
- 3) Achieve and maintain an overall GPA of 3.00 (career GPA which includes transfer course work)
- 4) Complete six credit hours of college level math (MAT 101 or higher level math)  
Complete three credit hours of English composition (ENG 101)  
Complete three credit hours of English literature, which can be fulfilled with HUM 103, 203 and 303 sequence
- 5) Obtain two letters of recommendation from education faculty
- 6) Approval of candidacy by the chair of the education department

### **Teacher Certification Requirements**

In order to be certified, pre-service teachers must demonstrate knowledge competence in the following areas:

- 1) Professional skills: writing, reading, and mathematics, are skills that students should have when they enter college.
- 2) General knowledge: curriculum areas such as English, humanities, social science, mathematics, and natural science provide content preparation which teachers need to be prepared to teach.
- 3) Content area knowledge: knowledge about the specific subject area or areas in which certification is sought is a must.
- 4.) Have a minimum of 3.0 college career GPA.

Those applying for a teaching certificate must have a college degree and be recommended for certification by a Geneva College department of education certification officer. In addition, the applicant must supply to the Pennsylvania Department of Education passing scores on the PRAXIS or PECT appropriate for their certification areas.

The requirements for the Education majors (BSEd), certification and for secondary content area majors are detailed in this catalog. The requirements for the procedures to be followed by those who already have a college degree and who are seeking certification alone in one of the content areas for which Geneva College has approved programs are described in this portion of the catalog also. On successful completion of requirements for certification at the elementary or secondary levels, students will be recommended to the Pennsylvania Department of Education for Certification.

**Requirements for certification may change in response to changes required by the Pennsylvania Department of Education. While there is usually a phase-in period for new requirements, students enrolling under this catalog could be affected by such changes. While students would be able to graduate from the college under the program criteria described in this catalog, they might not be able to be certified if they do not meet the new requirements for**

**certification. Students will be advised of any such changes and of the impact of those changes on their certification programs.**

Chapter 354, Preparation of Professional Educators, was enacted in 2000 in Pennsylvania. This law mandates certain regulations in the preparation of professional educators in the state. Students are responsible to be certain they are meeting regularly with their adviser in regard to this legislation. **Geneva College is not responsible for students who will not be certified because of failure to meet certification requirements at the time of graduation.**

### **Approved Certification Programs**

Geneva College certification programs approved by the Pennsylvania Department of Education are as follows:

- Biology
- Chemistry
- English
- Mathematics
- Music Education (K-12)
- PK-4 and PK-8 Special Education Dual Certificate
- Physics
- Social Studies

### **General Education Requirements**

All teacher candidates must complete core requirements (for Geneva College) as described on page 10. **(Core science and social science requirements are very specific for education students. Candidates MUST visit each semester with their advisor to determine which courses address both education program and core curricular requirements.) In addition, all candidates must complete six credits of college level math (MAT 101 or higher level math course).**

Chapter 354, Preparation of Professional Educators, was enacted in 2000 in Pennsylvania. This law mandates certain regulations in the preparation of professional educators in the state. Students are responsible to be certain they are meeting regularly with their adviser in regard to this legislation. **Geneva College is not responsible for students who will not be certified because of failure to meet certification requirements at the time of graduation.**

### **For PK-4/PK-8 Special Education Dual Certification**

EDU 202	Social and Philosophical Foundations of Modern Education	3
EDU 211	Educational Psychology	3
EDU 216	Stage 1- Field Experience Observation	1
EDU 214	Stage 2- Field Experience Exploration	1
EDU 251	Integrating the Arts in the PK-4 Classroom	3
PSY 251	Child Development	3
EDU 290	Educational Technology	2
EDU 321	Teaching of Reading PK-4	3
EDU 323	Teaching Children Mathematics PK-4	3
EDU 349	Teaching of Science for PK-4	3
EDU 370	Survey of Disabilities-PreK-4 and PreK-8 Special Education	3
EDU 420	Educational Assessment	3
EDU 342	Children's Literature PK-4	3
EDU 343	Meeting the Instructional Needs of PK-4 English Language Learners	3
EDU 345	Advanced Teaching of Reading and Writing PK-4	3
EDU 346	Language Arts in Early Childhood PK-4	3
EDU 347	Teaching of Social Studies PK-4 Grades	3
EDU 470	Advanced Studies in Special Education	3
EDU 471	Assessment of Exceptional Children	3
EDU 472	Academic Skill Intervention for Exceptional Children	3
EDU 473	Behavioral Skill Intervention for Exceptional Children	3
EDU 474	Teaching Reading to the Exceptional Child	3
EDU 430	Student Teaching Performance-Special Education	2
EDU 431	Student Teaching Performance-PK-4	2
EDU 433	Student Teaching Portfolio	4

## For Secondary Education (7-12)

Chapter 354, Preparation of Professional Educators, was enacted in 2000 in Pennsylvania. This law mandates certain regulations in the preparation of professional educators in the state. Students are responsible to be certain they are meeting regularly with their adviser in regard to this legislation. **Geneva College is not responsible for students who will not be certified because of failure to meet certification requirements at the time of graduation.**

### For all Secondary Certification Programs:

EDU 202	Social and Philosophical Foundations of Modern Education	3
EDU 211	Educational Psychology	3
EDU 217	Level 1- Field Experience, 4-12	1
EDU 219	Level 2- Field Experience Exploration, 4- 12	1
EDU 375	Exceptionality in the Secondary School	3
EDU 415	Content Literacy Across the Curriculum Grades 4-12	3
EDU 482	Interventions for Students in Inclusive Classrooms - 7-12	3
EDU 420	Educational Assessment	3
EDU 432	Student Teaching Performance - 4-12	4
EDU 433	Student Teaching Portfolio	4
EDU 434	Student Teaching Seminar	4
	Methods of Teaching Course in the Certification area	3 or 4
ENG 382	English Grammars	3

## Admission to All Field Experiences

- 1) Acceptable personal and professional qualities and habits, including grooming and dress as defined in the Pennsylvania's Code of Professional Practice and Conduct for Educators.
- 2) Current Act 33, 34, and 151 clearances.
- 3) A cumulative grade point average: 3.00 or above (includes transfer work)

## Admission to Student Teaching

Enrollment in student teaching requires approval of an application by the director of student teaching. The following criteria must be met in order for applications to be approved:

- 1) A cumulative grade point average:  
3.00 or above (includes transfer work)
- 2) For student teaching and certification purposes, all courses in elementary education or in professional education for secondary certification candidates must be passed with grades of C or better. The overall GPA must be as per the Chapter 354 regulations.
- 3) Completion of at least 96 credit hours of college work.
- 4) Acceptable personal and professional qualities and habits, including grooming and dress as defined in the Pennsylvania's Code of Professional Practice and Conduct for Educators.
- 5) Current Act 33, 34, and 151 clearances.
- 6) Approval of advanced field experience faculty (elementary/special education) methods and advanced field experience professors (secondary) and approval of the department chair.

## Professional Semester

Student teaching, EDU 431 or EDU 432 and EDU 433 and EDU 434, may be scheduled for either semester of the senior year. Student teachers must spend the entire school day for a semester in a school classroom and are to follow the same daily schedule as their cooperating teacher. It is recommended that student teachers not take a course in addition to student teaching. Student teaching is a full-time task and is to be the student teacher's top priority. If, for some reason, other course work must be taken, no more than one other course may be taken by a student teacher. The separate courses EDU 430, EDU 431, EDU 433, and EDU 434 for PK-4/PK-8 Special Education majors and EDU 432, EDU 433, and EDU 434 for secondary certification students must be taken together.

If a student is going to be recommended for certification by the Geneva College Department of Education, the student must student teach through Geneva College and be observed by Geneva College faculty. To be recommended by the department of education for certification, a student must receive at least a grade of B in EDU 430/431/432.

Expenses incurred incidental to student teaching such as and including transportation, food, housing, and books are the responsibility of the student as are incidental expenses associated with any other class. There may be occasions, such as fall break and spring break, when the student teaching schedule does not provide for a break at the time that regular college breaks are scheduled. Student teachers may inquire in the Residence Life Office about reduced meal plan options.

## **International**

Geneva College has joined with several other Christian colleges in the Christian College Teacher Education Coordinating Council (CCTECC). Through CCTECC, Geneva may sponsor qualified students who attend Geneva to do a portion of their student teaching in mission schools or selected other schools. The first seven weeks of student teaching will be completed in a school near Geneva College under supervision of Geneva faculty. The final seven to nine weeks will be done in an approved missions or international school.

## **Special Students**

- 1) Students who are transients (page 196) and who wish to student teach through Geneva College, but who are going to be recommended for certification by another institution to which they will transfer the transcript of their student teaching, must file an application for student teaching by the appropriate deadline with the Geneva College Department of Education during the year prior to the one in which they plan to student teach, meet the requirements listed above for admission to student teaching, submit a letter from the dean of academic administration or chair of the education department of their college recommending them for student teaching, and supply a current official transcript of their college work to be sent directly to the Geneva College Department of Education from the Registrar of their college.
- 2) Persons who have a bachelor's degree and are seeking initial certification in the state of Pennsylvania must furnish an official transcript of all college work to the Geneva College Department of Education, and must meet with a certification officer in the Geneva College Department of Education who will develop a program of prescribed courses, the successful completion of which will lead to teacher certification in the state of Pennsylvania. Course work from other institutions to be used in meeting the requirements for certification in any teaching area must be recent and have received a grade of C or better.
- 3) Graduates of Geneva College or other colleges who already hold teaching certificates may be certified in an additional area by taking any additional courses needed. Arrangements should be made directly with Geneva's Department of Education. Requirements and processes are the same as the number 2 above. A program of study will be established.

## **Placement Service**

The education department maintains credential files. A file containing recommendations and evaluations from faculty and employers is maintained and is sent only to prospective employers on request of the graduates.

## **Christian School Teaching Minor**

Christian schools need certified and highly competent Christian teachers. They cannot accept less because the school is "just a Christian school." Teachers in Christian schools must be knowledgeable about the subject matter they teach and about pedagogical issues and principles they use to help children learn. They need to have a positive Christian world and life view and to be able to provide Biblical and spiritual leadership to their students and to others in their school community. Christian teachers should be competent practitioners, able to make their knowledge and theory work to benefit students. Students need more than "nice" Christian experiences only; they must learn and demonstrate their learning, and their teachers must be skilled in directing and assessing that learning.

The level of competence required by the Pennsylvania Department of Education is a base level, but teachers in Christian schools must also have a foundational understanding of Biblical Christian education beyond the base level, and reflect that understanding in their teaching and in their critique of issues and trends in both secular and Christian education.

This minor is for prospective teachers who believe that a Christian school may be where they belong or who wish to have the background and perspective that the minor will help them develop. The minor is not intended to stand-alone but to be a significant supplement to the elementary or to one of the secondary certification programs. Given the size of the elementary



and secondary certification programs at Geneva College, students should plan carefully in taking the Christian school teaching minor. *Students interested in this minor should check with their adviser, the chair of the Biblical studies department or the chair of the education department for further details.*

**The Christian School Teaching Minor is composed of the following courses:**

BIB 300	Foundations of Christian Thought	3
BIB 325	Biblical Theology	3
BIB 350	History of the Christian Church	3
EDU 303	Introduction to Christian Education	3
MIN 210	Evangelism	
or MIN 215	Methods of Teaching the Bible	3

In order to be eligible to declare the Christian education minor, students must complete BIB 112 Biblical Introduction I—Creation to Post-Exilic Period; BIB 113 Biblical Introduction II—Intertestament Period through Apostolic Age; and one of the teacher certification programs offered through the department of education.

All courses that require field experience in a school district require payment to a certified cooperating teacher and have a fee attached. These fees contribute to an honorarium that is paid to the cooperating teacher for their willingness to supervise and work with Geneva teacher candidates.

Education Department Fees (fees are per course unless otherwise noted):

EDU 214, 219, 342, 343, 345, 346, 347	\$65
EDU 470, 471, 472, 473, 474	\$70
EDU 430, 431, 432 (fee is per credit hour)	\$105
SCS 403	\$65

## Department of Engineering and Computer Science

By developing and using the tools and capacities the God of creation has provided for our service to Him and each other, the department seeks to prepare students to enter industry and business, graduate school, or the teaching profession. Insights and skills are developed through majors in computer science and engineering.

### Mission of the Department

The mission of the Department of Engineering and Computer Science is to serve Christ by equipping a diverse community of students to provide excellent engineering and computing services in an environment of technological change.

### **Computer Science Major · BS - Program requirements 54 credit hours**

The field of Computer Science is one of rapid growth. Students entering this field must be prepared to meet the challenges of a discipline immersed in constant change. Consequently the program provides a foundational survey of Computer Science topics through a set of courses required by all majors, and then gives depth in a particular area of application tailored to each student's interests and career goals through a choice of concentrations.

CSC 101	Structured Programming	3
CSC 102	Object-Oriented Programming	3
CSC 133	Survey of Computer Science	4
CSC 203	Software Engineering	3
CSC 204	Algorithms	3
CSC 251	Networks & Security	3
CSC 311	Cyberethics	2
CSC 363	Database Systems	3
CSC 481	Senior Project 1	
or CSC 483	Software Engineering Project 1	3
CSC 482	Senior Project 2	
or CSC 484	Senior Engineering Project 2	3
MAT 130	Discrete Mathematics	3
MAT 105	Elementary Statistical Methods	
or MAT 265	Probability and Statistics	3

**Plus a minor or second major.**

#### **Web and Mobile Technology Minor- 19 credit hours**

BUS 441	Project Management	3
CSC 190	HTML	1
CSC 205	HCI Design & Programming	3
CSC 206	Web Programming	3
CSC 364	E-Commerce	3
CSC 407	Web Engineering	3
CSC 408	Mobile and Cloud Applications	3

#### **Cybersecurity Minor – 18 credit hours**

BUS 441	Project Management	3
CRJ 350	Cyber Law	3
CSC 252	Disaster Recovery	3
CSC 335	System Foundations	3
CSC 454	Cybersecurity	3
CSC 471	Computer Forensics	3

#### **Data Science Minor – 20 credit hours**

BUS 441	Project Management	3
CSC 465	Big Data Analytics	3
EGR 371	Operations Research	3
MAT 161	Calculus 1	4
MAT 162	Calculus 2	4

MAT 350	Numerical Methods	3
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### **Computer Science Minor for Non-Computer Science Majors – 18 credit hours**

CSC 101	Structured Programming	3
CSC 102	Object-Oriented Programming	3
CSC 133	Survey of Computer Science	3
CSC 311	Cyberethics	3

Plus six additional credit hours of computer science courses at 200-level or above.

### **Software Development Minor for Non-Computer Science Majors – 22 credit hours**

CSC 101	Structured Programming	3
CSC 102	Object-Oriented Programming	3
CSC 133	Survey of Computer Science	3
CSC 203	Software Development	3
CSC 483	Software Engineering Project Part 1	3
CSC 484	Software Engineering Project Part 2	3

Take one of the following courses:

CSC 204	Algorithms	3
CSC 205	HCI Design and Programming	3
CSC 206	Web Programming	3
CSC 363	Database Systems	3

### **Engineering Major · BSE**

The college offers one four-year degree program in engineering. This general engineering program is accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org>. This program is accredited under the general criteria for basic level programs, not under program criteria for specific branches of engineering. Within this program, students may choose to concentrate in biomedical engineering, chemical engineering, civil engineering, computer engineering, electrical engineering, environmental engineering, mechanical engineering, or an interdisciplinary field.

The college also offers a two-year program leading to the Associate in Engineering degree (AE). All the courses in this program carry full college credit and may be used towards the four-year degree.

### **Objectives of the Engineering Department**

We recognize that our students and graduates make choices and commitments that we do not control. Nevertheless, we state our objectives on the assumption that our graduates stay in the engineering profession and make the choices and commitments that we encourage.

Graduates of Geneva College's Engineering program will:

- 1) See their lives from a Biblical viewpoint and their professional careers as a calling from God.
- 2) Understand and be committed to Biblical ethics and practice engineering according to high standards of integrity.
- 3) Be able to design effective solutions to engineering problems in accord with applicable standards.
- 4) Communicate effectively, both orally and in writing.
- 5) Understand the mathematics and physical phenomena relevant to their fields and how these relate to a Christian worldview.
- 6) Work effectively in teams, and with experience, assume increasing levels of responsibility.
- 7) Be familiar with state-of-the-art engineering equipment and methods relevant to their field.
- 8) Be aware of non-technical viewpoints and the diversity of world cultures.
- 9) Be engaged in lifelong learning, keep up with the advancing state of the art in their fields, and continue to grow as disciples of Christ.

## Engineering Major • BSE

### General program requirements

15 credit hours of mathematics:

MAT 161	Calculus I	4
MAT 162	Calculus II	4
MAT 265	Probability and Statistics	3
MAT 405	Differential Equations	4

Eight credit hours of chemistry and physics:

CHM 111	General College Chemistry	4
PHY 201	College Physics I	4

10-30 additional credit hours of mathematics or science electives, to be chosen from course lists provided under the biomedical, chemical, civil, computer, electrical, environmental, mechanical, and interdisciplinary engineering concentrations. Credit hours in excess of the requirements may be used as free electives credit.

Three credit hours of Economics (the following course is counted as a social science elective in the Core curriculum):

ECO 270	Principles of Microeconomics for Engineers	3
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23 credit hours of engineering:

EGR 100	Calling and Vocation	1
EGR 101	Introduction to Engineering	2
EGR 102	Computer-Aided Engineering	2
EGR 211	Solid Mechanics	4
EGR 212	Linear Circuit Analysis I	3
EGR 330	Thermal Fluid Sciences	3
EGR 401	Christian Ethics and Engineering	2
EGR 481, 482	Senior Design Project	3, 3

25-39 additional credit hours of engineering (BME, CHE, CIE, CPE, EGR, ELE, EVE, MEE)

Credit hours in excess of requirements may be used as free elective credit. 25-39

29-32 credit hours of core requirements not included in the major.

Engineering students take EGR 100 (see above) instead of SSC 101.

Engineering students need only take nine credit hours of humanities (HUM) and need not take HUM 304.

Engineering students take ECO 270 as one of the two social science electives. Students in the chemical engineering concentration need not take a second social science elective in addition to ECO 270.

29-32

Two to four additional credit hours of free electives.

2-4

Zero to nine credit hours of computer programming

0-9

Summary of required credit hours

99-104 in major requirements, 29-32 in core requirements  
not included in major, two to four in electives.

135

Specific requirements for concentrations in biomedical, chemical, civil, computer, electrical, environmental, mechanical, and interdisciplinary engineering are given below.

*Students completing the requirements for the BSE degree in four years (eight semesters) will be required to take 18 credit hours in two to four semesters that will incur extra tuition charges for the 18<sup>th</sup> credit hour (see page 197)*

## Plan of Study

By the end of the fall semester of the sophomore year, each student should prepare a plan, in consultation with his or her advisor, for meeting the requirements of a particular concentration. The plan should include selecting math, science, and engineering electives that contribute to the attainment of a coherent educational objective. The plan should also include the preliminary scheduling of courses semester by semester so that prerequisites for required and elective courses can be met in a timely way. Planning is especially important for the biomedical and interdisciplinary concentrations and may need to be done in the freshman year. An advisor may refuse to clear an advisee for registration if he or she fails to prepare a plan or fails to select courses according to plan. The plan may be revised in consultation with the student's advisor.

## Double Concentrations

A student who desires to complete the requirements for two concentrations and receive recognition for both on his/her transcript must complete all the requirements for each concentration. Any course that meets a requirement in both concentrations may be counted towards both, but the student must complete at least 15 more credit hours in engineering (BME, CHE, CIE, CPE, EGR, ELE, EVE, or MEE) than required to complete a single concentration.

### Biomedical Engineering Concentration- Program requirements 100 credit hours

84 credit hours as defined above: 15 in mathematics, 8 in science, 23 in general engineering, three in economics, 32 in core requirements, and three in free electives, plus:

16 additional credit hours in biology and chemistry:

BIO 112	Introduction to Cellular Biology	4
BIO 225	Human Anatomy and Physiology I	4
BIO 326	Human Anatomy and Physiology II	4
CHM 221	Organic Chemistry I	4

3 credit hours of computer programming:

CSC 101	Structured Programming	
or CSC 111	Introduction to Engineering Computation	3

3 credit hours of biomedical engineering:

BME 300	Introduction to Biomedical Engineering	3
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29 credit hours in mathematics, science, and engineering chosen in consultation with the student's adviser and incorporated into her/his Plan of Study; at least 22 must in engineering.

### Chemical Engineering Concentration- Program requirements 104 credit hours

80 credit hours as defined above: 15 in mathematics, eight in science, 23 in general engineering, three in economics, and 29 in core requirements, and two in free electives, plus:

29 additional credit hours of mathematics and science:

MAT 261	Calculus III	4
PHY 202	College Physics II	4
CHM 221	Organic Chemistry I	4
CHM 222	Organic Chemistry II	4
CHM 232	Quantitative Analytical Chemistry	4
CHM 306	Instrumental Analysis	3
CHM 307	Physical Chemistry I: Thermodynamics	3
CHM 308	Physical Chemistry II: Structure and Dynamics	3

23 credit hours in general and chemical engineering:

EGR 316	Process Control	3
EGR 331	Introduction to Thermal and Fluid Engineering Laboratory	1
EGR 332	Fluid Mechanics	4

MEE 416	Design of Thermal Systems	3
CHE 301	Process Analysis	3
CHE 302	Unit Operations	3
CHE 312	Advanced Laboratory- Physical/Inorganic	2
CHE 315	Mass Transfer	1
CHE 401	Reactor Design	3

Three additional credit hours in engineering electives- any course listed in BME, CHE, CIE, CPE, EGR, ELE, EVE, or MEE.

### **Civil Engineering Concentration - Program requirement 100 credit hours**

84 credit hours as defined above: 15 in mathematics, 8 in science, 23 in general engineering, three in economics, and 32 in core requirements, and three in free electives, plus:

12 additional credit hours of mathematics and science:

MAT 261	Calculus III	4
CHM 221	Organic Chemistry I	4
PHY 202	College Physics II	4

18 credit hours required in general and civil engineering:

EGR 331	Introduction to Thermal and Fluid Engineering Laboratory	1
EGR 332	Fluid Mechanics	4
CIE 201	Geomatics Engineering	3
CIE 231	Structural Analysis	3
CIE 407	Geotechnical Engineering	4
CIE 451	Urban Hydrology	3

Nine credit hours in civil engineering electives, selected from the following (if more than 9 credit hours are selected, the excess credit hours may be applied towards the three credit hours of free electives):

EGR 214	Dynamics	3
CIE 301	Transportation Engineering	3
CIE 321	Site Development	3
CIE 333	Reinforced Concrete Design	4
CIE 434	Structural Steel Design	3
EVE 240	Water Quality Control	3

Six additional credit hours in engineering electives—any course listed in BME, CHE, CIE, CPE, EGR, ELE, EVE or MEE, including those listed as civil engineering electives (if more than six credit hours are selected, the excess credit hours may be applied towards the three credit hours of free electives).

Six additional credit hours of mathematics and science electives selected from the following (if more than six credit hours are selected, the excess credit hours may be applied towards the three credit hours of free electives):

MAT 307	Linear Algebra	3
MAT 350	Numerical Methods	3
MAT 409	Partial Differential Equations	3
BIO 101	Topics in Biology	3
BIO 112	Introduction to Cellular Biology	4
BIO 210	ID and Evolution	4
BIO 306	General Ecology	4
BIO 331	Biomedical Ethics	3
CHM 170	Worth of Water	4
CHM 222	Organic Chemistry II	4
CHM 232	Quantitative Analytical Chemistry	4
CHM 307	Physical Chemistry I: Thermodynamics	3
EVS 111	Environmental Science	4
EVS 221	Environmental Ethics	3
PHY 160	Introduction to Acoustics	3

PHY 250	Observational Astronomy	3
PHY 301	Classical Mechanics	3
PHY 306	Optics	3
PHY 307	Thermodynamics	3
PHY 408	Modern Physics	3
SCS 201	Astronomy	3
SCS 215	Earth and Space Science	3
Au Sable Courses (see p. 144)		

### Computer Engineering Concentration - Program requirement 99 credit hours

85 credit hours as defined above: 15 in mathematics, eight in science, 23 in general engineering, three in economics, 32 in core requirements, and four in free electives, plus:

Nine additional credit hours of computer science:

CSC 101	Structured Programming	3
CSC 102	Object-Oriented Programming	3
CSC 204	Algorithms	3

Seven additional credit hours of required mathematics and science:

MAT 130	Discrete Mathematics	3
PHY 202	College Physics II	4

Three credit hours of mathematics or science elective selected from the following (if four credit hours are selected, the fourth credit hour may be counted as free electives):

BIO 101	Topics in Biology	3
BIO 112	Introduction to Cellular Biology	4
CHM 221	Organic Chemistry I	4
CHM 222	Organic Chemistry II	4
CHM 232	Quantitative Analytical Chemistry	4
CHM 304	Inorganic Chemistry	3
CHM 307	Physical Chemistry I	3
EVS 111	Environmental Science	4
EVS 221	Environmental Ethics	3
MAT 261	Calculus III	4
MAT 307	Linear Algebra	3
MAT 309	Introduction to Abstract Algebra	2
MAT 310	Introduction to Real Analysis	2
MAT 350	Numerical Methods	3
MAT 409	Partial Differential Equations	3
PHY 160	Introduction to Acoustics	3
PHY 250	Observational Astronomy	3
PHY 301	Classical Mechanics	3
PHY 303, 304	Advanced Physical Measurements	1-3
PHY 306	Optics	3
PHY 307*	Thermodynamics	3
PHY 333	Introduction to Quantum Mechanics	3
PHY 405, 406	Methods of Theoretical Physics I, II	3,3
PHY 408	Modern Physics	3
SCS 201	Astronomy	3

\*Cross-listed as CHM 307

22 credit hours in general and computer engineering:

CPE 133	Survey of Computer Science	3
CPE 203	Software Engineering	3
CPE 220	Digital Systems	3
CPE 303	Microprocessor Systems	3
CPE 335	System Foundations	3

EGR 225	Signals and Systems	3
ELE 309	Electronic Devices and Circuits I	4

Six credit hours of computer engineering electives, selected from the following:

CPE 251	Networks and Security	3
CPE 252	Cybersecurity	3
CPE 304	Advanced Digital Logic	3
CPE 454	Cybersecurity	3
CPE 471	Computer Forensics	3
CPE 490	Embedded Systems	3
CSC 363	Database Systems	3
CSC 465	Big Data Analytics	3
ELE 440	Digital Signal Processing	3

Three additional credit-hours in engineering elective- any course listed in BME, CHE, CIE, CPE, EGR, ELE, EVE, or MEE.

### **Electrical Engineering Concentration - Program requirements 99 credit hours**

85 credit hours as defined above: 15 in mathematics, eight in science, 23 in general engineering, three in economics, 32 in core requirements, and four in free electives, plus:

Eight additional credit hours of mathematics and science:

MAT 261	Calculus III	4
PHY 202	College Physics II	4

3 credit hours of computer programming:

CSC 101	Structured Programming	3
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26 credit hours in general and electrical engineering:

CPE 220	Digital Systems	3
CPE 303	Microprocessor Systems	3
CPE 304	Advanced Digital Logic	3
EGR 225	Signals and Systems	3
EGR 316	Process Control	3
ELE 222	Linear Circuit Analysis II	3
ELE 305	Electromagnetic Fields and Waves	4
ELE 309	Electronic Devices and Circuits I	4

Seven or eight credit hours of electrical engineering electives, selected from the following (if eight credit hours are selected, the eighth credit hour may be counted towards the four credit hours of free electives):

CPE 490	Embedded Systems	3
ELE 324	Electrical Machines	3
ELE 402	Communications Engineering	4
ELE 410	Electronic Devices and Circuits II	4
ELE 440	Digital Signal Processing	3

Three additional credit hours in engineering electives- any course listed in BME, CHE, CIE, CPE, EGR, ELE, EVE, or MEE.

Three credit hours of physics elective selected from the following:

PHY 306	Optics	3
PHY 408	Modern Physics	3

### **Environmental Engineering Concentration- Program requirements 100 credit hours**

84 credit hours defined above: 15 in mathematics, eight in science, 23 in general engineering, three in economics, 32 in core requirements, and three in free electives, plus:



15 additional credit hours of science:		
CHM 221	Organic Chemistry I	4
EVS 111	Environmental Science	4
EVS 221	Environmental Ethics	3
BIO 306	General Ecology	4

Six credit hours of political science:		
POL 151	American Government	3
POL 361	American Public Policy	3

15 credit hours of general and environmental engineering:		
EGR 331	Introduction to Thermal and Fluid Engineering Laboratory	1
EGR 332	Fluid Mechanics	4
CHE 301	Process Analysis	3
EVE 240	Water Quality Control	4
EVE 341	Environmental Monitoring and Impact Analysis	3

Three credit hours of hydrology, selected from the following:		
EVE 461	Surface Water Hydrology	3
EVE 462	Ground Water Hydraulics and Hydrology	3

Six credit hours of environmental engineering electives, selected from the following:		
CHE 302	Unit Operations	3
CHE 401	Reactor Design	3
EVE 453	Solid and Hazardous Waste	3
EVE 454	Air Pollution Control	3
EVE 461	Surface Water Hydrology	3
EVE 462	Ground Water Hydraulics and Hydrology	3

Six credit hours of engineering electives-any course listed in BME, CHE, CIE, CPE, EGR, ELE, EVE, or MEE, including those listed as environmental engineering electives. If more than six credit hours are taken, the credit hours above six may be counted towards the three credit hours of free elective.

Three or four credit hours of mathematics or science electives, selected from the following (if a four credit hour course is selected, the fourth credit hour may be counted towards the three credit hours of free electives):

MAT 261	Calculus III	4
MAT 307	Linear Algebra	3
MAT 350	Numerical Methods	3
MAT 409	Partial Differential Equations	3
BIO 112	Introduction to Cellular Biology	4
BIO 305	Microbiology	4
BIO/CHM 317	Biochemistry	3
CHM 170	Worth of Water	4
CHM 222	Organic Chemistry II	4
PHY 160	Acoustics	3
PHY 202	College Physics II	4
SCS 215	Earth and Space Science	3
Au Sable Courses (see p. 144)		

### **Mechanical Engineering Concentration - Program requirements 100 credit hours**

85 credit hours as defined above: 15 in mathematics, eight in science, 23 in general engineering, three in economics, 32 in core requirements, and four in free electives, plus:

12 additional credit hours of mathematics and science:		
MAT 261	Calculus III	4
CHM 221	Organic Chemistry I	4
PHY 202	College Physics II	4

Three credit hours of computer programming:  
CSC 111 Introduction to Engineering Computation 3

17 credit hours in general and mechanical engineering:  
EGR 214 Dynamics 3  
EGR 331 Introduction to Thermal and Fluid Engineering Laboratory 1  
EGR 332 Fluid Mechanics 4  
MEE 321 Mechanics of Deformable Bodies 3  
MEE 333 Applied Thermal Fluids Engineering 3  
MEE 403 Mechanical Component Design 3

Six credit hours in mechanical engineering electives, selected from the following:  
MEE 324 Kinematics of Mechanisms 3  
MEE 405 Finite Element Methods 3  
MEE 410 Mechanical Vibration 3  
MEE 416 Design of Thermal Systems 3  
MEE 418 Reacting Systems 3

Six additional credit hours in engineering electives—any course listed in BME, CHE, CIE, CPE, EGR, ELE, EVE, or MEE, including those listed as mechanical engineering electives. If more than six credit hours are taken, the credit hours above six may be counted towards the four credit hours of free elective.

The requirements for the mechanical engineering concentration may alternatively be satisfied by choosing the following manufacturing-related courses in place of the mechanical engineering electives and engineering electives described above:

EGR 322 Manufacturing Engineering 3  
EGR 325 Materials Engineering 3  
EGR 371 Operations Research 3  
EGR 423 Quality Engineering 3

Three credit hours of mathematics elective selected from the following:  
MAT 307 Linear Algebra 3  
MAT 350 Numerical Methods 3  
MAT 409 Partial Differential Equations 3

Three or four credit hours of chemistry or physics elective selected from the following (if a four credit hour course is selected, the fourth credit hour may be counted towards the three credit hours of free electives):

CHM 232 Quantitative Analytical Chemistry 4  
CHM 307 Physical Chemistry I: Thermodynamics 3  
PHY 301 Classical Mechanics 3  
PHY 306 Optics 3  
PHY 307 Thermodynamics 3  
PHY 408 Modern Physics 3

### **Interdisciplinary Engineering**

To select this concentration a student must identify two specific focus areas, and then select courses supporting the focus areas. The focus areas may support one overall goal. Students selecting this option must obtain the approval of two department chairs, or if the focus areas are both within engineering, the approval of two engineering faculty members.

#### **Program requirements 84 credit hours**

84 credit hours as defined above: 15 in mathematics, eight in science, 23 in general engineering, three in economics, 32 in core requirements, and three in free electives, plus:

Four additional credit hours of chemistry or physics, selected from the following:

CHM 221 Organic Chemistry I 4  
PHY 202 College Physics II 4

24 credit hours of engineering in focus area one:

These courses must be selected from BME, CHE, CIE, CPE, EGR, ELE, EVE, or MEE, and must constitute a generally recognized track within engineering, for example, microprocessor design or thermal sciences. The selected courses must lead to senior level competencies in this focus area.

15 credit hours of science, mathematics, or engineering in focus area two:

Course selections must constitute or support a generally recognized or identifiable focus area in science, engineering, or mathematics, for example, robotics or engineering physics. At least three credit hours in this group must be selected from BME, CHE, CIE, CPE, EGR, ELE, EVE, or MEE.

Eight credit hours of mathematics, science, or engineering selected to support or augment one or both focus areas.

All plans must meet or exceed the department's minimum requirements for engineering design. The student should consult with his or her adviser for details.

## Engineering Minor

At least 19 credit hours:

EGR 101	Introduction to Engineering	2
EGR 102	Computer-Aided Engineering	2
EGR 211	Solid Mechanics	4
EGR 212	Linear Circuit Analysis I	3
EGR 401	Christian Ethics and Engineering	2

Plus at least six additional credit hours from BME, CHE, CIE, CPE, EGR, ELE, EVE, or MEE.

## Associate Degree in Engineering - Program requirements 41 credit hours

11 credit hours of mathematics:

MAT 161	Calculus I	4
MAT 162	Calculus II	4
MAT 265	Probability and Statistics	3

Four additional hours of mathematics, selected from the following:

MAT 261	Calculus III	
or MAT 405	Differential Equations	4

12 credit hours of chemistry and physics, selected from the following:

CHM 111	General College Chemistry	4
CHM 221	Organic Chemistry I	4
PHY 201	College Physics I	4
PHY 202	College Physics II	4

12 credit hours of engineering:

EGR 100	Engineering: Calling and Vocation	1
EGR 101	Introduction to Engineering	2
EGR 102	Computer-Aided Engineering	2
EGR 211	Solid Mechanics	4
EGR 212	Linear Circuit Analysis I	3

Three additional credit hours in engineering elective from BME, CHE, CIE, CPE, EGR, ELE, EVE or MEE.

22 credit hours of core requirements:

BIB 112	Bible Introduction I	3
BIB 113	Bible Introduction II	3
COM 101	Principles of Communication	3
ENG 101	English Composition	3
HUM 103	Invitation to the Humanities	3
HUM 203	Making the West	3
PED 103	Physical Fitness	1

**Summary of Required credit hours**

42 in major requirements, 22 in core requirements not included in major.

If less than 12 hours of the engineering credit hours are taken at Geneva, the student must also satisfy a general competency test administered by the engineering department chairperson.

**Department of English****Our vision**

In the beginning the Word was with God  
 And God spoke the worlds into being.  
 Then and now those worlds sing their words back to God;  
 God hears, enjoys, and joins the singing.

The Word gives breath and can take breath away;  
 The Word informs and imagines.  
 The Word that condemns can take death away;  
 The Word sustains and envisions.

Now some words are broken, and wordsmiths die,  
 And some names are said all in vain.  
 We sing some songs as sad as a sigh,  
 But the Word still speaks and His words sustain.

Christ calls a name and He images the same;  
 He figures, patterns, and designs.  
 We read, we write, we watch, and we wait,  
 And our words with the Word He aligns.

This vision leads to some ideals that we would like to sow and cultivate in our students with the hope that sooner or later these qualities will mature in students' lives.

Through the experience of literature and the related arts, through the clear and creative use of language, and through understanding language itself, our students, especially our departmental majors, should come to:

- Connect their words and their reading with the Word.
- Experience, express, and testify to the wonder of the glory of God, His work, and the work of His creatures.
- Comprehend and lament the brokenness of this fallen world.
- Seek wisdom in humility.
- Honor God in the use of language and in responding to others' use of language.

The mission of the English department of Geneva College is to serve the student body by offering college level writing courses as part of the core curriculum and by offering upper level writing, English language, and literature courses to English majors and future teachers. We aim to prepare students to be competent writers, to be innovative critical thinkers, and to gain general knowledge about literary history both in the West and globally. As we help students pursue excellence in writing, language, and literature, we do so believing that human beings are image bearers of God and as such are creative beings. Moreover, we teach, pursue scholarship, and write out of a commitment to the power of language as expressed and reflected in the Word of God; we encourage students to do the same.

A major in English is excellent preparation for professions such as law, teaching, business, and other ministry-related vocations, including those requiring graduate work. The department offers a major in English, with concentrations in either English education or literature, and a major in writing.

The department also offers minors in English, teaching English as a second language, creative writing, and informational writing. Minors should be chosen by the beginning of the junior year.

The English department works with the student publications board in sponsoring student publications in newspaper and literary magazine. The department operates a writing center open to students desiring tutoring assistance in developing their writing skills. The English department also works with the department of languages and culture in its work with English as a second language.

## English Major · BA - Program requirements 48 credit hours

### Core English Requirements (27 credits):

ENG 112	Introduction to Literary Study and Research	3
ENG 201	Introduction to Creative Writing	
or ENG 205	Advanced Composition	3
ENG 232	Introduction to Rhetoric	3
ENG 291	Masterpieces of World Literature	3
ENG 351	Shakespeare	3
ENG 489	English Seminar	3
LIN 219	Introduction to Linguistics	
or ENG 382	English Grammars	3
(English Education majors should choose ENG 382)		

### Three credits from British or American Survey:

ENG 261	British Literature to 18 <sup>th</sup> Century	3
ENG 262	British Literature from 18 <sup>th</sup> Century to Present	3
ENG 281	American Literature to Civil	3
ENG 282	American Literature from Civil War to Present	3

### Three credits from Diverse Voices

ENG 213	Cinema Topics (approved topic)	3
ENG 290	Nonwestern World Literature	3
ENG 335	Minority Literature	3
ENG 336	Women's Literature	3

### Concentration in Literature (21 credits):

A student majoring in English with a concentration in literature must complete 48 credit hours in major courses. In electing courses outside this major, students should consider developing a minor that has specific pre-professional orientation and also choosing courses in American and English history.

### 9 additional credits in British & American Survey:

ENG 261	British Literature to 18 <sup>th</sup> Century	3
ENG 262	British Literature from 18 <sup>th</sup> Century to Present	3
ENG 281	American Literature to Civil	3
ENG 282	American Literature from Civil War to Present	3

6 credits of ENG 390 Specialized Study 6

3 additional elective credits in ENG or LIN 3

### 3 credits from Theory to Practice

COM 201	Theatre Practicum	1
ENG 221	Newspaper	1
ENG 223	Literary Magazine	1
ENG 320	Tutoring Writing	2
ENG 493	Internship	1-3

## English with Secondary Education Major · BA- Program requirements 91 credit hours

This program involves a relatively balanced study of language, literature, and writing. Students majoring in English with Secondary Education must take 47 credit hours English core requirements, 7 credit hours English methods requirements in their major program and 37 credit hours of pre-professional courses outside the English department. They are exempted

from one of the non-laboratory courses in the natural sciences. See page 55 for a full description of the requirements in the program leading to certification to teach on the secondary level.

ENG 112	Introduction to Literary Study and Research	3
ENG 201	Introduction to Creative Writing	
or ENG 205	Advanced Composition	3
ENG 232	Introduction to Rhetoric	3
ENG 261	British Literature to 18 <sup>th</sup> Century	3
ENG 262	British Literature from 18 <sup>th</sup> Century to Present	3
ENG 281	American Literature to Civil	3
ENG 282	American Literature from Civil War to Present	3
ENG 291	Masterpieces of World Literature	3
ENG 351	Shakespeare	3
ENG 489	Majors Seminar	
ENG 382	English Grammars	3
Three credits from Diverse Voices		
ENG 213	Cinema Topics (approved topic)	3
ENG 290	Nonwestern World Literature	3
ENG 335	Minority Literature	3
ENG 336	Women's Literature	3
Six credit hours from advanced study courses:		
ENG 390	Special Topics in Literature	3
Three Credits from Theory to Practice:		
ENG 320	Tutoring Writing	2
ENG 221	Newspaper	1
or ENG 223	Literary Magazine	1
ENG 405	Methods of Teaching English- Secondary	3
<b>Pre-Professional Courses (35 credits)</b>		
EDU 202	Social and Philosophical Foundations of Modern Education	3
EDU 211	Educational Psychology	3
EDU 217	Initial Field Experience – Secondary	1
EDU 219	Level 2- Field Experience 4-12	1
EDU 375	Exceptionality in the Secondary School	3
EDU 415	Literacy Across the Curriculum Grades 4- 12	3
EDU 420	Educational Assessment	3
EDU 432	Student Teaching Performance – 4-12	4
EDU 433	Student Teaching Portfolio	4
EDU 434	Student Teaching Seminar	4
EDU 482	Interventions for Students in Inclusive Classrooms- 7-12	3
MAT 101	College Algebra (or equivalent)	3
MAT 105	Elementary Statistical Methods (or equivalent)	3

Teaching majors should plan to do their student teaching during the spring semester of their senior year, except under special circumstances.

Successful completion of the English major with a concentration in English education with a 3.0 grade point average or better, together with passing the pre-professional and content area examinations mandated by the Commonwealth of Pennsylvania, will result in being certified to teach English on the secondary level. Most states honor Pennsylvania's certification. **Geneva College is not responsible for students who will not be certified because of failure to meet certification requirements at the time of graduation.**

## Writing Major • BA - Program requirements 48 credit hours

A student majoring in writing must complete 48 credit hours in major courses. The writing major is designed to develop general writing skills while still giving the student the option of emphasizing creative or informational writing. The writing major is not a journalism major.

ENG 112	Introduction to Literary Study and Research	3
ENG 201	Introduction to Creative Writing	3
ENG 205	Advanced Composition	3
ENG 215	Writing Fiction	
or ENG 216	Writing Poetry	3
ENG 232	Introduction to Rhetoric	3
ENG 242	Editing	3
ENG 291	Masterpieces of World Literature	3
ENG 328	History of the English Language	
or LIN 219	Introduction to Linguistics	3
ENG 344	Publishing	3
ENG 351	Shakespeare	3
ENG 489	Majors Seminar	3
3 credits in British or American Survey:		3
ENG 261	British Literature to 18 <sup>th</sup> Century	3
ENG 262	British Literature from 18 <sup>th</sup> Century to Present	3
ENG 281	American Literature to Civil	3
ENG 282	American Literature from Civil War to Present	3
3 credits from Diverse Voices		
ENG 213	Cinema Topics (approved topic)	3
ENG 290	Nonwestern World Literature	3
ENG 335	Minority Literature	3
ENG 336	Women's Literature	3
3 credits from Theory to Practice		3
COM 201	Theatre Practicum	1
ENG 320	Tutoring Writing	2
ENG 221	Newspaper	1
ENG 223	Literary Magazine	1
ENG 493	English Internship	1-3
6 credits from:		
ENG 212	Cinema	3
ENG 241	Contemporary Newswriting	3
ENG 301	Genre Writing	3
ENG 311	Business & Technical Writing	3
ENG 401	Advanced Creative Writing Workshop	3

Ordinarily students will take no more than six credit hours of writing options outside of their area of emphasis. ENG 394, ENG 493, and ENG 495 are repeatable courses, as long as the same experience is not repeated. A single internship or independent study cannot count as fulfilling both a program and an option requirement.

In their junior year, majors should discuss with their advisers their preferences in pursuing ENG 493 or ENG 495. If they have special interests and contacts for a summer internship, they should also discuss such possibilities well ahead of time.

## English Minor

An English minor is intended for students who wish to add a literature centered liberal arts concentration to a major outside the English department.

A student can complete an English minor by taking 18 credit hours of English courses with the following constraints:

Required:		
ENG 112	Introduction to Literary Study and Research	3
ENG 201	Introduction to Creative Writing	
or ENG 205	Advanced Composition	3

12 credits of English Electives with the following restriction:

No more than three credits from among the following:

ENG 215, ENG 216, ENG 232, ENG 241, ENG 242, ENG 301, ENG 311, ENG 344, or ENG 401.

The following courses may not be used to complete an English minor:

ENG 095	English Proficiency
ENG 101	English Composition
ENG 110	Proficiency in English as a Second Language
ENG 405	Teaching of English—Secondary
ENG 413	Teaching of English as a Second Language

### Minor in Writing

Nineteen credit hours are required to complete the minor.

ENG 112	Introduction to Literary Study and Research	3
ENG 201	Introduction to Creative Writing	
or ENG 205	Advanced Composition	3
ENG 215	Creative Writing: Fiction	
or ENG 216	Creative Writing: Poetry	3

The remaining nine credit hours can be elected from the following courses:

ENG 232	Introduction to Rhetoric	3
ENG 241	Contemporary Newswriting	3
ENG 242	Editing	3
ENG 301	Topics in Genre Writing	3
ENG 311	Writing for Business and Industry	3
ENG 344	Publishing	3
ENG 401	Advanced Creative Writing Workshop	3

### Minor in Teaching of English as a Second Language

This minor (usually referred to as a TESL minor) is available for students who want to develop the special skills for teaching English to persons for whom English is not their first language. Twenty-one credit hours are needed to complete the following program:

ENG 328	History of the English Language	3
ENG 382	English Grammars	3
ENG 413	Teaching English as Second Language	3
LIN 219	Introduction to Linguistics	3
CDS 220	Language Development	3

One of the following three courses:

MIN 201	Cultural Anthropology	3
LIN 220	Applied Linguistics	3
COM 225	Culture & Communication	3

One elective in English:

English Elective in literature or writing excluding ENG 095, ENG 101, and ENG 110	3
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## Department of History, Political Science, and Sociology

The Department of History, Political Science, and Sociology seeks to give all students an understanding of human society, its history, and its present condition from a Christian perspective, and it seeks to develop in students an awareness of their appropriate role in that society. The department offers majors in history, political science, and sociology for students who wish to concentrate in those fields and selected minors in related professional fields.



Courses offered by the department contribute to preparation for graduate study and for careers in research, law, business, government service, the ministry, library work, journalism, editing, public or applied history, and education, among others.

Students who wish to gain certification to teach social studies should be aware that the combination of college core courses, secondary education requirements, the major requirements, and related social studies courses adds up to more than 135 credit hours. This requires careful scheduling and coordination with both the adviser and the education department. It may be difficult or impossible to fit these requirements into eight semesters. Students also must achieve a 3.0 GPA and pass the pre-professional skills test before being admitted to candidacy to the professional education program. **Geneva College is not responsible for students who will not be certified because of failure to meet certification requirements at the time of graduation.**

The department provides leadership in the development of a pre-law studies minor which involves courses in various disciplines, and which serves to introduce students to the basic tenets of the legal profession. See page 88.

### **History Major · BA - Program requirements 40 credit hours**

The history major seeks to help students understand and evaluate the past through the collection, organization, and interpretation of evidence (historical research and writing), taking into consideration the dynamics of historical events, cause-and-effect relationships, and the interpretation of historical periods and civilizations. In other words, the program is designed to encourage students to develop an historical imagination for the “how’s and why’s” of history as much as the “what’s, when’s, and where’s,” and to articulate their findings. It particularly seeks to help students approach the past through a distinctly Christian worldview: an attempt to responsibly and honestly address and interpret the complexities of history in the spirit of Biblical faithfulness. The major is intended to complement the core curriculum and to encourage students to gain a liberal arts background as the basis for future development and contributions to the Christian community and society.

HIS 201	Introduction to Historical Studies	3
European Sequence (9 credit hours):		
HIS 220	Europe I: Ancient through Medieval	3
HIS 221	Europe II: 1500 – 1815	3
HIS 222	Europe III: 1815 – Present	3
United States Sequence (9 credit hours):		
HIS 250	US I: Colonial	3
HIS 251	US II: 19 <sup>th</sup> Century	3
HIS 252	US III: 20 <sup>th</sup> Century	3
Non-Western Courses (6 credit hours):		
HIS 260	Latin America	3
HIS 270	Middle East	3
HIS 280	Modern Africa	3
HIS 290	Modern Asia	3
Six credit hours of 300 Level courses		6
Three credit hours of HIS 401 Selected Themes in History		3
HIS 421	Senior Seminar (open only to senior history majors)	3
HIS 422	History and Theory (open only to senior history majors)	1

### **History Minor**

18 credit hours of history courses.

## Political Science Major • BA - Program requirements 40 credit hours

The political science major seeks to help students understand and assess the discipline of political science, theories of politics, political systems and governmental structures, and the tools used in social science research. In addition, the political science major encourages students to develop their reasoning, analytic, and communication skills, and to apply what they are learning to contemporary political issues. The political science major particularly seeks to help students apply Biblical perspectives to the study, practice, and transformation of politics. In conjunction with the core curriculum, the political science major provides students with a broad liberal arts background while training them in the discipline, and equipping them for service in fields including government, law, politics, teaching, policy analysis, and private sector management.

### Major Core Courses (22 credit hours):

POL 151	American Government (Political Science majors may not use this course to fulfill the Social Science core requirement.)	3
POL 203	International Relations	3
POL 211	Comparative Politics	3
POL 352	Great Issues in Politics	3
POL 421	Senior Seminar	3
SSC 348	Methods of Social Science Research	3
SSC 349	Social Science Statistics	4

### Major Area Courses (9 credit hours with at least 3 credit hours in each of the following areas):

#### American Government (at least 3 credit hours)

POL 253	Parties, Elections, and Interest Groups	3
POL 254	State and Local Government	3
POL 255	Congress and the Presidency	4
POL 360	Public Administration	3
POL 361	American Public Policy	3

#### Comparative/International Government (at least 3 credit hours)

POL 331	Foreign and National Security Policy	3
POL 332	Topics in Comparative Politics	3
POL 341	Politics of Global Economics	3
POL 342	Topics in International Relations	3

#### Political Ideas (at least 3 credit hours)

POL 305	Constitutional Law	3
POL 309	Topics in Modern Political Thought	3
POL 312	History of Political Thought	3
POL 313	Democratic Political Thought	3

Nine credit hours in Political Science 9

## Political Science Minor

18 credit hours

POL 151	American Government	3
POL 203	International Relations	
or POL 211	Comparative Politics	3
POL 352	Great Issues in Politics	3

Plus three other courses selected from any POL course or SSC 348

Students are strongly advised to include SSC 348 Methods in Social Science Research in the minor.

## Sociology Major • BA - Program requirements 33 credit hours

The sociology major is designed to give students a foundation in social theory that is demonstrated in everyday social life. While the program is theory based, students are regularly in the community seeing the implications of theory in

neighborhood design, marginalized groups, and the functioning of institutions. This kind of preparation depends on interdisciplinary study and is rooted in a Biblical view of social life.

1)	Sociology Core— (12 credit hours)		
	SOC 120	Society	3
	SOC 220	Social Change	3
	SOC 223	The Sociological Imagination	3
	SOC 254	Gender, Class and Race	3
2)	Contemporary Trends in Sociology (12 credit hours)		
	SOC 230	Introduction to Community Development	3
	SOC 271	Restoring the City	3
	SOC 300	Special Topics	3
		*International Justice	
		*American Culture Studies	
		*Work, Vocation and Leadership	
		*Environmental Sociology	
	SOC 312	Black Culture in the U.S.	3
3)	Social Theory—(9 credit hours)		
	SOC 346	Sociology of Religion	3
	SOC 360	Readings in Social Theory	3
	SOC 401	Utopia and Shalom	3

### **Social Studies Education Major – BA- Program requirements 106 credit hours**

Education Courses (41 credit hours)			
EDU 202	Social and Philosophical Foundations of Modern Education		3
EDU/PSY 211	Educational Psychology		3
EDU 217	Level 1- Field Experience 4-12		1
EDU 219	Level 2- Field Experience 4-12		1
EDU 375	Survey of Disabilities- 4-8 and Secondary		3
EDU 415	Literacy Across the Curriculum Grades 4-12		3
EDU 420	Educational Assessment		3
EDU 432	Student Teaching Performance- 4-12		4
EDU 433	Student Teaching Portfolio		4
EDU 434	Student Teaching Seminar		4
EDU 482	Intervention for Students in Inclusive Classrooms (Grades 7-12)		3
ENG 382	English Grammars		3
MAT 101	College Algebra (or equivalent)		3
MAT 105	Elementary Statistical Methods (or equivalent)		3
Social Studies Courses (25 credits hours)			
ECO 100	Fundamentals of Economics		
or ECO 211	Micro Economics		
or ECO 212	Macro Economics		3
POL 151	American Government		3
PSY 201	Introduction to Psychology		3
SOC 120	Society		3
SSC 280	Human Geography		3
SSC 403	Social Studies Teaching Methods		4
6 credits from:			
HIS 250	U.S. I: Colonial		3
HIS 251	U.S. II: 19 <sup>th</sup> Century		3
HIS 252	U.S. III: 20 <sup>th</sup> Century		3

Second major of History or Political Science (40 credit hours)

### **Sociology Minor**

A student must complete 18 credit hours in sociology for a minor. Students must complete SOC 120, Society, either SOC 360, Readings in Social Theory or SOC 401, Utopia and Shalom, and four of any other sociology courses.

### **Criminal Justice Minor**

The interdisciplinary minor in Crime, Law, and Society is intended to help students develop the knowledge and background necessary to understand the origins of criminal behavior, the consequences of crime for society, and how societies seek to respond to crime. The minor is not intended to provide students with technical skills used in law enforcement. Rather, the minor seeks to help students probe the deeper questions of how we determine what behaviors should be criminalized, what caused those behaviors, and how societies respond to those behaviors. It also seeks to help the student evaluate criminal justice systems from a Christian perspective. This minor should be a good complement to majors in a variety of fields, especially those in the social sciences. It should also enhance the student's employment opportunities in the field of criminal justice.

18 credit hours

SSC 210	Crime, Law, and Society	3
SOC 242	Criminology	3
SSC 310	Criminal Justice	3

Three courses from the following list:

No more than two of these may be in the same department and no course from this list may be used in both this minor and the student's first major.

POL 305	Constitutional Law	3
POL 332	Topics in Comparative Politics	3
or POL 342	Topics in International Relations	3
POL 360	Public Administration	3
HSV 202	Human Diversity	3
PSY 313	Abnormal Psychology	3
PSY 408	Social Psychology	3
SOC 310	Deviance and Marginalization	3
SSC 493	Internship in Criminal Justice	3

### **Community Development Minor**

18 credits

MIN 201	Cultural Anthropology	3
MIN 225	Globalism and Multiculturalism	
or SOC 245	Gender, Class and Race	3
MIN 491	Sustainable Missions	3
SOC 230	Introduction to Community Development	3
SOC 271	Restoring the City	3
SOC 311	Sociology of the City	3

## **Department of Languages and Cultures**

Language, a God-given means of conversing with our Creator and our fellow creatures, provides essential communicative skills for understanding, appreciating, and working with millions of people who speak languages other than English in the United States and outside of our borders. Foreign languages erect bridges leading to successful business and international/national relationships, enabling those who speak them to be a more integral, active component of our present day international society. Acquaintance with one or more languages besides our own helps us value and share the varieties of wisdom, vision and experience that God has distributed among us, and provides us with a valuable tool for serving Him in His earthly Kingdom.

The Spanish minor helps prepare for careers in business, government, missions, science, social service, and teaching. The emphasis of the program is on communication skills, and the demand for these skills in areas such as education,

international banking, multinational commerce, government translation, criminology, and missions makes a Spanish minor in conjunction with any of the college's other majors an attractive combination of study.

All students taking Spanish should consider participating in Geneva College's endorsed programs in Quito, Ecuador (EQUIP), Seville, Spain (Semester in Spain) and Nicaragua (SPIN-Studies Program in Nicaragua). Students may fulfill their Spanish minor requirements by taking 9 credits in Geneva's Spanish minor and 9 credits of Spanish courses abroad. Also, several students opt to plan an Independent Spanish major at Geneva alongside any major at Geneva (except Secondary Education) by completing 18 credits in the Spanish minor at Geneva and 18 credits of Spanish courses in a semester study abroad program.

The beginning Spanish courses are also offered, SPA 101 and 102, but they do not count toward the 18-credit minor.

## Spanish Minor

Students wishing to obtain a Spanish minor must take the following courses for a total of 18 credit hours:

SPA 201	Intermediate Spanish I	3
SPA 202	Intermediate Spanish II	3
SPA 315	Culture and Civilization of Spanish America	3
SPA 319	Advanced Spanish Conversation	3
SPA 320	Advanced Spanish Composition	3
SPA 321	Advanced Spanish Grammar	3
SPA 330	Hispanic Film	3

## Department of Leadership Studies

### Vision of the Department of Leadership Studies (DLS)

Transformed lives ready to serve organizations as servant leaders.

### Mission of the DLS

To provide students with the opportunity to become more effective leaders through faith-based leadership education, practice, and service.

### Leadership Studies Minor

The Leadership Studies minor is housed in the Department of Leadership Studies and is delivered through a partnership with Student Development. All students pursuing the Minor in Leadership Studies will be guided through the program by a representative in the Student Development department (Director of Student Leadership Development).

19 credit hours:

COM 225	Culture and Communication , or if unavailable,	
COM 220	Group Communication	3
LDR 200	Introduction to Leadership Development	3
LDR 292	Leadership Practicum	1
LDR 400	Leadership Studies Capstone	3
SOC 300	Work, Vocation, and Leadership	3

Choose one of the following:

PHI 112	Ethics	3
PHI 214	Business Ethics	3

or other discipline specific ethics course

Choose one of the following:

BUS 310	Principles of Management	3
COM 210	Leadership Communication	3
COM 220	Group Communication	3
COM 315	Communication Process	3
SOC 220	Social Change	3
MIN 243	Principles of Leadership	3

## Department of Music

The Department of Music offers instruction in voice and a variety of instruments, and provides opportunities for solo and group performance, both for students majoring in music and for students from the college at large.

The fundamental purpose of the department of music at Geneva College is to prepare graduates who are able to critique musical life from a Christian perspective and transform it into a Biblical pattern. Such graduates include those who will be listeners and amateur performers of music as well as those who will be professional musicians. To achieve their purpose, we believe music graduates must develop skills in five major areas. Curricular offerings of the department focus on these areas.

- 1) A broad appreciation of the humanities, sciences, and other arts, in order to understand the significance of music to individuals and societies. The college's core is supplemented by ensembles and elective courses open to all students.
- 2) Detailed comprehension of the logic and context of music. Courses in music theory (MUS 108, MUS 109, MUS 208, MUS 209) and aural skills (MUS 128, MUS 129, MUS 228, MUS 229) provide understanding of musicianship, writing and composition, and analysis. Those in music history (MUS 310, MUS 311, MUS 370) examine music's social context, critical writing, and style. Introduction to Acoustics (PHY 160) studies the creational framework within which music operates. Independent and directed study (MUS 491, MUS 495) offer additional insights.
- 3) Competence in the individual and group performance of music. "Making music" involves both private and class lessons in voice, piano, percussion, and a variety of brass, reed, and string instruments; choral groups such as Genevans and Madrigal Singers; and such instrumental groups as Symphonic band, Marching band, Jazz band, and instrumental ensemble.
- 4) The development of salable professional skills in music. Each student majoring in music chooses one of four tracks.
  - a. Music education BS, preparation to teach vocal and instrumental music in elementary and secondary schools. This program is accredited by the Pennsylvania Department of Education and, through interstate agreements; certification is readily achieved in many other states as well. See page 53.
  - b. Music business BA, preparation to work in music wholesaling and retailing, personal and concert management, etc.
  - c. Music general BA, for the generalist. This program is not career specific; it may include preparation for graduate study either in music or in some related field. This is a flexible program and is essentially liberal arts rather than career specific.
- 5) The opportunity to articulate and demonstrate a comprehensive philosophy of music, embodied in all courses, and in performances.

### Auditions

Students who wish to major in music must meet the normal conditions for admission to the college. In addition, they must be accepted by the music department, based on their qualifications to pursue study in this field. The acceptance process will include an audition, interview with the faculty, and diagnostic evaluation (testing), as appropriate for the particular major intended. Students who wish to be considered for a music scholarship must audition by the end of February of their senior year.

### Individual Instruction

Any student may receive college credit for private studio lessons in voice, piano, organ, strings, woodwinds, brass, guitar, and percussion. Fees are described on page 197. These lessons constitute the applied music requirement for music majors. All music majors taking applied music for credit must appear before a board (see page 79 for definition of terms) at the end of each semester.

### Musical Organizations

Regardless of major, students may earn college credit for participation in MUS 212 Marching Band, MUS 213 Symphonic Band, MUS 214 Instrumental Ensembles, MUS 214 Jazz Band, MUS 215 Genevans, MUS 216 Vocal Ensemble, and MUS 218 Handbell Ensemble. A maximum of eight of these credit hours can be used to meet minimum graduation requirements.

All music majors are required to participate in at least one ensemble every semester, and to complete a total of ten credit hours in ensembles. Eight of these must be in large ensembles (MUS 212, MUS 213, or MUS 215) and two in small ensembles (MUS 214, MUS 216, MUS 218). Music minors are required to complete four credit hours in ensembles.

### **Piano Proficiency**

All music majors are required to pass a proficiency examination in piano by the end of their sophomore year. See second year review, page 79. General music, music business, and music performance (non-keyboard) majors are required to pass level I proficiency. Music education and music performance (keyboard) majors are required to pass at level II.

- 1) Every music major must be continuously enrolled in piano until the piano proficiency examination is passed.
- 2) Preparation for the piano proficiency exam should not be made through private lessons.
- 3)
  - a. The level I exam can be completed by passing MUA 107 the second in the class piano sequence, with a grade of “B” or better. The student need not appear before the entire faculty board.
  - b. Students who enter the department with some piano skills may elect to test out of MUA 107 by passing a version of the level I proficiency.
  - c. Preparation for a level II exam should be made by completing two semesters of the class piano sequence (MUA 106, MUA107, and continuing with private piano lessons until proficiency is passed).
- 4) The following guidelines apply to the class piano and keyboard harmony sequence:
  - a. If a student receives an A or B for the semester, he or she may go on to the next course. If the grade is B, the class syllabus must be completed before beginning the next.
  - b. If the student receives C, D, or F, the course must be repeated.
- 5) Details more specific than the lists above are available from the piano instructors and should be followed in preparing for the examination.
- 6) Failure to pass the examination by the end of the sophomore year puts doubt on the student’s ability to complete the degree successfully and to succeed in a musical career. Students who do not pass by that time will be placed on probation for one semester.

### **Voice Proficiency**

Students majoring in music education must pass a voice proficiency examination by the end of their junior year.

### **Recitals and Attendance**

The BS in music education and the BA in music performance require the presentation of a senior recital. Students in those programs should check with their adviser upon registration to learn the specific requirements.

All music majors and minors are required to attend recitals and concerts on campus. Such attendance is essential to musical and personal growth, and is an important part of one’s musical education.

### **Second Year Review**

During the spring semester of the sophomore year as a music major, or after the completion of 43 credit hours of college work, the student will be evaluated by the faculty of the music department on the basis of progress in five areas: academic studies (music literature, theory, and aural skills; business and accounting courses for music business majors), piano skills (completion of piano proficiency), performance skills (ensemble as well as private and class lessons), interpersonal skills, and vocal skills (music education majors). On the basis of this evaluation, the student may be advised to continue or to consider a different major. Results of the evaluation will be discussed in a conference with the student’s academic adviser.

### **Definitions of Terms**

**Music Performance Major:** a student approved by the music faculty to receive his or her degree in music performance.

**Board:** a committee, consisting of members of the music faculty, that sits at the end of each semester to hear and evaluate the progress of all music majors taking private lessons.

**Concentration:** the primary applied music study of students majoring in music education, music business, or music (general).

**Ensemble:** a performing group sponsored by the music department, and conducted or coached by a member of the music faculty: MUS 212, MUS 213, MUS 214, MUS 215, MUS 216, and MUS 218.

### **Music Education Major • BS – Program requirements 93 credit hours**

Fourteen credit hours in music theory and aural skills (MUS 108, MUS 109, MUS 128, MUS 129, MUS 208, MUS 209, MUS 228, MUS 229)

Nine credit hours in music history and literature (MUS 310, MUS 311, MUS 370)

Four credit hours in conducting (MUS 231, MUS 232, MUS 334, MUS 335)

Five credit hours in school music methods (MUS 350, MUS 351)

Six credit hours in class lessons (MUA 153, MUA 154, MUA 155, MUA 156, MUA 157, MUA 193) others by elective (MUA 254, MUA 255, or MUA 257)

Ten credit hours in ensembles (eight in large ensembles, MUS 212, MUS 213, MUS 215; two in small ensembles, MUS 214, MUS 216, MUS 218)

Three credit hours in Introduction to Acoustics (PHY 160)

Thirteen credit hours in studio lessons in the instrument of concentration

One hour in senior recital

Piano proficiency, Level II

Total: 64 credit hours in music; three in acoustics; 26 credit hours in Professional education and 43 in core requirements not included in the major. Total credit hours: 133-136.

Additional proficiency and program requirements:

Passing piano proficiency examination (level II) by the end of the sophomore year, and a voice proficiency test by end of junior year. Prerequisite for student teaching.

- Participation in at least one ensemble each semester.
- Performance in one or more student recitals, and before the board, each semester.
- Prescribed attendance at recitals and concerts on campus.
- Senior recital: presentation during senior year, of a solo half-recital (30 minutes) of works approved by the music faculty.
- Organ majors must study piano at least one year or pass a diagnostic test in piano and receive special recommendation of the organ instructor.

**Suggestions:** Students entering with any academic deficiencies as defined on page 193 will need additional time. For most majors at least one summer session is recommended to complete the degree within four years.

### **Music Business Major • BA – Program requirements 78 credit hours**

Purpose: preparation to work in music wholesaling and retailing, personal and concert management, etc.

Eleven credit hours in music theory and aural skills (MUS 108, MUS 109, MUS 128, MUS 129, MUS 208 or MUS 209, MUS 228 or MUS 229)

Six credit hours in music history and literature (MUS 310, MUS 311)

Ten credit hours in ensembles (eight in large ensembles, MUS 212, MUS 213, MUS 215; two in small ensembles, MUS 214, MUS 216, MUS 218)



Three credit hours in Introduction to Acoustics (PHY 160)

Eight credit hours in applied music lessons (two of which may be class lessons)

Piano proficiency, level I (normally one to two credit hours)

Eighteen credit hours of business (BUS 110, BUS 241, BUS 310, BUS 311, BUS 320, BUS 417)

Nine credit hours of Accounting and Economics (ACC 151, ECO 211, and either ACC 152 or ECO 212)

Two credit hours of public relations (COM 180)

Nine credit hours in music business (MUS 301, MUS 493, MUS 495)

Total: 37 in music, three in acoustics, 27 in BUS/ACC/ECO; two in public relations, 9 in music business, and 40 in core requirements not included in the major. Total credit hours 118.

There are additional proficiency and program requirements:

- Passing piano proficiency level I. MUS 106, MUS 107 are provided to help students meet this goal.
- Passing two credit hours in class lessons in instruments (MUA 153, MUA 154, MUA 155, MUA 156, MUA 157, MUA 193, MUA 254, MUA 255, MUA 257), which may be counted toward the applied music requirement.
- Passing participation in at least one ensemble each semester (as explained above).
- Passing performance in at least one student recital per semester, and before the board each semester, while studying privately.
- Passing prescribed attendance at recitals and concerts on campus.

### **Music Major • BA – Program requirements 60-64 credit hours**

Purpose: This liberal art major is not career-specific; it is for the generalist. With the addition of further options, it is suitable as preparation for graduate study.

Eight credit hours in music theory and aural skills (MUS 108, MUS 109, MUS 128, MUS 129)

Three credit hours in Music History (MUS 310 or MUS 311)

Ten credit hours in ensembles (eight in large ensembles, MUS 212, MUS 213, MUS 215; two in small ensembles, MUS 214, MUS 216, MUS 218)

Three credit hours in Introduction to Acoustics (PHY 160)

Eight credit hours in applied music lessons (two of which may be class lessons)

Ten additional credit hours in music

Piano proficiency level I (normally two credit hours)

An approved minor (such as business or theatre) or a second major.

Total: 39–43 credit hours in music; three in acoustics; 18 or more in a minor.

Additional performance and proficiency requirements:

- Passing piano proficiency examination at level I.
- Performance in at least one student recital per semester and appearance before the board each semester.
- Prescribed attendance at recitals and concerts on campus.

Program options or tracks:

MUS 208	Music Theory III	2
MUS 209	Music Theory IV	2

MUS 228	Aural Skills III	1
MUS 229	Aural Skills IV	1
MUS 310	Music History I	3
MUS 311	Music History II	3
MUS 231	Fundamentals of Conducting I	1
MUS 232	Fundamentals of Conducting II	1
MUS 370	World and Popular Music	3

## Music Minor

### Music: 19 credit hours

MUS 108	Music Theory I	2
MUS 109	Music Theory II	2
MUS 128	Aural Skills I	2
MUS 129	Aural Skills II	2
MUS 310	Music History I	
or MUS 311	Music History II	3
	Applied Music	4
	Ensembles	4
	Attendance at recitals and concerts	

## Department of Physical Education

The Physical Education Department offers two types of core courses to meet the core requirement, as well as offering courses to meet the Sport Coaching minor and the Sport Management/Business major.

In the core courses in the Department of Physical Education we seek to provide a positive learning environment that will enhance instruction and learning in the area of lifetime fitness. Instructors strive to be role models for each student while providing instruction and guidance for a life of spiritual, physical, emotional, and mental wellness. A goal is to enhance the student's sense of responsibility regarding caring for one's body as the "temple of the Lord" (I Corinthians 6:19-20).

### Core Requirement

Two credit hours of physical education, PED 103 – Physical Fitness and PED 101, are required of all students for graduation. Students who are participating in intercollegiate athletics may receive one credit only towards the physical education requirement PED 101. The only recognized intercollegiate sports are baseball, basketball, cross-country, football, soccer, and track and field for men, and basketball, cross-country, soccer, softball, tennis, track and field, and volleyball for women. Students in marching band may also receive one credit for PED 101.

A veteran's military training is accepted to meet the physical education requirement. See page 22.

### Sport Management/Business Major · BS- Program Requirements 57 credit hours

The Sport Management major prepares students for positions in the athletic world including athletic administration, sport/recreational facility management, and coaching and event management. Students explore the theories and principles of management as applied to sport programs and facilities. As a joint venture of the Department of Business and the Department of Physical Education, the goal of the sport management major is to prepare students to become a valuable part of the workforce in a variety of venues within the sport culture, thereby fulfilling the Geneva College mission statement, "for the purpose of developing servant-leaders, transforming society for the kingdom of Christ."

Take each of the following Business courses (39 credits):

ACC 151	Principles of Accounting I	3
BUS 110	Business Foundations	3
BUS 115	Business Communication	3
BUS 241	Quantitative Analysis I	3
BUS 310	Principles of Management	3
BUS 311	Business Law	3
BUS 314	International Business	3
BUS 320	Principles of Marketing	3
BUS 330	Principles of Finance	3
BUS 400	Biblical Management and Business Ethics	3

BUS 410	Strategic Management	3
ECO 211	Micro Economics	3
ECO 212	Macro Economics	3

Take each of the following SPM courses (18 credits):

SPM 101	Introduction to Sport Management	3
SPM 201	Legal Issues in Sport	3
SPM 205	Sport Management Practicum	3
SPM 206	Governance and Organization of Sport	3
SPM 302	Facility Management and Design	3
SPM 401	Sport in American Culture	3

\*An additional 1-9 credits in SPM 493 (Internship) may be taken as elective credits.

### **Sport Coaching Minor**

Courses in the Sport Coaching Minor can prepare students for coaching in interscholastic, intercollegiate, community, and youth sport organizations.

The following 18 credit hours must be taken to fulfill the requirements for a sport coaching minor:

PED 150	Coaching Effectiveness	3
PED 205	Sport Coaching Practicum	3
PED 247	First Aid and Emergency Care	2
PED 255	Athletic Training	3
PED 405	Sport Coaching Seminar	1
SPM 101	Introduction to Sport Management	3
SPM 401	Sport in American Culture	3

### **Sport Management Minor (business concentration)**

Courses in the sport management concentration, in conjunction with a business major, can prepare students for employment in professional, amateur, interscholastic, intercollegiate, community and youth sport organizations.

The following 18 credit hours are required to complete a minor in sport management:

PED 247	First Aid and Emergency Care	2
PED 405	Sport Coaching Seminar	1
SPM 101	Introduction to Sport Management	3
SPM 201	Legal Issues in Sport	3
SPM 205	Sport Management Practicum	3
SPM 302	Facility Management and Design	3
SPM 401	Sport in American Culture	3

## **Department of Psychology, Counseling and Human Services**

The department offers four undergraduate majors—psychology, biopsychology, criminal justice, and human services—as well as a master of arts in counseling.

Faculty members of the department of psychology, counseling and human services approach the study and practice of psychology, counseling and human services from a Christian perspective. They mentor and encourage students in their academic and Christian spiritual development. Faculty members are affiliated with professional organizations including the American Psychological Association, the Christian Association for Psychological Studies, the American Counseling Association, the American Psychological Society, the American Association of Marriage and Family Therapists, the National Organization for Human Service Education, and the National Council on Family Relations.

### **Psychology Major • BS - Program requirements 44 credit hours**

Psychology, the study of behavior and thinking, provides a strong basis for many careers. Psychology graduates are well prepared for graduate school in a specialized field of psychology such as clinical, counseling, industrial, or experimental psychology. Psychology graduates also find themselves prepared for graduate study in many other fields such as business, ministry, theology, or medical fields. Those with a bachelor's degree in psychology who do not wish to pursue graduate

study are eligible for a wide array of jobs working with people. The understanding of human behavior, personality, emotions, and groups, is an exciting discipline with broad application to almost all areas of life.

Honors students are invited to participate in Psi Chi, the national psychology honorary society. Each year outstanding psychology students are selected by the faculty to receive the Lewis G. Walker Award affording opportunity to attend a nationally recognized psychology conference.

The Bachelor of Science in psychology incorporates the broad study of psychology and methods of inquiry within the context of a Christian worldview. Students develop a general knowledge base that includes human development, social psychology, statistics, research methods, abnormal psychology, personality, biological bases, and cognitive psychology. A doctoral degree in psychology is required for those who wish to become licensed psychologists, professors of psychology, or research scientists and a master's degree is required for those who wish to be licensed counselors.

The psychology major provides comprehensive understanding of both psychological science (research methods and findings) as well as psychological practice (applying research results to solve human problems). Hence, it includes courses that incorporate a research and writing emphasis, as well as courses that examine practice and applications of psychological research. All students participate in an orientation to the field of psychology course at the beginning of the program and a seminar during the senior year, which serves as a capstone course oriented toward fostering students' professional development and planning. In all courses, students learn to evaluate and apply psychology from a Christian perspective.

Take each of the following PSY courses (44 credit hours):

HSV 202	Human Diversity	3
PSY 201	Introduction to Psychology	3
PSY 202	Biological Bases of Behavior	3
PSY 205	Psychological Statistics	
or MAT 105	Elementary Statistical Methods	3
PSY 206	Orientation to Psychology	2
PSY 207	Research Methods in Psychology	3
PSY 211	SPSS and Statistical Analysis	1
PSY 250	Life Span Development	3
PSY 313	Abnormal Psychology	3
PSY 328	Learning and Cognition	4
PSY 404	Personality Psychology	3
PSY 408	Social Psychology	3
PSY 411	History and Theories of Psychology	3
PSY 425	Senior Seminar in Psychology	1

Take one of the following PSY courses (three credit hours):

PSY 251	Child Development	3
PSY 252	Adolescent Development	3
PSY 253	Adulthood and Aging	3

Take one of the following PSY courses (three credit hours):

PSY 260	Tests and Measures	3
PSY 350	International Psychology	3
PSY 405	Psychology of Gender	3
PSY 406	Psychology of Prejudice	3

## Psychology Minor

Any 18 credit hours from the list below:

HSV 202	Human Diversity	3
PSY 201	Introduction to Psychology	3
PSY 202	Biological Bases of Behavior	3
PSY 205	Psychological Statistics	3
or MAT 105	Elementary Statistical Methods	3
PSY 206	Orientation to Psychology	2
PSY 207	Research Methods in Psychology	3

PSY 250	Life Span Development	3
PSY251	Child Development	3
PSY 252	Adolescent Development	3
PSY 253	Adulthood and Aging	3
PSY 260	Tests and Measures	3
PSY 313	Abnormal Psychology	3
PSY 320	Conditioning and Learning	4
PSY 325	Cognitive Psychology	4
PSY 326	Emotion and Memory	3
PSY 404	Personality Psychology	3
PSY 405	Psychology of Gender	3
PSY 406	Psychology of Prejudice	3
PSY 408	Social Psychology	3
PSY 411	History and Theories of Psychology	3
PSY 423	Psychology Research Literature	1
and PSY 424	Applied Psychological Research	2
PSY 425	Senior Seminar in Psychology	1

### **Biopsychology Major • BS-Program requirements 60 hours**

Recent advances in the understanding of brain function and how it relates to behavior have led to the emergence, development and rapid expansion of a new interdisciplinary scientific field of Biopsychology. This area of study explores the relationship between physiological and psychological systems. A major objective for this discipline is to provide a deeper understanding of how the physiology of the body functions in behavior, and also how defects in such function affect behavior. Recent advances in neuroscience and psychology have led to materialistic and scientific explanations of the mind, which in turn, influence fields of ethics, anthropology, theology, and philosophy. For example, a 2009 Wall Street Journal op-ed article by William McGurn expressed concern about a scientific view of human nature for its ability to account for love, morality, and human dignity. He points out that those who claim the mind can be reduced to electrochemical processes rarely live out the implications of that view. As Christians we should join in on this type of conversation and bring the metaphysical reality of God to bear on these types of issues. Although we must avoid the exclusivity of the current pervasive reductionistic philosophy in the study of biology and behavior, it is nevertheless clear that some behaviors and cognitive functions can be localized to specific physiological systems.

Our goal for the Biopsychology degree program is to structure a curriculum of courses that provide training in this new field as well as provide tools for engaging this area with Christian critique and discernment. The curriculum includes Psychology courses having a developmental and biological approach, along with Biology courses dealing with humans and/or animals at the genetic and molecular levels. Cognates in other disciplines are also to be required (e.g., Bible, Chemistry, Physics, and Philosophy).

Take each of the following courses:

BIO 112	Introduction to Cellular Biology	4
BIO 225	Human Anatomy and Physiology I	4
BIO 319	Genetics	4
BIO 326	Human Anatomy and Physiology II	4
BIO 331	Biomedical Ethics	3
BIO 422	Neuroscience	4
CHM 111	General College Chemistry	4
CHM 221	Organic Chemistry I	4
PHI 110	The Philosophical Conversation	3
PSY 201	Introduction to Psychology	3
PSY 202	Biological Bases	3
PSY 205	Psychological Statistics	3
PSY 206	Orientation to Psychology	2
PSY 207	Research Methods in Psychology	3
PSY 211	SPSS Tutorial	1
PSY 250	Life Span Development	3
PSY 313	Abnormal Psychology	3
PSY 328	Learning and Cognition	4

## Human Services Major • BS - Program requirements 50 credit hours

The human services field uses an interdisciplinary knowledge base, which includes, but is not limited to, psychology, sociology, anthropology to remediate and to assist individuals, families, groups, and communities to function as effectively as possible, by providing direct services, improvement of service accessibility, accountability, and coordination, as well as through prevention strategies. Graduates with a major in human services are prepared to work with different populations such as children, the indigent, the distressed, the elderly, the homeless, the abused or victimized, and the physically or mentally handicapped or ill and also are prepared to work in various human service settings (e.g., church or faith-based programs, the public welfare system, community development, public housing, children/youth/family services, residential treatment facilities, hospitals, prisons). Graduates also find themselves prepared for graduate studies in many fields such as human services, social work, counseling, psychology, sociology, criminal justice, or ministry.

The interdisciplinary approach of the human services affords students the opportunity to explore human services, practice, and theory from a variety of academic perspectives. Core courses in psychology prepare the students to comprehend normal human development. Human services courses stress a basic understanding of the history of social welfare, issues of diverse population groups, social systems, and the role of various service agencies in meeting human needs. Methodology courses promote understanding of the experimental methods employed in studying human behavior and systems. Internship and skills-based course work assure that students will possess the requisite generalist practice competencies needed to perform successfully in human services agencies. During the senior year, students complete semester-long internships in public, private, church, and government human services agencies.

Take each of the following HSV courses (35 credit hours):

HSV 201	Introduction to Human Services	3
HSV 202	Human Diversity	3
HSV 215	Human Services: Foundations and Calling	2
HSV 230	The Family System in Context	3
HSV 301	Social Welfare Agencies and Policies	3
HSV 303	Agency Field Experience	3
HSV 305	Counseling and Helping Skills I	3
HSV 307	Generalist Practice, Model, and Theory	3
HSV 401*	Senior Seminar	3
HSV 405	Community Intervention and Special Population	3
HSV 450*	Field Experience	6

\*HSV 401 and HSV 450 are taken concurrently. Admission is only by application and eligibility. Several prerequisites and an extensive time commitment make it essential to plan carefully for these courses.

Take one of the following statistics courses (three credit hours):

MAT 105	Elementary Statistical Methods	3
PSY 205	Psychological Statistics	3

Take each of the following PSY courses (9 credit hours):

PSY 201	Introduction to Psychology	3
PSY 250	Life Span Development	3
PSY 313	Abnormal Psychology	3

Take the following SOC course (3 credit hours):

SOC 120	Society	3
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Optional course (taken with HSV 303):

HSV 302	Program Evaluation for Human Services	1
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## Human Services Minor

18 credit hours

Take each of the following HSV courses (15 credit hours):

HSV 201	Introduction to Human Services	3
HSV 202	Human Diversity	3

HSV 230	The Family System in Context	3
HSV 301	Social Welfare Agencies and Policies	3
HSV 307	Generalist Practice, Model, and Theory	3

Take one of the following courses (three credit hours):  
 Any psychology (PSY) or human services (HSV) course 3

HSV 303, 401, and 450 are for majors only.  
 Depending on student demand, HSV 305 may only be available for majors.

### **Criminal Justice Major · BS – Program Requirements 42 hours, plus 12 credits in one concentration or Spanish Minor**

The interdisciplinary major in Criminal Justice is intended to help students develop the knowledge and background necessary to understand the origins of criminal behavior, the consequences of crime for society, and how societies seek to respond to crime. It draws from coursework in criminal justice, psychology, sociology, political science and will help students probe the deeper questions of how we determine what behaviors should be criminalized, what caused those behaviors, and how societies respond to those behaviors. It also seeks to help the student evaluate criminal justice systems from a Christian perspective to prepare students to serve God through compassionate service in this field. During the senior year, students will complete a semester-long field experience to further prepare for work in a variety of criminal justice fields.

Take 6 credits from the following Background and Framing Courses

POL 151	American Government	
or POL 254	State and Local Government	3
POL 360	Public Administration	3

Take the following 12 credits from Understanding Causes of Criminality:

CRJ 210	Crime, Law, and Society	3
SOC 242	Criminology	3
SOC 310	Deviance and Marginalization	3
PSY 313	Abnormal Psychology	3

Take the following 24 credits in Understanding our Response to Crime

CRJ 230	Juvenile Justice	3
CRJ 260	Criminal Law	3
CRJ 310	Criminal Justice Systems	3
CRJ 345	Probation and Parole	3
CRJ 360	Criminal Investigations and Procedures	3
CRJ 491	Restorative Justice	3
CRJ 493	Internship in Criminal Justice	3
CRJ 450	Senior Seminar and Professional Ethics	3

Students are required to take SOC 120 and PSY 201 for their Social Science core requirements.

In addition to the above, students will need to complete one of the following concentrations or minors.

#### **Leadership Concentration- 12 credits**

BUS 310	Principles of Management	3
COM 210	Leadership Communication	3
COM 220	Group Communication	3
LDR 200	Leadership Development	3

#### **Federal Law Enforcement- 12 credits**

CRJ 250	Homeland Security	3
POL XXX	Intelligence	3
POL 331	Foreign and National Security	3

POL 342	Global Terrorism	3
<b>Juvenile Development and Justice- 12 credits</b>		
HSV 230	The Family System in Context	3
PSY 250	Life Span Development	3
PSY 251	Child Development	3
PSY 252	Adolescent Development	3
<b>Spanish Minor – 18 hours</b>		
SPA 201	Intermediate Spanish I	3
SPA 202	Intermediate Spanish II	3
SPA 315	Culture and Civilization of Spanish America	3
SPA 319	Advanced Spanish Conversation	3
SPA 320	Advanced Spanish Composition	3
SPA 321	Advanced Spanish Grammar	3

## Pre-Professional Programs

### Pre-Law Program

To be admitted to a law school accredited by the American Bar Association, and eventually to the practice of law, the student generally must receive a bachelor's degree from an accredited college or university and an acceptable score on the Law School Admissions Test (LSAT). Most law schools prefer that students not make legal studies the focus of their undergraduate work. For this reason, Geneva College does not offer a pre-law major.

Geneva's pre-law committee provides counsel and advice to students interested in careers in the legal professions. The committee seeks to assist students in assessing their interests in the legal profession, in thinking about the role Christians should play in the legal profession, in preparing for law school and for the LSAT, and in the law school application process. Students with an interest in the legal professions are urged to identify themselves to the committee through the pre-law adviser, Dr. Frederick Neikirk.

While no particular major is necessary to gain admission to law school, law schools are looking for students who have good analytic and communication skills and a solid background in history and the social sciences. These attributes are also necessary for success in the practice of law. Many of these skills and much of this background knowledge can be attained through the core curriculum of the college. For students who want to pursue these in more depth Geneva offers a minor in pre-law studies. This minor is designed to build on the skills and understandings developed in the core, to supplement the student's major, and to help the student gain some understanding of the study and practice of law.

### Pre-Law Studies Minor

The pre-law studies minor requires at least six courses of which two must be chosen from the skill-oriented courses, two from the background courses, and one from the law-related courses. The sixth course may come from any of the three areas. No more than one course in this minor may be used to fulfill the requirements of any major and no more than one may be used to fulfill the requirements of the core curriculum. Students should see the pre-law adviser for more information on this minor and for assistance in planning which combination of courses will best meet their needs and interests.

#### Approved Skill-Oriented courses:

ACC 151	Principles of Accounting I	3
ACC 152	Accounting II (recommended, may not be used in the minor)	3
COM 215	Argumentation and Debate	3
COM 310	Public Speaking	3
ENG 113	Researched Writing	
or ENG 205	Advanced Composition	3
PHI 100	Critical Thinking	3

#### Approved Background courses:

ECO 100	Fundamentals of Economics	
or ECO 211	Micro Economics	
or ECO 212	Macro Economics	3
HIS 250	US I: Colonial	



or HIS 251	US II: 19 <sup>th</sup> Century	
or HIS 252	US III: 20 <sup>th</sup> Century	
or HIS 381	History of Britain	3
PHI 112	Ethics	3
POL 151	American Government	
or POL 254	State and Local Government	
or POL 361	American Public Policy	3
PSY 201	Introduction to Psychology	
SOC 120	Society	
or SOC 310	Deviance and Marginalization.	3

Approved Law Related courses:

BUS 311	Business Law	3
POL 305	Constitutional Law	3

Plus approved internship, special topics course, or off-campus course which introduces the student to some aspect of the law or legal profession. Students must see the pre-law adviser to get permission to include such a course or internship in the minor.

### **Pre-Medical Program**

The Geneva College curriculum provides an opportunity within a liberal arts context to fulfill the requirements for admission to allopathic or osteopathic medical schools and to professional schools of dental, veterinary, and podiatric medicine as well as optometry. The minimum entrance requirements for most of these schools can be met by completing the following courses: BIO 112, BIO 225, BIO 319, BIO 326, CHM 111, CHM 221, CHM 222, PHY 201, PHY 202 (or PHY 181, PHY 182), and six credit hours of English writing. Successful completion of these courses will also give the student the minimum preparation for the national admissions exams such as the MCAT, DAT, VAT, GRE, or OAT. Therefore, it is advisable that the student has completed or be enrolled in these courses by the spring of the junior year when these tests are ordinarily taken.

In addition, to provide the best preparation for the medical professions, as many as possible of the following courses should be completed: BIO 302 Embryology, BIO 305 Microbiology, BIO 315 Immunology, BIO 317 Biochemistry, BIO 331 Biomedical Ethics, BIO 405 Molecular Biology, and BIO 422 Neuroscience.

Pre-medical students should complete the requirements for a major within an academic discipline. The most common majors of students preparing for a career in medicine are biology, chemistry, and psychology, although most other majors are acceptable if the student has an excellent record of achievement. See page 34 for biology major requirements and page 43 for chemistry major requirements.

Suggested electives, occasionally recommended by medical schools: MAT 120 Precalculus, MAT 161 Calculus I, PSY 313 Abnormal Psychology, SOC 221 Social Groups and Institutions, CHM 318 Biochemistry II.

The new MCAT, being offered for the first time in 2015, places greater emphasis on psychology and sociology. To be prepared for this exam, a pre-medical student should take PSY 201 (Introduction to Psychology), PSY 205 (Psychological Statistics), PSY 207 (Research Methods in Psychology), and PSY 408 (Social Psychology) as well as SOC 120 (Society) and SOC 225 (Sociological Investigation).

# UNDERGRADUATE COURSE DESCRIPTIONS

This listing of each course includes its formal name, the number of credit hours earned when it is completed successfully, a general description of the content, the frequency with which it is usually offered, and prerequisites that are usually required. Note that special circumstances may lead to the course being offered more frequently than scheduled and, on some occasions, the college may choose not to offer a course in the expected semester. Students should consult the course listing printed each semester prior to registration and, if difficulties in scheduling occur, should consult their academic adviser. In all cases, the content of each course will be indicated more fully by the course syllabus that will be available from the instructor at the beginning of the course.

The following courses may be repeated, but only eight credit hours will count towards a bachelor's degree and four credit hours maximum for an associate degree: COM 201, 202, 203, 204; EDU 220; ENG 221, 222, 223; HMN 491; MUS 212, 213, 214, 215, 216, 218. (See limitations on page 14.)

## ACCOUNTING • ACC

ACC 151, 152 Principles of Accounting I, II (3, 3) is a two semester introduction to accounting. Accounting application is critical to this course as the preparation of trial balances, adjusting and other journal entries, and financial statements are the focus. Financial and managerial decision making techniques are discussed and applied in detail during the second semester. ACC 151: Every semester. ACC 152: Spring semester. Prerequisite for ACC 152: ACC 151.

ACC 256 Managerial Accounting (3) Cost accounting with a managerial emphasis including cost-volume-profit relationships; job costing, ABC costing, master budgets, flexible budgets and variance analysis, cost behavior, decision-making and relevant information, cost allocation, and process costing. Every semester. Prerequisites: ACC 151.

ACC 261, 262 Intermediate Accounting I, II (3, 3) is a two semester intermediate accounting course where financial statement components are examined in detail and more complex financial concepts such as bond accounting, deferred income taxes, pensions, leases, and securities are studied. ACC 261: Fall semester. ACC 262: Spring semester. Prerequisite for ACC 261: ACC 151; Prerequisite for ACC 262: ACC 261

ACC 350 Accounting Systems and Application (3) Using QuickBooks to perform and understand accounting transactions, controls, and procedures in a simulation-type setting. Fall Semester. Prerequisite: ACC 151.

ACC 357 Taxation (3) Underlying principles and concepts of income taxation as they relate to the preparation of federal income tax returns for individuals. Fall semester. Prerequisite: ACC 151.

ACC 358 Advanced Taxation (3) In-depth consideration of corporate income taxation, including the principles of estate and gift taxation. On demand. Prerequisite: ACC 357.

ACC 363 Advanced Accounting (3) Covers advanced topics such as purchase accounting, consolidations, partnership, governmental and not-for-profit accounting. Fall semester. Prerequisite: ACC 151.

ACC 365 Accounting Special Topics (3) are offered to fulfill core accounting requirements. Potential topics include International Accounting, Forensic Accounting, Advanced Managerial Accounting, Governmental and Not-for Profit Accounting, etc. Typically offered once per year based upon demand. Prerequisites: ACC 261.

ACC 457 Auditing (3) examines the entire audit process from a professional point of view. The application of course materials are critical to understanding the preliminary, fieldwork, and review stages of an audit and crucial to the comprehension of risk assessment and management communications. Spring semester. Prerequisite: ACC 261 .

ACC 199, 491, 493, 494, 495 (see page 13)

## BIBLICAL STUDIES • BIB

BIB 112 Biblical Introduction I—Creation to Post-Exilic Period (3) Introduction to the history of salvation as expressed in the Old Testament, including historical and theological study focused on Israel as the covenant people of God, with special attention on the relationship of the Old Testament to Jesus Christ.

BIB 113 Biblical Introduction II—Intertestamental Period through Apostolic Age (3) The political, social, and religious background and setting of the New Testament; the Gospels as witness to Jesus Christ; and the development of Christianity in the first century.

BIB 151 Introduction to Biblical Studies (honors) (3) An introductory Old Testament Bible course for students with a strong Bible background. Prerequisite: Invitation, based on pretest performance.

BIB 152 Introduction to Biblical Studies (honors) (3) An introductory New Testament Bible course for students with a strong Bible background. Prerequisite: Invitation, based on pretest performance.

BIB 200 How to Read the Bible (3) This course provides a general overview to the principles of interpretation from a redemptive historical perspective. Fall semester.

BIB 300 Foundations of Christian Thought (3) Scripturally derived concepts undergirding Christian academic work, and a biblically directed view of the world and of man's role in the divinely established order. Prerequisites: BIB 112, BIB 113. Open only to juniors and seniors.

BIB 301 Old Testament Prophecy (3) Theological and ethical content, with attention to the original life-settings and contemporary relevance of the prophetic literature. Repeatable. Prerequisites: BIB 112/BIB 113 or BIB 151/152; BIB 200 or permission of the instructor.

BIB 302 Wisdom Literature (3) The wisdom tradition in Israel and the ancient Near East, with special emphasis on Job, Proverbs, and Ecclesiastes. Approved HUM 304 option. Prerequisites: BIB 112, BIB 113, and BIB 200 or permission of the instructor.

BIB 303 Old Testament Studies (3) Variable topics in the Old Testament. Gives opportunity to study the book of Psalms or a more in-depth examination of some of the Pentateuch or history books. Repeatable. Prerequisites: BIB 112/113 or BIB 151/152; BIB 200 or permission of the instructor.

BIB 304 Psalms (3) This course explores the biblical book of Psalms under four headings: its ancient Israelite origins, its witness to Israel's Old Testament theology, its use in the New Testament, and its use in the Christian prayer and worship. Approved HUM 304 option. Prerequisites: BIB 112/113 or BIB 151/152; BIB 200; or permission of instructor.

BIB 305 Isaiah (3) A study of the Old Testament Book of Isaiah, with special attention toward exploring its role in the unfolding of redemptive-history, and how its message and imagery contains key themes that were recognized by the New Testament writers as having been ultimately fulfilled in the Person and Work of Jesus Christ. Approved HUM 304 option. Prerequisites: BIB 112/113 or BIB 151/152; BIB 200.

BIB 306 Daniel (3) An introduction to Biblical prophecy and the book of Daniel. Prerequisites: BIB 112/113 or BIB 151/152; BIB 200; or permission of instructor.

BIB 307 Judah's Exile and Restoration (3) A study of Judean history and prophecy from the Babylonian captivity to the return from exile. Approved HUM 304 option. Prerequisites: BIB 112/113 or BIB 151/152; BIB 200; or permission of instructor.

BIB 308 Luke (3) A study of the Gospel of Luke. Prerequisites: BIB 112/113 or BIB 151/152; BIB 200. Fall semester.

BIB 309 Revelation (3) A study of the book of Revelation. Prerequisites: BIB 112/113 or BIB 151/152; BIB 200. Fall Semester.

BIB 310 Pauline Epistles (3) In-depth study of various epistles. Repeatable. Prerequisites: BIB 112, BIB 113, and BIB 200 or permission of the instructor.

BIB 311 Matthew (3) A study of the Gospel of Matthew. Prerequisites: BIB 112/113 or BIB 151/152; BIB 200. Fall semester.

BIB 313 John (3) A study of the Gospel of John. Prerequisites: BIB 112/113 or BIB 151/152; BIB 200. Spring semester.

BIB 314 New Testament Studies (3) Study various New Testament books not covered in other courses. Repeatable. Prerequisites: BIB 112, BIB 113, and BIB 200 or permission of the instructor.

BIB 315 Acts (3) A study of the Book of Acts. Prerequisites: BIB 112/113 or BIB 151/152; BIB 200. Fall semester.

BIB 316 Romans (3) An in-depth study of the Book of Romans. Prerequisites: BIB 112/113 or BIB 151/152; BIB 200. Fall semester.

BIB 317 Ephesians/Pastoral Epistles (3) A study of Ephesians, its themes and doctrines. Prerequisites: BIB 112/BIB 113, or BIB 151/152; BIB 200. Spring semester.

BIB 318 Hebrews (3) Studies the setting and theological themes of this major New Testament epistle. Prerequisites: BIB 112/113 or BIB 151/152; BIB 200. Spring semester.

BIB 320 Special Topics in Theology (3) Variable theological topics. Repeatable.

BIB 322 Calvin's Institutes (3) A survey of the theological concepts in John Calvin's *Institutes of Christian Religion* with an introduction to the life and ministry of John Calvin. Prerequisites: BIB 112, BIB 113 and BIB 200.

BIB 324 Introduction to Reformed Tradition (3) An introduction to the history and theology of the Reformation, especially as seen in the Westminster Confession of Faith. Approved HUM 304 option. Prerequisites: BIB 112/113 or BIB 151/152; BIB 200; or permission of instructor.

BIB 325 Biblical Theology (3) Dominant motifs of Biblical literature, emphasizing Biblical texts, with some review of theological literature and methods. Prerequisites: BIB 112 and BIB 113. Juniors and seniors only.

BIB 340 Inter-Testamental Literature (3) Examines the history, literature, and religious developments of the Jewish people between the close of the Old Testament and the time of Jesus. Prerequisites: BIB 112/113 or BIB 151/152; BIB 200. Fall semester.

BIB 341 Archaeology & Geography of Israel (3) This course, team taught by faculty in the Bible Department, studies archeology in general, specific archeological sites in Israel, and the historical geography of Israel. This course culminates in a trip to Israel over Christmas Break. Students unable to participate in the travel component of the course may write a research paper. Permission only. Prerequisites: BIB 112, BIB 113. Fall semester, alternate years.

BIB 350 History of the Christian Church (3) Origin and spread of Christianity from the time of the apostles to the end of the 1900s, with special emphasis on doctrinal formulations. Prerequisite: HUM 203.

BIB 351 Church History I: Patristic and Medieval (3) A study of the origin and development of Christianity from the time of the Apostles to the eve of the Protestant Reformation, with special emphasis upon doctrinal formulations. Every fourth or fifth semester, in sequence with BIB 352, Church History II. Prerequisites: BIB 112/113 or BIB 151/152; plus HUM 203.

BIB 352 Church History II: Reformation and Modern (3) A study of the history and development of Christianity from the time of the Protestant Reformation to the present, with special emphasis upon doctrinal formulations. Every fourth or fifth semester, in sequence after BIB 351, Church History I. Prerequisites: BIB 112/113 or BIB 151/152; plus HUM 203.

BIB 353 Covenanter History and Theology (Scotland) (3) Examines the origins of Presbyterians and other non-conformists in Scotland from the 16<sup>th</sup> – 17<sup>th</sup> centuries up to the present day. Students will read primary and secondary sources that describe the doctrinal, ecclesiastical and political views of the Covenanters, why they stayed separate from the state church even when Scotland became Presbyterian, and how their legacy has led to the modern day Reformed Presbyterian experience in Scotland. Prerequisites: BIB 112/113 or BIB 151/152.

BIB 199, 491, 493, 495, 499 (See page 13)

## **BIOLOGY • BIO**

**BIO 101 Topics in Biology (3)** An in-depth examination of one biological topic that varies from semester to semester. Fulfills part of the natural science requirement for graduation but does not give credit toward a major in biology. Repeatable. Every semester.

**BIO 107 Foundations of Biology (4)** Intended to provide students with a solid understanding of foundational concepts in physiology, genetics, and ecology necessary for success in subsequent biology courses. Three hours lecture and three hours lab per week. Fall semester. Prerequisite: biology major.

**BIO 112 Introduction to Cellular Biology (4)** An introduction to the biological principles that operate at the cellular and molecular levels of organization. Three hours lecture and three hours laboratory per week. Spring semester. Prerequisites: BIO 107 or permission of the instructor.

**BIO 210 ID and Evolution (3)** This course explores the debate between the proponents of Intelligent Design (ID) and the defenders of Darwinian Evolution, by reading and discussing compelling publications written by each camp. Fall semester, alternate years. Fulfills part of the natural science requirement for graduation but does not give credit toward a major in biology.

**BIO 218 Introduction to Nutrition (3)** An introduction to the major types of nutrients needed by humans, their utilization by the body, the consequences of their deficiencies, and their sources. Nutritional principles are applied through the life cycle. Spring semester. Fulfills part of the natural science requirement for graduation but does not give credit toward a major in biology.

**BIO 225 Human Anatomy and Physiology I (4)** An introduction to gross anatomy and microscopic anatomy, as well as the function and regulation of the organ systems of the human body. Both systemic and regional approaches to learning anatomy will be used. Fall semester. Prerequisite: BIO 112 or permission of the instructor.

**BIO 302 Embryology (4)** Analysis of all stages of embryonic development, touching on underlying mechanisms. Focus is on mammalian development in lectures; fish, chick and mouse embryonic development in lab. Ethical issues involving human embryos are also discussed. Fall semester, odd years. Prerequisite: BIO 225 or permission of the instructor.

**BIO 305 Microbiology (4)** An introduction to the various types of microorganisms and representative human microbial infections. Also includes principles of infectious disease and host responses to infection. Three hours lecture and three hours laboratory per week. Spring semester. Prerequisite: BIO 112.

**BIO 306 General Ecology (4)** Principles describing the interactions of organisms with their living and non-living surroundings. Laboratories introduce field techniques. Three hours lecture and recitation; and three hours laboratory per week. Spring semester, alternate years. Prerequisite: BIO 107 or EVS 111.

**BIO 310 Botany (4)** Introduction to plant structure, function, and diversity. Three hours lecture and three hours laboratory per week. Fall semester, alternate years. Prerequisite: BIO 112 or permission of the instructor.

**BIO 315 Immunology (3)** A thorough study of the activities, interactions, and regulation of the immune system and its role in areas such as infections, transplants, tumors, and auto-immunity. Fall semester, even years. Prerequisite: BIO 225 or permission of the instructor.

**BIO 316 Virology (3)** A study of the general mechanisms by which viruses cause disease followed by a survey of the major groups of human viruses and the infections and tumors which they cause. The diagnosis and treatment of viral infections are also discussed. Spring semester, even years. Prerequisite: BIO 319.

**BIO 317 Biochemistry (3)** An introduction to biochemistry focusing on the structure and function of biological compounds. Topics include cellular structure, biological reactions, compartmentalization, water, amino acids, proteins, enzymes, carbohydrates, and membranes/lipids. Three hours lecture per week. Fall semester. Prerequisite: CHM 222. Cross-listed as CHM 317.

BIO 319 Genetics (4) A study of the inheritance, expression, and regulation of genes. Of particular interest is the relationship of these topics to human disease. Three hours lecture and three hours laboratory per week. Fall semester. Prerequisite: BIO 112.

BIO 326 Human Anatomy and Physiology II (4) This course focuses on the physiological regulation of human body homeostasis. The first segment covers neuronal and endocrine signal pathways vital to intercellular communication and regulation. Subsequently, regulation of homeostasis in a variety of stress and disease states is presented. In the laboratory, the student will perform actual experiments using physiological recording techniques. Students are challenged to integrate their knowledge of physiology with their theological and philosophical views of human nature and personhood. Spring semester. Prerequisite: BIO 225 or permission of the instructor.

BIO 331 Biomedical Ethics (3) A description and critique of the worldviews underlying humanistic and Biblical principles of ethics and the application of those principles to contemporary problems in health care and medical technology. Spring semester, odd years. Prerequisite: biology major, junior status.

BIO 405 Molecular Biology (4) An investigation into several of the hottest topics in molecular biology based on recent articles from biological journals. Particular areas of interest include intracellular sorting, signal transduction, cell cycle regulation, and cancer. The lab integrates techniques from biochemistry, cell biology, immunology, and molecular genetics. Three hours lecture and four hours laboratory per week. Spring semester, odd years. Prerequisite: BIO 319.

BIO 419 Senior Project (1) Performance of a research project under the direction of a Biology Department faculty member, resulting in a written report and an oral presentation. The research can be either lab-based or literature-based, but must be both scholarly and produce original ideas or data. Grade of C- or better required for graduation. Every semester, permission required. Prerequisite: biology major, senior status.

BIO 420 Senior Paper (1) Development of a thesis which examines one topic in biology from a Christian worldview contrasted with a secular worldview. Both written paper and oral presentation required. Grade of C- or better required for graduation. Every semester, limited enrollment. Prerequisite: biology major, senior status.

BIO 421 Genomics (3) The course will be an in depth exploration of contemporary genomics. This newly emerging field studies the structure, content and evolution of genomes. The analysis of gene regulation at the genome level (transcriptome) is also emphasized. The related disciplines of bioinformatics and computational biology will be integrated into the course. Applications will focus on the discovery of disease gene alleles and the analysis of genetic determinism in relation to a Biblical anthropology of humanness. Course format will include lectures, critical reading of current research articles and discovery based learning. Spring semester, even years. Prerequisites: BIO 319 and BIO 326.

BIO 422 Neuroscience (4) The course will teach the electrophysical, cellular, and molecular basis of neuronal signaling. This will serve as the foundation for understanding the neuroscientific bases of thought, mood, learning, memory, and selected diseases. The student will also be challenged to integrate current neuroscientific knowledge with their ethical, philosophical, and theological views of human nature. In the laboratory, the student will perform experiments in electrophysiology using crayfish neuron and muscle preparations. Three hours lecture and three hours laboratory per week. Fall semester, odd years. Prerequisites: BIO 319, BIO 326 and PHY 181.

BIO 199, 292, 491, 493, 495 (See page 13)

## **BIOMEDICAL ENGINEERING • BME**

BME 300 Introduction to Biomedical Engineering (3) A survey of applications of engineering principles to medical diagnosis/treatment of disease, monitoring/measurement of physiological function, and rehabilitation/replacement of body dysfunction. Specific applications include bioinstrumentation, bioelectricity, biotransport, biomaterials, and biomechanics. Although discussion will focus primarily on the engineering aspects, issues such as patient safety, public policy and regulation, animal experimentation will be discussed as appropriate. Fall semester, beginning 2016. Prerequisites: EGR 212, BIO 326.

BME 440 Biomedical Signal Processing (3) Introduction to discrete signals and systems. Includes convolution, correlation, and Fourier transforms; sampling theorems, and digital filters. Offered in 2 lectures and one three-hour lab format. Taught concurrently with ELE 440. Fall semester, alternate years. Next offered, Fall 2016. Prerequisite: EGR 225 or EGR 316.

## **BUSINESS • BUS**

**BUS 110 Business Foundations (3)** A course that exposes students to current business concepts and provides a holistic view of business operation. Includes study of external factors affecting management decision-making. Case analysis and business plan development are utilized to present business interrelationships. Every semester.

**BUS 115 Business Communication (3)** The course emphasizes business and professional communication in the marketplace. Topics include business research, writing, presentations, professionalism, teambuilding, social and electronic media, international business communication and integration of faith in the workplace. Every semester.

**BUS 140 Introduction to Business Computing (3)** An introductory course in the field of computing with a business emphasis. Course includes an introduction to computers, an introduction to programming and the use of business application software such as word processing and spreadsheets. This course does not count toward the business major. Every semester.

**BUS 220 Personal Finance (1)** A seminar course for students interested in learning how to manage their personal finances. Topics include budgeting, checkbook and savings management, insurances, personal income taxes, personal loans and financing, debt management, online banking and identity management, investing, personal legal matters, retirement planning and stewardship. Every Fall semester.

**BUS 241 Quantitative Analysis I (3)** Introduction to basic statistics and spreadsheets. Includes data collection, descriptive statistics, basic concepts of probability, inferential methods, hypothesis testing, correlation, and regression. Every semester.

**BUS 242 Quantitative Analysis II (3)** The study of the firm using a systems approach. Problem solving and decision-making are examined as well as use of quantitative analysis to business problems. Extensive use of spreadsheets and simulations. Topics include forecasting, cash management, break-even analysis, decision theory, and statistical analysis. Prerequisite: BUS 241 or MAT 161. Every semester.

**BUS 304 Report Writing for Management (3)** Practices learned in freshman composition applied to scientific description, report and research papers, and special correspondence. Written papers each week. On demand.

**BUS 310 Principles of Management (3)** Management and administrative concepts that are common to all types of organizations. Focuses on the functions of planning, organizing, leading, and controlling, with emphasis on integration of faith, systems, and contingency approaches. Prerequisite: sophomore standing and recommended to be taken in the sophomore year. Every semester.

**BUS 311 Business Law (3)** General principles applied to contracts, agency and employment, business organizations, government regulation, and real and personal property. Every semester. Prerequisite: sophomore standing.

**BUS 312 Supervision (3)** An applied review of the technical, conceptual, human resource, and decision-making skills required for supervisory assignments. Emphasis is placed upon diversity management, quality initiatives, productivity, legal compliance, strategic alignment, and team-based operations. Spring semester. Prerequisite: BUS 310 or permission of the instructor.

**BUS 314 International Business (3)** A comprehensive course covering all the major aspects of doing business in a global marketplace. Specific topics include the nature and environments where international business is conducted, the uncontrollable forces at work in the international business environments, international economics, trade theory, foreign direct investment, and the organizational environment. Every semester. Prerequisite: junior standing. BUS 310 recommended.

**BUS 316 Business & Cultural Experience-China (3)** A 14 day cultural and business exposure trip to Beijing, Shanghai, and Hong Kong, China. The trip provides experiential learning in Chinese history, culture, art, language, and business. Includes tours of cultural, historic, and business sites in China. Offered every fourth year (odd years). Next offerings: May 2015 and May 2019. Prerequisite: BUS 317.

BUS 317 How To Do Business in Asia (1) A semester long seminar class discussing the professional and cultural nuances of how to do business in Asia. The seminar class will prepare students for the cultural exposure trip to China. Spring semester every fourth year. Next offerings, Spring 2015, Spring 2019.

BUS 318 Business & Cultural Experience-South America (3) A 12-14 day business and cultural exposure trip to Argentina and Brazil. The trip provides experiential learning in South American history, culture, art, language & business. Includes tours of cultural, historic and business sites in both Argentina and Brazil. Every fourth year. Next offered: May 2017. Prerequisite: BUS 319.

BUS 319 How To Do Business in Latin America (1) A semester long seminar class discussing the professional and cultural nuances of how to do business in Latin America. The seminar class will prepare students for the cultural exposure trip to Argentina and Brazil. Spring semester, every fourth year. Next offered: Spring 2017.

BUS 320 Principles of Marketing (3) This course introduces the student to basic principles and foundations of marketing. Topics include defining marketing and the market process, understanding the marketplace and consumers, designing a customer-driven marketing strategy and mix, and the major trends and forces that impact marketing. Every semester. Prerequisite: BUS 110.

BUS 330 Principles of Finance (3) Principles of corporate financial management. Course topics include ratio analysis, cash flow forecasting, leverage, working capital management, cost of capital, capital budgeting, and security types. Every semester. Prerequisites: ACC 151.

BUS 331 Investments (3) Basic principles of investing suitable for the individual. Covers investment types and markets. Fall semester. Prerequisite: junior standing. Course in economics recommended.

BUS 335 Financial Statement Analysis (3) This course combines theoretical concepts underlying the presentation of financial statements with the practical techniques of financial analysis. Topics include accounting processes; examination of the components of the balance sheet, the income statement and the statement of cash flows; application of the various quantitative techniques of financial analysis, such as ratio interpretation and EPS evaluation; the meaning and significance of the auditor's opinion, and current SEC reporting regulations. The course will fulfill special topics requirement. Offered on demand. Prerequisite: BUS 330.

BUS 341, 342 Development of Information Systems I, II (3, 3) Analysis of business, industrial and institutional organizations from the viewpoint of computer applications. Data processing, hardware configurations, peripheral devices; analysis of systems; development of computer implemented systems. Fall semester. Prerequisites for BUS 341: BUS 110 and BUS 241 or permission of the instructor. Spring semester. Prerequisite for BUS 342: BUS 341.

BUS 343 Systems Analysis and Design (3) This course provides the student with theory and practice associated with the analysis and design of computer-based information systems. Fundamental topics include systems theory, the role of the information system in operating and managing the organization, and systems design concepts from a structured and object oriented perspective. The purpose, function, and expected outcomes of each phase and activity of the systems development life cycle (SDLC) are discussed from theoretical and practical perspectives. Specific design techniques, such as data flow diagrams and data dictionaries are discussed and used. Other topics include the function of design tools such as CASE, planning techniques, and project management. A cumulative project is used to supplement lectures, with hands-on experiences in applying the SDLC to the analysis and design of information systems. Fall semester. Prerequisite: sophomore standing.

BUS 344 Management of Information Systems (3) Explores current information systems concepts and technologies. Students learn how information systems give a business or organization a competitive edge by providing technologies that help managers plan, control, and make decisions. Includes topics such as hardware and software components of an information system, e-business concepts and implementation, and a survey of common information systems used today. Fall and Spring semesters.

BUS 350 Human Resource Management (3) A survey of the management of human resources and its role in strategy formulation and implementation. Content includes the study of employee recruitment, socialization, motivation, training and development, legal compliance, evaluation, and retention. Every semester. Prerequisites: BUS 310, sophomore standing, or permission of the instructor. BUS 310 may be taken concurrently.



BUS 371 Operations Research (3) Quantitative approaches to management decision-making. Includes review of probability, decision theory, linear programming, network analysis, inventory control, waiting line theory, and simulation. Applications to business and industry. Spring semester. Prerequisite: BUS 242 or permission of the instructor.

BUS 400 Biblical Management and Business Ethics (3) The integration of insights from a Christian perspective wrestling with the problems associated with carrying out managerial decisions and managerial applications within organizations. The course focuses on management challenges and ethical issues facing managers. Every semester. Prerequisite: BUS 310 and junior standing.

BUS 410 Strategic Management (3) The capstone business class, integrating concepts and practices from the core business classes, utilizing an organization-wide perspective. The course emphasizes strategic analysis, strategy formulation, and strategy implementations so as to formulate sustainable competitive advantage. Case analysis and computer simulation are significant learning components. Every semester. Prerequisites: senior standing and BUS 330 or permission of the instructor. BUS 320 and BUS 415 recommended.

BUS 411 Advanced Business Law (3) In-depth considerations of principles including uniform commercial code, negotiable instruments, creditor's rights and bankruptcy, insurance, and professional liability and accountability. Intended to meet the CPA examination requirements of certain states that set a two-semester minimum requirement. On demand. Prerequisite: BUS 311.

BUS 415 Operations Management (3) Planning and controlling the use of human resources, materials, capital, and equipment for production; the manufacturing and service firm from both a conceptual and a quantitative viewpoint. Every semester. Prerequisites: BUS 242, BUS 310, and junior standing.

BUS 417 The Entrepreneur (3) Seminar in management for students interested in operating their own business. Study, guest speakers, and field trips designed to fit specific needs of students enrolled. Limit 15 students. Spring semester. Prerequisite: junior standing.

BUS 419 Management Insights (1) A seminar course for business students where students have the opportunity to engage business executives/industry experts in order to gain insights into current business perspectives through the sharing of current issues and challenges in business. Every semester. Not repeatable. Prerequisite: Junior or Senior status or by permission.

BUS 420 Marketing Research (3) Introduction to the practical problems, including sources of information, questionnaire preparation, design of a sample, analysis of data, preparation of reports. Fall semester. Prerequisites: BUS 242 and BUS 320 or permission of the instructor.

BUS 421 Advertising and Promotion (3) A comprehensive study of advertising, detailing its relationship to market practice. Topics such as advertising preparation, media selection and evaluation, consumer behavior and research, and promotional budgeting, are included. The roles of public relations, direct marketing, personal selling, and sales promotion are also explored within the context of an integrated marketing communication (IMC) program. Also, there is a laboratory attached to this class where the student will become proficient in Adobe Illustrator software for use in designing effective artwork for advertising campaigns. Fall semester. Prerequisite: BUS 320 or permission of the instructor.

BUS 422 Sales and Sales Management (3) This course introduces the student to the basic principles and foundations of personal selling on three levels: industrial, commercial, and retail. Emphasis is on the detailed analysis of the sales process as viewed by the salesperson. Other topics include the organizational buying process, sales communications, the theory of adaptive sales, and ethical/legal issues in selling. Using a variety of instructional methods such as role-playing and video cases, students are given the opportunity to practice their newly acquired sales skills. In the second portion of the course, various specialized managerial functions are studied, such as sales department budgeting, sales force organization, territory design, and sales compensation. Spring semester. Prerequisite: BUS 320.

BUS 423 Quality Engineering (3) Introduction to traditional quality engineering topics such as statistical quality control (control charts, acceptance sampling, process capability analysis, design of experiments), total quality management, lean manufacturing, six-sigma concepts and practices, measurement, detection, reduction, elimination, and prevention of quality deficiencies. Taguchi method and its application to engineering design. Spring semester, alternate years. Next offered, Spring 2012. Prerequisite: BUS 242. Cross-listed as EGR 423.

BUS 424 International Marketing and Export Management (3) This course focuses on key management functions in international marketing including entry strategies, product and pricing policies, financing, promotion and distribution. This course will also concentrate on export management which is a major international activity of most small and medium-sized companies. Alternate Spring semesters-even years. Prerequisite: BUS 320.

BUS 425 Consumer Behavior (3) This course studies the concepts, theories, and marketplace factors that explain the decision-making process used by the consumer in purchasing goods and services. A number of influences including Economic, Sociological, Psychological, and Cultural as well as Marketing strategy are integrated to understand the influences on choice made by the consumer. Spring semester. Prerequisite: BUS 320.

BUS 428 Strategic Marketing Policy (3) The course emphasizes strategic and operational issues in managing the marketing mix. Through the use of computer simulation, student team companies compete for market share and profitability. Spring semester. Prerequisites: BUS 320 and senior standing.

BUS 430 Intermediate Finance (3) Emphasis on valuation approach. Course topics include risk and return, valuation models, capital structure, capital markets, mergers and acquisitions, and bankruptcy. Spring semester. Prerequisites: BUS 242 and BUS 330.

BUS 441 Project Management (3) Project Management, the capstone course, utilizes an Information Systems Project Management Taxonomy to provide the student with an integrated theoretical and practical perspective of technology and information systems as process and functional components of an organization. Emphasis is on the roles that people, information, information systems quality, and technology play in the application of the nine Knowledge Areas and five Process Groups that comprise the Common Body of Knowledge for Information Systems Project Management. Particular emphasis is placed in the five Process Groups- initiating, planning, executing, controlling, and closing- for information systems projects that are needed to provide the various types of information systems which provide a competitive advantage in both inter-organizational and international environments and yet serve the needs of both the users and management. As an underlying tenet for the nine Functional Areas, the course emphasizes refining individual communications skills necessary to the field of information systems project planning and management. The student completes Chapter Questions and case studies, practices team problem solving techniques, participates in structured group discussions, conducts research, writes reports, and gives oral presentations. Spring semester. Prerequisite: Junior standing.

BUS 445 Computing Applications in Management (1–3) Special topics. On demand. Prerequisite: permission of the instructor.

BUS 453 Employee & Labor Relations (3) Class will cover relational strategies for both union and non-union environments. Every other Spring year. Prerequisite: BUS 350.

BUS 454 Compensation & Benefits (3) Class will cover compensation and benefits issues related to employment. Every other Spring. Prerequisite: BUS 350.

BUS 455 Strategic Human Resource Management (3) The capstone Human Resource Management (HRM) class, integrating the content of the previous HRM courses and the business core so as to study human resource strategy formulation and implementation. Emphasis is placed upon developing HR systems that align with strategy, development of corporate culture, and contemporary HR issues. Spring semester. Prerequisites: BUS 350 and senior standing or permission of the instructor.

BUS 456 Strategic Staffing (3) Class will cover recruitment and selection including organizational entry and socialization. Every Fall. Prerequisite: BUS 350.

BUS 199, 491, 493, 494, 495, 499 (See page 13)

## **CHEMICAL ENGINEERING • CHE**

CHE 301 Process Analysis (3) Introduction to the units and methods involved in designing commercial chemical processes. Fall semester. Prerequisite: CHM 111.

CHE 302 Unit Operations (3) Study of equipment necessary to carry out chemical processes. Spring semester. Prerequisite: CHE 301.

CHE 312 Advanced Laboratory—Physical/Inorganic (2) Techniques of inorganic synthesis and physical measurement on these and other chemical systems. Includes handling of air-sensitive materials, bubble-cap fractional distillation, kinetics, spectroscopy, and thermochemistry. Three hours laboratory per week per credit hour. Taught concurrently with CHM 312. Fall semester. Prerequisite: CHM 232. Pre or Corequisite: CHM 307.

CHE 315 Mass Transfer (1) Fundamentals of mass transfer; steady-state and unsteady-state molecular diffusion in fluids and solids with chemical reaction. Spring semester, beginning 2016. Prerequisite: EGR 330.

CHE 401 Reactor Design (3) Techniques involved in choosing a reactor to produce a desired product, taught concurrently with MEE 418. Fall semester. Prerequisites: CHM 308 and CHE 302; beginning in the fall of 2016: CHM 221 and either EGR 330 or CHM 307.

## **CHEMISTRY • CHM**

CHM 100 Introductory Applied Chemistry (3) An introduction to the basic concepts of chemistry with emphasis on utility for daily life. Not applicable toward a major or minor in chemistry. Three hours lecture per week. Prerequisite: Math proficiency is required as demonstrated by a math SAT score of at least 470, or ACT score of at least 19 or a passing grade in either MAT 095 or MAT 101, or permission of the instructor. Offered periodically.

CHM 111 General College Chemistry (4) Begins with atomic theory and bonding and continues through simple chemical reactions, the periodic table and forms of matter. The students will develop the skills to perform general chemical calculations. Laboratory experiments will include physical properties, synthesis, kinetics, and identifying unknowns. Three hours lecture and 3.3 hours laboratory per week. Fall semester. Prerequisite: Math proficiency is required or permission of instructor.

CHM 160 Chemistry in Art (3) Topics include a scientific description of the materials and methods used in making works of art; light and the chemistry of color; pigments and dyes; restoration and conservation; scientific examination of artworks; the identification of fakes; and scientific probes of influence and style. Not applicable toward a major or minor in chemistry. Three hours lecture per week. Offered periodically.

CHM 170 Worth of Water (4) The course, which includes a lab component, focuses on cultivating an understanding and awareness of complex issues related to water issues in Southwestern Pennsylvania, the United States and the global environment. It concludes with a travel component to southern Florida. This class satisfies the core requirement for a laboratory course in the natural sciences. Approved HUM 304 option. Offered periodically.

CHM 221 Organic Chemistry I (4) A study of carbon compounds that includes topics in structure, properties, and reactivity. All functional groups will be surveyed with alkanes, alkenes, halogens, and alcohols covered in detail. Attention will be given to basic mechanisms of organic reactions and introductory spectroscopy. Includes applications with fuels and polymers. The laboratory will introduce basic techniques in studying organic molecules. Three hours lecture and 3.3 hours laboratory per week. Spring semester. Prerequisite: CHM 111.

CHM 222 Organic Chemistry II (4) A continuation of study of the structure and chemistry of organic molecules, including radical reactions and the functional group chemistry of aromatics, alcohols, ketones, aldehydes, and amines. Introduction to biochemical molecules. Use and interpretation of major spectroscopy techniques including: NMR, IR, and mass spectroscopy. Laboratory will focus on synthesis and characterization. Three hours lecture and 3.3 hours laboratory per week. Fall semester. Prerequisite: Passing grade in CHM 221.

CHM 232 Quantitative Analytical Chemistry (4) Classical methods of analysis of chemical substances with an introduction to instrumental methods. Includes thorough understanding of the processes of ionic equilibria. Three hours lecture and 3.3 hours laboratory per week. Spring semester. Prerequisite: CHM 111.

CHM 304 Inorganic Chemistry (3) Chemical properties of inorganic chemical substances correlated with current theories of atomic and molecular structure and the periodic table. Special emphasis on current topics in inorganic chemistry. Fall semester. Prerequisite: CHM 232.

CHM 305 Advanced Organic Chemistry (3) Organic structures and reactivities, methods of studying reaction mechanisms (including spectroscopy), and comprehensive study of mechanisms of organic reactions. Topics will include ideas important in modern organic chemistry including the relationship of structure and reactivity, functional group

manipulations, spectroscopy, methods of studying reaction mechanisms, and a comprehensive study of mechanisms of organic reactions. Spring semester, alternate years. Prerequisite: CHM 222.

CHM 306 Instrumental Analysis (3) Overview of the theory and practice of spectroscopic, electrochemical, and chromatographic techniques of chemical analysis. Spring semester, alternate even-numbered years. Prerequisites: CHM 232 and PHY 182 or PHY 202.

CHM 307 Physical Chemistry I: Thermodynamics (3) The three laws of thermodynamics and the concepts of energy and equilibrium applied to physical and chemical systems. Includes the kinetic theory of gases and an introduction to statistical mechanics. Fall semester. Prerequisites: PHY 202, MAT 162, and CHM 221. Cross-listed as PHY 307.

CHM 308 Physical Chemistry II: Structure and Dynamics (3) Topics include the models of the structure of matter, surface phenomena, transport properties of matter, and chemical kinetics. Spring semester. Prerequisite: CHM 307.

CHM 310 Advanced Laboratory—Organic (1-2) Synthesis of organic compounds via multi-step and classic named reactions. Characterization and analysis of organic compounds by NMR, IR, MS, and chromatography. Three hours laboratory per week per credit. Spring semester, and alternate years. Pre or Corequisite: CHM 305.

CHM 311 Advanced Laboratory—Instrumental (2) Quantitative and qualitative analyses by spectroscopic, electrochemical, and chromatographic techniques. Six hours laboratory per week. Spring semester, alternate years. Pre or Corequisite: CHM 306.

CHM 312 Advanced Laboratory—Physical/Inorganic (2) Techniques of inorganic synthesis and physical measurement on these and other chemical systems. Includes handling of air-sensitive materials, bubble-cap fractional distillation, kinetics, spectroscopy, and thermochemistry. Three hours laboratory per week per credit hour. Fall semester. Prerequisite: CHM 232. Pre or Corequisite: CHM 307. Cross-listed as CHE 312.

CHM 313 Biochemistry Laboratory (1) Purification and characterization of biological molecules with a focus on proteins, enzymes, lipids and carbohydrates. Techniques important for isolation and characterization of these molecules will be learned and applied in the laboratory. Techniques/experiments to include electrophoresis, spectroscopy, centrifugation, drug binding to proteins and kinetic analysis. Spring semester. Pre or Corequisite: CHM 317.

CHM 317 Biochemistry I (3) An introduction to biochemistry focusing on the structure and function of biological compounds. Topics include cellular structure, biological reactions, compartmentalization, water, amino acids, proteins, enzymes, carbohydrates, and membranes/lipids. Three hour lecture per week. Fall semester. Prerequisite: CHM 222. Cross-listed as BIO 317.

CHM 318 Biochemistry II (3) A study of metabolic and nucleic acid chemistry. Topics include bioenergetics, metabolic reaction mechanisms, metabolic pathways, biosynthesis, and pathway regulation. Spring semester, alternate years. Prerequisite: CHM 317.

CHM 412 Polymer Chemistry (3) Nomenclature, structure, properties, characterization methods, reactions, and synthesis of polymeric materials. Spring semester, alternate odd-numbered years. Prerequisite: CHM 307.

CHM 420 Chemical Research (credit variable—usually 2) Individualized laboratory work in a specialized field of chemistry under direct supervision. Problems should be selected a semester in advance to provide for preliminary literature review. Every semester. Three hours laboratory per week per credit hour. May be taken repeatedly but a maximum of two credit hours count toward a chemistry major or minor.

CHM 421 Current Topics Seminar (1) Study and discussion of selected current topics in chemistry. Requires use of primary chemical literature. May be taken repeatedly but counted no more than two times toward a chemistry major or minor. Every semester. Prerequisite: CHM 222.

CHM 199, 491, 493, 494, 495, 499 (See page 13)

Au Sable courses are listed on page 144.

## **CIVIL ENGINEERING • CIE**

CIE 201 Geomatics Engineering (3) Field measurement of distance, elevation, and angles using various instruments including tape, automatic level, and total station. Topics include types of surveying, legal aspects, and error analysis. Fall semester.

CIE 231 Structural Analysis (3) Shear and moment diagrams, influence lines. Analysis of statically determinate and indeterminate trusses and frames. Virtual work, moment distribution, and matrix methods. Spring semester. Prerequisite: EGR 211.

CIE 301 Transportation Engineering (3) Introduction to the primary modes of transportation. Main emphasis on planning, design, and operation of roadways, including traffic flow theory, highway capacity, traffic control, geometry, drainage, and design of pavements. Fall semester, alternate years. Next offered, Fall 2015. Corequisite: CIE 201.

CIE 321 Site Development (3) Layout of sites for construction projects, including ground surface contours, access roads, parking lots, and utilities using professional software. Spring semester. Prerequisite: CIE 201.

CIE 333 Reinforced Concrete Design (4) Design of reinforced concrete beams, columns, frames, and slabs using the strength method. Concentrates on use of the ACI 318 Code. Design software application. Practical design project. Spring semester. Prerequisite: CIE 231.

CIE 407 Geotechnical Engineering (4) Mechanics of aggregations applied to earthwork and foundations design. Spring semester. Prerequisite: EGR 211.

CIE 434 Structural Steel Design (3) Introduction to the design of structural steel beams, columns, tension members, frames, trusses, and connections (bolted and welded) using the load and resistance factor design (LRFD) method. Concentrates on AISC specifications and manuals. Design software application. Practical design project. Fall semester. Prerequisite: CIE 231.

CIE 451 Urban Hydrology (3) Water supply and sewer systems, reservoirs, wells, water transmission and distribution, sanitary sewers, storm sewers, flooding and flood control. Practical design projects. Fall semester. Prerequisite: EGR 315, Corequisite: MEE 417.

CIE 199, 491, 493, 494, 495, 499 (See page 13)

## **COMMUNICATION DISORDERS • CDS**

CDS 160 Introduction to Sign Language (3) Manual communication via “Signed English.” Emphasis on both receptive and expressive abilities of a basic, foundational vocabulary. Spring semester.

CDS 190 Introduction to Communication Disorders (3) Characteristics, etiology, and an introduction to individuals with various communication disorders. Overview of the field. Fall semester.

CDS 220 Language Development (3) Focuses upon current information and theory regarding language development through the lifespan. Fall semester.

CDS 230 Phonetics (3) The science of the production, perception and transcription of speech sounds. Studies of the physiological, acoustical, perceptual, and descriptive aspects of speech and sound production. Fall semester.

CDS 250 Treatment Procedures in Communicative Disorders (3) Treatment principles and procedures used in treating communicative disorders. Current issues and ethics in the field of communicative disorders. Spring semester. Prerequisite: CDS 190.

CDS 260 Introduction to Audiology (3) Physics of sound; anatomy and physiology of the ear; types of hearing disorders, etiology, and treatments; audiometric evaluation. Fall semester.

CDS 270 Aural Rehabilitation (3) Communicative rehabilitation or habilitation of the hearing-impaired individuals through auditory training, speech reading, and hearing-aid orientation. Includes linguistic development of the hearing-impaired

child, therapy planning, educational alternatives, and psychosocial aspects of hearing impairment. Spring semester. Prerequisite: CDS 260.

CDS 280 Anatomy and Physiology of the Speech Mechanism (3) Anatomy and physiology of the speech/language mechanism. Includes respiration, phonation, articulation, and neurology. Spring semester.

CDS 340 Voice/Fluency Disorders (3) Description, diagnosis, and treatment of voice and fluency disorders in children and adults. Spring semester. Prerequisites: CDS 190 and CDS 250 or permission of the instructor.

CDS 350 Language Disorders in Children (3) Description, diagnosis, and treatment of language disorders in children. Fall semester. Prerequisites: CDS 190, CDS 220, and CDS 250 or permission of the instructor.

CDS 360 Articulation/Phonological Disorders in Children (3) Description, diagnosis, and treatment of articulation/phonological disorders in children. Spring semester. Prerequisites: CDS 190, CDS 230 and CDS 250 or permission of the instructor.

CDS 370 Neurogenic Communication Disorders in Adults (3) Description, diagnosis, and treatment of neurogenic communication disorders in adults. Fall semester. Prerequisites: CDS 190 and CDS 250 or permission of the instructor.

CDS 450 Clinical Experience in Communication Disorders (6) Experience in working with individuals that exhibit speech and/or language disorders to achieve more effective communication skills. Provide therapy under the supervision of a certified speech/language pathologist at facilities in the surrounding area. Every semester. Prerequisites: CDS 250, CDS 340, CDS 350, CDS 360 and CDS 370. Communication Disorders majors must have an overall GPA and major GPA of 3.0 to enroll in CDS 450.

## **COMMUNICATION • COM**

COM 101 Principles of Communication (3) A preliminary inquiry into the fundamental areas of study in the communication discipline including interpersonal, group and public speech. Emphasis placed on the development of sensitivity and competency in the various settings of oral communication. Every semester.

COM 111 Introduction to Communication (3) A platform course introducing students to the study of communication through the foundational disciplines of rhetoric and phenomenology attending specifically to the themes of character and community. Fall semester.

COM 150 Media Literacy (3) This course is a practical application class that centers on the relationship between media and society. Students will examine, discuss, and analyze media messages. Coursework will include analysis of advertisements, television programs, video games, movies, and news. This course is suited to students who want to better understand the persuasive techniques used in advertising. It provides the groundwork for Integrated Media emphasis students to understand and appreciate creation of mediated messages. Every semester.

COM 160 Interpretative Reading (3) Training in understanding thought and feeling in literature and in communicating it to an audience. Spring semester.

COM 165 Acting Principles (3) Introduction to the principles of acting. Participation in several scenes and monologues. Fall semester.

COM 180 Introduction to Public Relations (3) Overview of the theories and applications of public relations and related fields. Examines integration of Biblical values in public relations through various lessons, case studies, and group projects. Fall semester.

\*COM 201 Theatre Practicum (1) Practical experience in the various phases of theatre work connected with the major productions of the department. Repeatable. Every semester.

COM 202 Public Relations Practicum (1) Individual projects. Every semester. Repeatable with permission of the instructor.

\*COM 203 Radio Practicum (1) Practical experience. Repeatable. Every semester.

\*COM 204 Integrated Media Practicum (1) Practical experience with print, audio, video, and digital communication tools. Repeatable. Every semester.

COM 210 Leadership Communication (3) A survey of leadership practices in terms of how those theories and practices are expedited through various communication media and processes. Fall semester.

COM 215 Argumentation and Debate (3) Critical analysis, organization, and evidence applied to intensive study of common public arguments. Fall semester.

COM 220 Group Communication (3) A study of communication in both small and large groups including theoretical inquiry, group activities, and experiential learning, strategically addressing organizational identity, group membership, and critical listening skills. Spring semester.

COM 225 Culture & Communication (3) An overview of the fundamental human values exposed by the study of different cultures. Emphasis placed on understanding the role of micro and macro cultures informing domestic, civic, and international relations. Fall semester.

COM 230 Interpersonal Communication (3) An introduction to philosophical perspectives and contemporary research in the field of interpersonal communication focused on developing and sustaining valuable interpersonal relationships. Spring semester, alternate years.

COM 235 Studio Production (3) This course covers basic use of all studio equipment, including camera operations, lighting theory, color, and audio mixing, as well as control room equipment, such as the studio switcher, audio mixer, and camera controls. Fall semester.

COM 245 Writing for Integrated Media (3) A writing course to introduce the student to the techniques and styles of writing found in the integrated media marketplace. Students will learn how to write for multiple media forms, not simply as each form exists on its own merit, but in such a way that a message can be crafted and adapted across multiple platforms, reaching the appropriate audiences and publics. Theoretical and practical applications are explored. Fall semester, alternate years. Next offered, Fall 2017.

COM 250 Mediated Communications (3) The course traces the history of mediated communication technologies from its rhetorical roots through the beginning of the written work, newspapers, books, magazines, radio, television, the Internet and gaming. It will explore how citizens, public relations practitioners, the media, and other professionals use electronic communication tools to distribute their messages. Spring semester. Prerequisite: COM 101.

COM 255 Field Production (3) This course serves as an intensive study in the theory and practice of field and location shooting. Students are introduced to the challenges and uniqueness of field production as it relates to videography, news media, documentaries, and commercial production. Spring semester. Prerequisite: COM 235.

COM 280 Public Relations Publications (3) Hands-on experience in the theory and development of creating graphic communications. Basics of design for printed and electronic materials used in public relations and marketing are discussed. Spring semester, alternate years. Next offered, Spring 2017.

COM 310 Public Speaking (3) Practical and psychological principles of persuasive speech in varied settings. Spring semester. Prerequisite: COM 101 or 200 level communications course.

COM 315 Communication Process (3) The study of communication through the exploration and analysis of societal theories and contemporary issues. Spring semester. Prerequisite: COM 101 and junior standing or permission of department chair.

COM 320 Communications Workshop Facilitation (3) Resources for improving communication in organizations, including workshop formats and workshop management skills. Fall semester. Prerequisite: COM 101.

COM 330 Special Topics in Communication (3) Special Topics in Communication will be a seminar course that will rotate between members of the department allowing them to teach various communication courses/topics based on research interests with the intent of exposing students to the breadth and depth of the discipline. Spring semester, alternate years.

COM 340 Advanced Audio Production (3) This course is for students wanting a more in-depth look at audio production. The student will concentrate on digital audio production techniques and on-location audio production. The use of microphones and positioning for audio production are closely examined. Offered on demand.

COM 350 Principles of Multimedia (3) This course is an introduction to the new media. This course will examine Web page creation, graphics and animation, and the convergence of audio, video, and computers. Each student will produce a CD ROM as a final project. Prerequisite: sophomore standing. Spring semester, alternate years. Next offered, Spring 2014.

COM 380 Advanced Public Relations (3) Exploring the various tools and tactics of effective public relations as a means of building mutually beneficial relationships between commercial and/or nonprofit organizations and their various publics. Spring semester, alternate years. Next offered, Spring 2012. Prerequisite: COM 180.

COM 400 The Communication Professional (3) This course is taught in a facilitative format with heavy emphasis on final student projects and assessments of their portfolio. COM 400 is designed to aid the student in making closure on their major, its key values, and preparing their heart and mind for becoming servant-leaders who will transform society for the Kingdom of Christ. Limited to communication majors. Spring semester. Prerequisite: senior standing or permission of the instructor.

COM 410 Media Law, Regulation, and Ethics (3) This course surveys laws and regulations that affect the print and broadcast media. Includes material on the First Amendment, libel, invasion of privacy, freedom of information, copyright, obscenity, advertising and broadcast regulation and matters relating to press coverage of the judicial system. Also investigates the relationship between law and ethics and key ethical issues in professional communications. Fall 2015, then every other spring starting with 2017. Prerequisite: Junior status.

COM 493 Internship (3) Supervised involvement in professional and applied settings: integrated media, public relations, visual communication, writing, general communication, and communication disorders. On demand. Prerequisite: junior or senior standing and permission of the instructor.

COM 199, 491, 494, 495, 499 (See page 13)

## **COMPUTER ENGINEERING · CPE**

CPE 133 Survey of Computer Science (3) An exploration of computer science including digital systems, computer architecture, networks, operating systems, database systems, computer languages, simulation, algorithms, artificial intelligence, and software engineering. This course is a cross-listing of CSC 133 with CPE 220 material removed. Fall semester. Prerequisite: CPE 220.

CPE 203 Software Engineering (3) Traditional and Agile software engineering, including process models, requirements, specifications, design, implementation, testing, documentation, deployment, configuration management, maintenance, project management, and brief introductions to current software engineering tools. Cross-listed as CSC 203. Spring semester, odd years. Prerequisite: CSC 102.

CPE 220 Digital Systems (3) Boolean algebra, logic components, combinatorial and sequential system analysis and synthesis, number and coding systems; circuits, structure, and logical design of digital systems. Includes laboratory exercises and a design project using standard integrated circuits. Spring semester.

CPE 251 Networks and Security (3) Introduction to data networking, telecommunications, and security. Topics include: Analog and digital signals, network topologies, network protocols (TCP/IP), network operating systems, network hardware, frame types, the OSI model, LANs, WANs, the Internet, Ethernet, network and host-based intrusion detection, firewalls, secure web filtering, security vulnerabilities, public key infrastructures (PKI), and virtual private networks (VPN). Every spring semester. Prerequisite: CPE 133.

CPE 303 Microprocessor Systems (3) A study of microprocessors and their peripheral components as central elements in a digital system. Includes machine architectures, instruction sets, peripheral interfacing, data acquisition and control. A semester design project is required. Fall semester. Prerequisite: CPE 220.

CPE 304 Advanced Digital Logic (3) Design and implementation of complex combinational and sequential digital systems. Topics include the VHDL hardware description language, programmable logic devices, CAD tools for design entry,



simulation and synthesis, and rapid prototyping. A semester design project is required. Spring semester. Prerequisite: CPE 303.

CPE 333 Operating Systems (3) Computer operating system; operating system issues related to process management, storage management, I/O systems, distributed systems, protection and security. Fall semester.

CPE 335 System Foundations (3) Hardware configuration, operating systems, and organization of computing systems; functional components, bus input/output, and memory systems, operating system support including process, storage, and input/output management, instruction set design, comparison of RISC and CISC systems, and instruction pipelining. Spring semester, odd years. Prerequisite: CPE 133.

CPE 454 Cybersecurity (3) This course contains theory and hands-on practice in topics to include: Cryptography, exploit development for penetration testing, intrusion detection, system hardening, ethical hacking, web app penetration testing, security plan development, and securing various types of operating systems. Cross-listed as CSC 454. Fall semesters, odd years. Prerequisite: CSC 251.

CPE 471 Computer Forensics (3) Computer and network in-depth forensic analysis by applying key techniques one byte at a time using various operating systems, memory systems, smartphone devices, and reverse-engineering of malware. Spring semester, even years. Prerequisite: CPE 454.

CPE 490 Embedded Systems (3) Design and implementation of embedded microprocessor systems. Includes the use of micro-controllers and complex logic devices to implement digital systems. Topics include C++ and assembly language programming, data structures, I/O structures, and real time operating systems. Includes a semester design project. Spring semester. Prerequisite: CPE 304.

CPE 199, 491, 493, 494, 495, 499 (See page 13)

## **COMPUTER SCIENCE • CSC**

CSC 101 Structured Programming (3) Basic concepts in structured programming including data types, selection, iteration, methods, arrays, strings, files, and graphical user interfaces. Fall semester. Prerequisites: none.

CSC 102 Object-Oriented Programming (3) Object-oriented programming including class design, information hiding, inheritance, polymorphism and templates. OOP concepts are demonstrated through building abstract data types that implement basic data structures (linked lists, stacks, queues, and binary trees). Spring semester. Prerequisite: CSC 101.

CSC 111 Introduction to Engineering Computation (3) Structured programming and problem solving using a current application (MATLAB). Fall semester.

CSC 133 Survey of Computer Science (4) An exploration of computer science including digital systems, computer architecture, networks, operating systems, database systems, computer languages, simulation, algorithms, artificial intelligence, and software engineering. This course is cross-listed as CPE 133. Fall semester.

CSC 190 HTML (1) Basic web page development using HTML5 and CSS3, with emphasis on methods for backward compatibility to older browsers and a short introduction to JavaScript. Fall semester.

CSC 203 Software Engineering (3) Traditional and Agile software engineering, including process models, requirements, specifications, design, implementation, testing, documentation, deployment, configuration management, maintenance, project management, and brief introductions to current software engineering tools. Cross-listed as CPE 203. Spring semester, odd years. Prerequisite: CSC 102.

CSC 204 Algorithms (3) An in-depth study of essential data structures and algorithms their implementation and analysis. Specific topics include object-oriented implementation, recursion, backtracking, searching, sorting, hash tables, dictionaries, trees, graphs, design patterns, functional programming, and parallel programming. Spring semester, even years. Prerequisite: CSC 102. Prerequisite or Corequisite: MAT 130.

CSC 205 HCI Design and Programming (3) Human Computer Interaction design and implementation in an event-driven programming language. Concepts include issues of graphical user interface design, event processing, integration of a database system, exception handling, and simple screen graphics. Fall semester. Prerequisite: CSC 101.

CSC 206 Web Programming (3) Design and implementation of web pages and web sites using a server-side scripting language with forms and validation programming. Spring semester. Prerequisite: CSC 190 or by exam. Co-requisite: CSC 102.

CSC 251 Networks and Security (3) Introduction to data networking, telecommunications, and security. Topics include: Analog and digital signals, network topologies, network protocols (TCP/IP), network operating systems, network hardware, frame types, the OSI model, LANs, WANs, the Internet, Ethernet, network and host-based intrusion detection, firewalls, secure web filtering, security vulnerabilities, public key infrastructures (PKI), and virtual private networks (VPN). . Every spring semester. Prerequisite: CSC 133.

CSC 252 Disaster Recovery (2) IT disaster recovery: identifying the risks, analyzing impact, user recovery, facilities protection and recovery, system and network recovery, data recovery, writing the plan, implementing the plan, testing the plan and managing the plan, prevention. Spring semester, even years. Prerequisite: CSC 251.

CSC 311 Cyberethics (2) Significant consideration of ethical issues, professional practice and social responsibility, especially as illuminated by Christian faith. Spring semester, odd years. Prerequisites: ENG 101, BIB 112, and BIB 113.

CSC 335 System Foundations (4) Hardware configuration, operating systems, and organization of computing systems; functional components, bus, input/output, and memory systems, operating system support including process, storage, and input/output management, instruction set design, comparison of RISC and CISC systems, and instruction pipelining. Spring semester, odd years. Prerequisite: CSC 133.

CSC 363 Database Systems (3) Introduction to the fundamental concepts necessary for designing, using, and implementing database systems. Topics include: entity-relationship models, relational data model, relational database schemas, SQL, and emerging database technologies such as data warehousing and data mining. Hands-on experience using current database system. Fall semester. Prerequisite: CSC 133.

CSC 364 E-Commerce (3) Explore the Internet as a way to communicate and do business in the changing technological world around us. Topics include: evaluation of tools, hosting services, visual design, and website management issues related to Web presence. Requires research and hands-on development. Spring semester, even years. Prerequisite: CSC 206. Pre or co-requisite: CSC 363.

CSC 407 Web Engineering (3) A capstone course where topics from web programming, software engineering, e-commerce, database systems and computer security are merged with project management, change and content management and user-centered design to support the engineering of complex web sites. Fall semester, even years. Pre-requisite: CSC 364.

CSC 408 Mobile and Cloud Applications ( 3 ) Design and development of applications for the mobile and cloud computing environment using the appropriate development environment for the particular device. Spring semester, odd years. Prerequisite: CSC 407.

CSC 454 Cybersecurity (3) This course contains theory and hands-on practice in topics to include: Cryptography, exploit development for penetration testing, intrusion detection, system hardening, ethical hacking, web app penetration testing, security plan development, and securing various types of operating systems. Cross-listed as CPE 454. Fall semester, odd years. Prerequisites: CSC 251 and CSC 363.

CSC 465 Big Data Analytics (3) Introduction to extracting, verifying, and presentation of information and knowledge from data using fundamental technologies that support distributed storage and efficient analysis of very large amounts of data. Spring semester, even years. Prerequisites: CSC 363, MAT 265, MAT 350. Co-requisite: CSC 204.

CSC 471 Computer Forensics (3) Computer and network in-depth forensic analysis by applying key techniques one byte at a time using various operating systems, memory systems, smartphone devices, and reverse-engineering of malware. Spring semester, even years. Prerequisite: CSC 454.

CSC 481, 482 Senior Project (3,3) Projects derived from realistic problems requiring a computer-related solution. Projects may be undertaken by individuals or teams. Projects may be interdisciplinary or specific to an area of interest. Must be taken in sequence. CSC 481 will be graded in progress (IP); the final grade in CSC 482 will count for all 6 credits in GPA. Offered at the discretion of the department. Prerequisites: senior standing. CSC 481.

CSC 483, 484 Senior Software Project (3, 3) Senior capstone experience. Member of the class will function as a software development team facilitated by the course instructor (generally a practicing software engineer) using an Agile process model. Offered at the discretion of the department. Prerequisites: CSC 203, 204, senior standing/ CSC 483.

CSC 199, 491, 493, 494, 495, 499 (See page 13)

## **CRIMINAL JUSTICE • CRJ**

CRJ 210 Crime, Law, and Society (3) This course will provide students with an introductory survey of the basis of American civil and criminal law; key contemporary legal issues; and the processes and institutions of the justice system, including law enforcement, courts, and corrections. Particular attention is placed on the relationship between the law and society's norms, and the relationship of both to Scriptural principles of justice. Offered every other year. Cross-listed as SSC 210.

CRJ 230 Juvenile Justice (3) Students will review causal theories of juvenile crime and will also examine the history and philosophy of the treatment of juveniles in the criminal justice system and the goals and effectiveness of the system. Promising alternatives rooted in a biblical reconciliation worldview will be included. Problems such as gangs, drug usage, and school violence will also be explored. Prerequisite: CRJ 210.

CRJ 250 Homeland Security (3) This course is an introduction to both public and private sector dimensions of theoretical and practical aspects of homeland security and emergency management, including: origins of natural and terrorist-caused disasters; local, state, and federal emergency management planning and operations; health infrastructure capabilities, public communication strategies; business community concerns; ethical, legal, and constitutional questions; as well as the social and psychological dimensions of disasters. Spring semester, odd years.

CRJ 260 Criminal Law (3) This course is an introduction to the basic concepts of criminal law focusing on a study of what constitutes particular crimes, both in the common law and by statute, including certain defenses. Principles learned in this course will help students develop a deeper ability to discern what constitutes fair administration of justice: dealing fairly with the accused while continuing to uphold the interests of both victims and society at large.

CRJ 310 Criminal Justice Systems (3) This course will compare and contrast the objectives and outcomes of law enforcement, corrections, and community based corrections. Particular attention will be given to alternative sentencing options with a focus on restorative justice principles. Students will be challenged to explore these different criminal justice system components using their worldview and the Christian worldview. Spring semester, odd years.

CRJ 345 Probation and Parole (3) Probation and Parole examines the history, structure, organization, and operation of probation and parole in the Criminal Justice System. The focus is on the application of services provided to people convicted of committing crimes who are allowed to remain in the community either through probation or parole. Distinctions will be drawn between probation and parole, the types of offenders under each, styles of supervision, goals, and objectives and between adult and juvenile offenders.

CRJ 350 Cyberlaw (3) This course is an introduction to the basic concepts of cyberlaw focusing on the study of jurisdiction and venue in cyberspace, copyright and trademark digital law, computer crimes, tort law in cyberspace, and international law. Fall semester, odd years.

CRJ 360 Criminal Investigation and Procedures (3) This course continues the material covered in Criminal Law, this time focusing on the procedural protections guaranteed by the 4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup>, and 8<sup>th</sup> Amendments to the Constitution, helping students develop a more sophisticated understanding of things like searches and seizures and the right to an attorney. Students will learn the crucial role these protections play in protecting the rights of those suspected or accused of criminal activity. Prerequisite: CRJ 260 or permission of instructor.

CRJ 450 Senior Seminar and Professional Ethics (3) This course is offered in conjunction with the internship experience. It acts as a capstone course for the major. Students will be given the opportunity to consider their worldview, the Christian

worldview and a Christian response to the discipline and issues of criminal justice. Attention will also be focused on ethical principles necessary in the field. The course acts as a preparation for the professional career launch of a student. The course is taken in conjunction with the field experience and is designed to support the student's field experiences. Co-requisite: CRJ 493.

CRJ 471 Computer Investigation (3) Computer and network forensic investigation using key investigative techniques on various operating systems, memory systems, and smartphone devices. Spring semester, even years. Prerequisites: CSC 133 and CRJ 360.

CRJ 493 Internship in Criminal Justice (3) This field experience provides exposure to the type of activities in which Criminal Justice graduates are likely to be involved. Requires a total of 135 site hours. Prerequisites: declared criminal justice emphasis or minor; junior or senior standing.

### **CROSS CULTURAL EXPERIENCE • XCX**

XCX 311 Puerto Rico (3) This course will be a multi-disciplinary course integrated around the theme of Puerto Rico and specifically, colonialism in Puerto Rico. Prerequisite: HUM 203, HUM 303 concurrently.

XCX 313 Arizona (3) This course will be a multi-disciplinary course integrated around the theme of Arizona and specifically, colonialism in Arizona.

XCX 315 Ireland (3) This course will be a multi-disciplinary course integrated around the theme of Ireland and specifically, colonialism in Ireland.

### **ECONOMICS • ECO**

ECO 100 Fundamentals of Economics (3) General introduction to the field for non-majors. Credit is not granted to students completing ECO 211 and/or ECO 212. If a student declares a major in the department after having taken ECO 100, this course may be substituted for ECO 212. On demand.

ECO 211 Micro Economics (3) This course examines consumption and production at the household, firm and industry level; explains methods of economic analysis and price formulation; and examines the various market structures and behavior of pure competition, monopoly, oligopoly, and monopolistic consumption. Fall semester. Prerequisite: Sophomore standing/ or permission of instructor or department chair.

ECO 212 Macro Economics (3) This course explains the characteristics and operations of the national economy including the measurement of national employment, production and income, the role of money and banking, and international trade. Students also learn methods of economic analysis, the role of government, and economic policy. Spring semester. Prerequisite: Sophomore standing/ or permission of instructor or department chair.

ECO 270 Principles of Microeconomics for Engineers (3) An introduction to the principles of micro-economics with selected topics in finance. Topics include, but are not limited to , the theoretical basis of markets (supply and demand), basic market structures, externalities and other market failures, the time value of money, project revaluation, and related concepts. The emphasis throughout is on economics as a social science. Not applicable toward a major, minor, or associate degree in Accounting or Business. Every semester. Prerequisite: Sophomore standing. To be offered for the first time in the fall semester of 2015.

ECO 311 Money, Credit, & Banking (3) Monetary system of the United States, the Federal Reserve System, and commercial banking. Alternate Fall semesters, next offered Fall 2010. Prerequisite: ECO 100 or ECO 211.

ECO 327 Comparative Economic Systems (3) Various policies for improving our economic institutions are studied based on theory and the historical experience of selected countries. The course emphasizes the mechanisms of such policies in the context of values and ideology. Spring Semester. Prerequisites: ECO 211 and ECO 212.

ECO 350 History of Economic Thought (3) Contribution of the classical economists are examined starting with Adam Smith and continuing to the marginal revolution with Jevons, Menger, Walras, as well as socialist and historical thought, and concluding with Keynes. On demand. Prerequisites: ECO 211 and ECO 212.

ECO 351 Intermediate Economic Theory (3) General theory examined with emphasis on the micro approach. On demand. Prerequisites: ECO 211 and ECO 212.

ECO 199, 491, 493, 494, 495, 499 (See page 13)

## **EDUCATION • EDU**

Courses with an asterisk give credit only toward the Bachelor of Science in education degree and are to be taken only by elementary education majors, not by those in secondary certification programs.

EDU 095 Reading Improvement I (2) For college students who are under prepared in vocabulary development, reading comprehension, oral communication, or basic study skills. Fall semester. This course does not earn credit toward graduation.

EDU 096 Reading Improvement II (2) A continuation of Reading Improvement I. An individualized laboratory course in advanced study skills, including skimming, scanning, outlining, summarizing, note taking, and critical analysis of specialized types of reading materials. Spring semester. This course does not earn credit toward graduation.

EDU 099 Foundations of Academic Success (1) This course introduces the student to the most basic and critical academic study skills and strategies necessary for success in the collegiate environment. Students will learn to view academic study skills as an essential foundation to the rest of their academic career at the institution. Students will develop a basic understanding of the fixed and growth mindsets and will be able to articulate the importance of a growth mindset within the learning environment. Students will work toward developing critical psychological competencies that lead to success, including self-efficacy, approach behaviors, and internal locus of control. Generally, this course will introduce students to their own personal potential for continuous growth, development, and maturation as active learners within in the collegiate environment. Every Fall (first 8 weeks of the semester). Prerequisite: Admitted on Academic Probation.

EDU 202 Social and Philosophical Foundations of Modern Education (3) This course reviews the historic, philosophical, and social developments that affect American education, along with a study of its organization and legal foundations. Particular attention is given to the development of a philosophy of education. The course is designed to analyze historical, philosophical, and social developments in American education from a Christian perspective. Prerequisites: PSY 201 and enrollment in a certification program or permission of the department. This course must be taken at Geneva College. Fall and Spring semesters.

EDU 211 Educational Psychology (3) Psychological principles and theories applied to teaching. The coverage of psychological variables that influence teacher functioning in the classroom, the role of human development, learning, instructional models, motivation, classroom management and discipline, the nature of and the response of teachers to exceptionality, and ethnic, racial, and social differences in schools. Every semester.

EDU 214 Stage 2- Field Experience Exploration (1) In this course, each student will complete 20 hours of field experience in a Birth through PK setting that includes students with and without disabilities. Assignments related to Cognitive, Physical, Social, Behavioral, and Language Development will be given and students will participate in small group and individual tutoring with reading, math, and other subject matter; activities with outdoor and indoor play; and monitoring classroom routines and procedures. These assignments will help students explore various issues related to the development of children in this age range. Prerequisite: Act 34, 114, and 151 clearances. Every semester.

EDU 216 Stage 1- Field Experience Observation (1) Systematic visitation, observation and participation in elementary school classroom. Nine seminar classes will help explore educational methods, techniques, and related issues. Recommended to be taken during the sophomore year. It is a prerequisite to junior year courses. Every semester. Credit granted up to two semesters. Prerequisites: Act 34, 114 and 151 clearances. Every semester.

EDU 217 Level 1- Field Experience, 4-12 (1) Systematic visitation, observation and participation in the secondary school classroom. Must be taken by the sophomore year. It is prerequisite to junior year courses. Spring semester. Prerequisites or Corequisites: EDU 211 or PSY 211 and Act 34, 114, and 151 clearances.

EDU 219 Level 2-Field Experience Exploration, 4-12 (1) A ten week practical field experience and a series of discussion seminars. The student is assigned to a local secondary or middle school where he/she observes and carries out tasks assigned by the professional teachers. Discussion seminars are scheduled throughout the semester. The student will expand

his/her understanding of teaching techniques, classroom management strategies and other related issues during the seminar. One of the primary goals of this course is to help the student develop an understanding about the nature of the student learning and effective types of instructional mediation in a secondary school environment. Fall semester. Prerequisites: Act 34, 114, and 151 clearances.

EDU 220 Tutoring (1) Thirty hours of tutoring in a supervised setting. With permission from the instructor and education department chair, credit can be given for working with tutoring programs or other directed tutoring situations. Credit granted up to two semesters and graded as credit/no credit. Prerequisites: EDU 211 or PSY 211 and sophomore standing.

EDU 251 Integrating the Arts in the PreK-4 Classroom (3) The course will focus on the integration of the arts- visual arts, dance/movement, music/song, drama/theater- at the PreK-4 grades. The course will build an appreciation of the arts as well as basic concepts in the arts. It will also develop in the preservice teacher an understanding how the arts can be used to support and develop the core subjects of math, language arts, science and social studies. The emphasis will be What is basic to the arts, Why integrating the arts can be essential to the curriculum, and How the arts can be used in the PreK-4 classrooms. Every semester.

EDU 290 Educational Technology (2) A course designed to explore various technology tools and instructional strategies to enhance student learning. Fall and Spring semesters.

EDU 303 Introduction to Christian Education (3) Teaching of the Scriptures as they relate to education; the role of the teacher in the Christian school; the history of Christian education; and the organization and administration of the Christian school. Offered as needed.

EDU 321 Teaching of Reading PK-4 (3) This course covers foundations of the reading process, history of reading methodologies, current approaches to teaching reading, RTI, ELL, and evidenced-based teaching strategies involved in phonemic awareness, decoding, vocabulary, comprehension, and fluency for PK-4 teachers. Every semester.

EDU 323 Teaching Children Mathematics PK-4 (3) The course provides a strong background in teaching children mathematics PK-4. It was designed to examine math concepts developed in PK-4 and best practices for teaching these concepts, explore the role of assessment, provide opportunity to examine math standards, and explore and reflect on the teacher's role in the creation of a positive math environment. Every semester.

EDU 342 Children's Literature Pre-K-4 (3) This course is an introductory course in children's literature that gives a brief overview of the field and the various genres as they are used in the elementary school. Books that are appropriate for children ages 3-12 will be read and discussed, and teaching strategies that involve literature in the context of the curriculum will be modeled. Every semester.

EDU 343 Meeting the Instructional Needs of PreK-4 English Language Learners: Language & Cultural Diversity in the PK-4 Classroom(3) This course is designed to prepare future teachers to work with English Language Learners (ELLs) in the PK-4 classroom. This includes using effective strategies to help ELLs meet the PA Academic Standards, as well as working and communicating with the ESL Program Specialist in regards to appropriate and effective classroom instruction, Pennsylvania's English Language Proficiency Standards (ELPS), and assessment data. Every semester.

EDU 345 Advanced Teaching of Reading and Writing PreK-4 (3) This course investigates current approaches to teaching reading and writing and includes strategies involved in assessing, planning, and instructing in a balanced literacy curriculum within the context of an advanced field placement. Every semester.

EDU 346 Language Arts in Early Childhood PreK-4 (3) This course covers listening, speaking, reading, and writing skills as they apply to child development and the early childhood curriculum. Teaching strategies for the language arts and the integration of the language arts into content areas and ELL education will be addressed. Every semester.

EDU 347 Teaching of Social Studies in the PreK-4 Grades (3) This course provides the future teacher with preparation for teaching in the content area of social studies in prekindergarten-4<sup>th</sup> grade. A variety of strategies and philosophies for teaching will be explored. Prerequisites: Educational psychology and requirements as mandated by Chapter 354. This course is part of a block of courses in the PreK-4 major. Field experience is a major component of the course. This course must be successfully completed prior to student teaching. Every semester.

EDU 349 Teaching of Science for PreK-4 (3) This course provides the future teacher with preparation for teaching science at the 4-8 grade level. A variety of strategies and philosophies for teaching will be explored. Inquiry-based science is an important focus of the course. Prerequisites: Educational Psychology and requirements as mandated by Chapter 354. Every semester.

EDU 370 Survey of Disabilities- PreK-4 and PreK-8 Special Education (3) This course will provide PK-4-PK8 Special Education aspiring teachers with a survey of the characteristics of special needs students, including differences in Cognitive, Physical, Social, Behavioral, and Language Development. Academic challenges of special education students will be highlighted including their specific needs and legal status. Federal legislation, team collaboration, special support services, and IEPs will be discussed. Every semester. Prerequisites: EDU 211 or PSY 211 and requirements as mandated by Chapter 354. Every semester.

EDU 375 Survey of Disabilities- 4-8 and Secondary (3) This course will provide 4-8 and Secondary Education aspiring teachers with a survey of the characteristics of special needs students, including differences in Cognitive, Physical, Social, Behavioral, and Language Development. Academic challenges of special education students will be highlighted including their specific needs and legal status. Federal legislation, team collaboration, special support services, and IEPs will be discussed. Fall semester. Prerequisites: EDU 211 or PSY 211 and requirements as mandated by Chapter 354. Fall semester.

EDU 380 History of Mathematics & Mathematics Education (2) Today's efforts to reform the teaching of mathematics will be examined in an historical context. Both the history of mathematics education and the history of mathematical thought will be explored. The great thinkers and their contribution to mathematical thought will be highlighted. The implications of various worldviews, including a Christian worldview, concerning the nature of mathematics and mathematics pedagogy will be examined. Spring semester. Corequisites: EDU 382 and requirements as mandated by Chapter 354. Cross-listed as MAT 380.

EDU 382 Math Curricula in the Middle and Secondary School (2) An introduction to curriculum resources focusing on what is critical for students to know and be able to do. Emphasis is on creating unity among the written, taught, and tested curricula. Those taking the course will become knowledgeable about and able to use the standards of the State of Pennsylvania and the National Council for the Teaching of Mathematics (NCTM) with regard to their own teaching of mathematics. Spring semester. Corequisites: EDU 380 and requirements as mandated by Chapter 354. Cross-listed as MAT 382.

EDU 415 Literacy Across the Curriculum Grades 4-12 (3) This course provides preservice teachers with an understanding of the ways in which reading and writing can be used to enhance students' comprehension of content area material. Every semester.

EDU 420 Educational Assessment (3) Methods and instruments for evaluating the individual and the various outcomes of the school program; elementary statistical techniques for interpreting measurements. Every semester. Prerequisites: EDU 211 or PSY 211 and requirements as mandated by Chapter 354.

EDU 430 Student Teaching Performance—Special Education (2) Observation and pre-service teaching under the supervision of a cooperating teacher and a student teaching supervisor from Geneva College. Every semester. Prerequisites: Student must meet all criteria delineated on page 55 must have completed the special education block of courses, and must have been accepted as a student teacher.

EDU 431 Student Teaching Performance—Elementary (2) Observation and pre-service teaching under the direction and supervision of a cooperating teacher and a student teaching supervisor from Geneva College. Every semester. For prerequisites, see admission to student teaching section on page 55.

EDU 432 Student Teaching Performance – 4-12 (4) Observation and pre-service teaching under the direction and supervision of a cooperating teacher and a student teaching supervisor from Geneva College. Every semester. For prerequisites, see admission to student teaching section on page 55.

EDU 433 Student Teaching Portfolio (4) An integral part of student teaching, the portfolio experience is an opportunity for students to produce a collection of materials to show growth of knowledge and application of teaching practices. It is expected that, in the production phase, students will reflect on their performance and analyze their own work. A well-

developed portfolio will be a useful tool to help a graduate present herself or himself to prospective employers. Every semester. For prerequisites, see the admission to student teaching section on page 55.

EDU 434 Student Teaching Seminar (4) A weekly seminar provides a context in which professional issues can be explored and to which student teachers can bring issues they need to raise. The seminar will revolve around reviewing professional literature, developing curriculum materials and lesson plans, and participating in analysis and resolution of real and simulated concerns. Every semester. For prerequisites, see admission to student teaching section on page 55.

EDU 470 Advanced Studies in Special Education (3) Prepares students for classroom teaching through (1) understanding the historical foundations of special education, (2) demonstrating an understanding of IDEA, ADA, Section 504, and NCLB and how these acts impact the school, (3) understanding procedural safeguards, disciplinary procedures, preventing over-representation of diverse students, effective early intervention procedures to prevent placement, (4) authoring an appropriate transition IEP based on a student's post secondary and independent living needs as well as the academic needs. This course includes field experience. Prerequisites: Requirements as mandated by Chapter 354. Concurrent enrollment in EDU 471, 472, 473 and 474.

EDU 471 Assessment of Exceptional Children (3) Prepares the students to assess individuals with disabilities by (1) applying general evaluative and assessment techniques to exceptional children, (2) identifying types of instruments used to assess exceptional learners, (3) identifying factors involved in collecting, interpreting, and analyzing information about the family, school, and personal history of exceptional learners, (4) applying universal screenings and progress monitoring techniques within field placements, (5) interpreting evaluative data for screening and placement; (6) evaluating student progress toward mastery learning outcomes and objectives, (7) organizing, interpreting, and summarizing evaluation data for instructional planning, delivery, and management, and (8) authoring an appropriate IEP based on student's individual needs and present levels of performance. Prerequisites: Requirements as mandated by Chapter 354, concurrent enrollment in EDU 470, EDU 472, EDU 473, EDU 474. Every semester.

EDU 472 Academic Skill Intervention for Exceptional Children (3) Prepares prospective teachers to develop and implement special education and inclusive academic programs for the physically and/or mentally disabled student. Proven methods, strategies, and techniques will emphasize the required planning behind the use of such methods, strategies and techniques. Geneva students will be given the opportunity to practice the skills learned through field experience work in local educational agencies prior to the student teaching experience. Prerequisites: Requirements as mandated by Chapter 354, concurrent enrollment in EDU 470, EDU 471, EDU 473, EDU 474. Every semester.

EDU 473 Behavioral Skill Intervention for Exceptional Children (3) Prepares prospective PK-8 Special Education teachers to develop and implement special education and inclusive programs of behavioral intervention for the physically and/or mentally disabled. Behavioral management, behavioral modification techniques, therapeutic crisis intervention, positive behavioral support skills, and other methods will be emphasized to prepare Geneva students to deal with problem behaviors with skill and confidence. Geneva students will be expected to practice their newly acquired skills and techniques through field experience work in local educational agencies prior to the student teaching experience. Prerequisites: Requirements as mandated by Chapter 354, concurrent enrollment in EDU 470, EDU 471, EDU 472, EDU 474. Every semester.

EDU 474 Teaching Reading to the Exceptional Child (3) Teaches the theory and skills necessary for success in teaching reading to exceptional students. A wide variety of research on proven methods and techniques in teaching reading to exceptional students will be covered in this course. Geneva students will be given the opportunity to work with children with reading disabilities through our on-campus reading laboratory as well as through field experience opportunities prior to student teaching. Prerequisites: Requirements as mandated by Chapter 354, concurrent enrollment in EDU 470, EDU 471, EDU 472, EDU 473. Every semester.

EDU 482 Intervention for Students in Inclusive Classrooms (Grades 7-12) (3) This course is designed to instruct the undergraduate student in techniques and strategies used in teaching students with special needs. It is designed to include technology as it relates to methods, how to use specific instructional approaches, and how to modify existing curricular methods to meet individual needs. Spring semester.

EDU 199, 491, 493, 494, 495, 499 (See page 13)



## **ELECTRICAL ENGINEERING • ELE**

ELE 222 Linear Circuit Analysis II (3) Use of Phasors in AC linear circuit analysis, AC Power Analysis including three phase systems, magnetically couple circuits, circuit frequency response, and the simulation of circuits. Spring semester. Prerequisite: EGR 212.

ELE 305 Electromagnetic Fields and Waves (4) Such topics as Coulomb's Law, Gauss' Law, energy and potential. Poisson and Laplace's equations, the steady magnetic field, time-varying fields, and Maxwell's equations. Fall semester. Prerequisites: PHY 202, MAT 405. Corequisite: MAT 261.

ELE 309 Electronic Devices and Circuits I (4) Introduction to the characteristics and circuit applications of diodes, field-effect and bipolar junction transistors and vacuum tubes. Includes energy band theory, graphical analysis, biasing, small-signal equivalent circuits, device modeling, and computer simulation. Emphasis is on analysis and design of power supplies, small-signal amplifiers, power amplifiers, oscillators, and switching circuits. Laboratory exercises in design, simulation, and construction of circuits and measurements of their properties. Fall semester. Prerequisite: PHY 202 or EGR 212.

ELE 324 Electrical Machines (3) Energy, power transfer devices, magnetic circuits, transformer analysis, introduction to rotating machinery. Spring semester. Prerequisite: EGR 212.

ELE 402 Communications Engineering (4) Amplitude, phase and frequency modulation, Fourier analysis and spectra, transmission and reception circuits, transmission line and antenna theory. Laboratory exercises in spectral analysis of modulated signals, communications circuits, and transmission line and antenna properties. Fall semester, alternate years. Next offered, Fall 2015. Prerequisites: ELE 305, EGR 316.

ELE 410 Electronic Devices and Circuits II (4) Continuation of ELE 309. Topics include feedback theory, linear integrated circuits with emphasis on operational amplifiers and their applications, SCR and Triac theory and applications, tunnel diodes, optoelectronic devices, and switching power supplies. Laboratory exercises in design, simulation, construction and measurement of circuits. Spring semester. Prerequisites: ELE 309, EGR 316.

ELE 440 Digital Signal Processing (3) Introduction to discrete signals and systems. Includes convolution, correlation, and Fourier transforms; sampling theorems, and digital filters. Offered in 2 lectures and one three-hour lab format. Fall semester, alternate years. Next offered, Fall 2016. Prerequisite: ELE 213 or EGR 316; beginning Fall 2016, EGR 225 or EGR 316.

ELE 199, 491, 493, 494, 495, 499 (See page 13)

## **ENGINEERING • EGR**

EGR 100 Engineering: Calling and Vocation (1) Introduction to the engineering profession, the Biblical concepts of calling and vocation, and skills and information to enhance the transition from high school or work to college. Fall semester.

EGR 101 Introduction to Engineering (2) Introduction to engineering design and decision-making. Christian worldview applied to engineering. Use of logic, experimental data, and design criteria. Project-oriented. Every semester.

EGR 102 Computer-Aided Engineering (2) Design problems requiring the use of computers and professional software. Continuation of issues addressed in EGR 101. Introduction to engineering graphic design. Every semester.

EGR 211 Solid Mechanics (4) Statics of particles and rigid bodies. Equivalent force-couple systems and equilibrium in 2D and 3D. Frames and machines; centroids; introduction to friction. Mechanics of deformable bodies: stress, strain, tension, compression, torsion, bending, shear. Design and deflection of beams, stability of columns. Every semester. Prerequisite: MAT 161.

EGR 212 Linear Circuit Analysis I (3) DC and AC circuit analysis, network theorems, Kirchoff's Laws, topology, and computer aided techniques. Introduction to Fourier Analysis. Every semester. Prerequisite: MAT 162.

EGR 213 Systems Engineering (3) Systems approach to engineering problem solving. Economic analysis of projects including: time value of money, rate of return, break even and replacement techniques. Decision analysis using linear

programming. Statistical analysis explored. Fall semester. Prerequisite: MAT 161. This course will be offered for the last time in Fall 2014.

EGR 214 Dynamics (3) Plane kinematics and kinetics of particles and rigid bodies. Equations of motion, work and energy, impulse and momentum. Simple gyroscopic phenomena. Spring semester. Prerequisites: EGR 211, MAT 162.

EGR 225 Signals and Systems (3) Characterization of linear systems in terms of differential and difference equations, superposition, convolution, transfer function and frequency response. Emphasis on continuous-time signals and systems. Specific topics include Fourier series and transforms, Laplace transforms and their application to electrical systems, sampling theory and aliasing. Spring semester. Prerequisite: EGR 212.

EGR 304 Technology and Society (3) An examination of the interactions between technological development and the development of human societies. Emphasizes the historical approach and involves the use of historical, imaginative, theoretical, sociological, philosophical, and/or theological writings on technology and society. Cross-listed as HUM 304. Spring semester. Prerequisites: HUM 203, SCS 110 (or two lab science courses), or consent of the instructor.

EGR 314 Engineering Thermodynamics (3) Application of first and second laws of thermodynamics. Work, heat, thermodynamic properties of pure substances. Introduction to refrigeration and power cycles. Fall semester. Prerequisite: PHY 201. This course will be offered for the last time in Spring 2015.

EGR 315 Transport Processes (4) Transport of momentum, heat, and mass; balances and equations of change. Applications to steady laminar and turbulent systems. Friction factor, heat transfer coefficient, and mass transfer coefficient. Introduction to macroscopic balances, including Bernoulli equation and applications to heat exchangers. Spring semester. Prerequisites: MAT 261 and either EGR 314 or CHM 307; or permission of the instructor. Corequisite: MAT 405. This course will be offered for the last time in Spring 2015.

EGR 316 Process Control (3) Introduction to classical and modern control theory. Discussion of the elements of a practical system and computer modeling of such systems. Spring semester. Prerequisites: EGR 212, MAT 405.

EGR 322 Manufacturing Engineering (3) Introduction to both traditional and modern manufacturing engineering topics including Geometric Dimensioning and Tolerancing. Traditional manufacturing topics include machining, stamping, forming (plastics and metal), casting, metrology, etc. Modern manufacturing topics include Computer Numerical Control, Flexible Manufacturing Systems, robotics, CAD/CAM/CIM/CAPP, nano-fabrication, etc. Hands-on team projects/labs and plant tours included. Spring semester, alternate years. Next offered, Spring 2015. Prerequisite: EGR 211 or permission of instructor.

EGR 325 Materials Engineering (3) Atomic bonding, crystal lattices, dislocation theory, phase diagrams, heat treatment, ferrous and non-ferrous alloys, ceramics and glasses, polymers and composites. Fall semester, alternate years. Next offered, Fall 2014. Prerequisite: CHM 221.

EGR 330 Thermal Fluid Sciences (3) Application of the first law of thermodynamics to systems involving heat transfer and fluid flow. Introduction to fluid properties, work and energy, basic rate processes (heat and momentum transfer), and application to heating, cooling, and movement of solids, liquids and gases. Every semester. Prerequisite: PHY 201. This course will be offered for the first time in Fall 2015.

EGR 331 Introduction to Thermal and Fluid Engineering Laboratory (1) Selected experiments in thermodynamics, heat transfer, and fluid flow integrated with EGR 330 topics. Additional topics in report writing, appropriate statistical and data presentation approaches. Every semester. Corequisite: EGR 330. This course will be offered for the first time in Fall 2015.

EGR 332 Fluid Mechanics (4) Fluid properties and hydrostatics. Open channel flow, compressible flow, pipe flow and pipe networks, pumps and turbo machinery, boundary layers, dimensional analysis, similitude, lift and drag. Spring semester. Prerequisite: EGR 330 and EGR 331. This course will be offered for the first time in Spring 2016.

EGR 371 Operations Research (3) Quantitative approaches to management decision making. Includes review of probability, decision theory, linear programming, network analysis, inventory control, waiting line theory and simulation. Applications to business and industry. Cross-listed with BUS 371. Spring semester, alternate years. Next offered, Spring 2016. Prerequisite: EGR 213 or MAT 105.

EGR 401 Christian Ethics and Engineering (2) The engineering profession, professional life. Christian ethics applied to engineering, discussion of case histories of ethical problems in engineering. Spring semester. Prerequisite: Senior standing or consent of the instructor.

EGR 423 Quality Engineering (3) Introduction to traditional quality engineering topics such as statistical quality control (control charts, acceptance sampling, process capability analysis, design of experiments), total quality management, lean manufacturing, six-sigma concepts and practices, measurement, detection, reduction, elimination, and prevention of quality deficiencies. Taguchi method and its application to engineering design. Spring semester, alternate years. Next offered, Spring 2016. Prerequisite EGR 213 or BUS 242. Cross-listed as BUS 423.

EGR 481, 482 Senior Design Project (2-3, 2-3) Projects derived from industry sources or realistic integrated design problems. Projects may be undertaken by individuals or teams. Projects may be interdisciplinary or specific to an area of concentration. Must be taken in sequence; EGR 481 will be graded in progress (IP); the final grade in EGR 482 will count for all four credit hours in the GPA. Every semester. Prerequisite: senior standing.

EGR 199, 491, 493, 494, 495, 499 (See page 13)

## **ENGLISH • ENG**

ENG 095 English Proficiency (2) Development of basic writing skills in preparation for ENG 101. Limited to those recommended by department action. Fall semester. Credit-no credit. This course does not earn credit toward graduation.

ENG 101 English Composition (3) Fundamentals of expository writing. Offers practice in reading, interpreting, and responding to texts. Passing grade to meet college requirement is C– or better. Every semester. Does not count toward an English major.

ENG 102 Academic Writing and Research Process (3) The course is intended to serve those students who seek to improve the knowledge, skills, and strategies to find and critically evaluate information, and then organize the results of their research and communicate them in writing. On demand or summers. Prerequisite: ENG 101 or equivalent.

ENG 110 Proficiency in English as a Second Language (2) Development of oral and written communication skills in English for non-native users of English. Limited to those recommended by department action. Offered on demand. Credit-no credit.

ENG 112 Introduction to Literary Study and Research (3) Basics of literary critical theory, study of literary genres, written work applying various critical perspectives to literature. Fall semester.

ENG 113 Researched Writing (3) Writing based on various kinds of research and investigation primarily in the field of English studies; an emphasis on individualized projects and extensive practice in using library and literary resources. Fulfills core writing requirement for English and Writing majors. On demand or summers. Prerequisite: ENG 112.

ENG 151 Honors English Composition (3) Modes, styles, and rhetoric of expository writing. Fall semester. Prerequisite: Permission of the English Department.

ENG 201 Introduction to Creative Writing (3) Introduction to the forms and concepts of literary creation; treatment of the basic elements of compositional principles of fiction, poetry, and drama. Spring semester. Prerequisite: ENG 101 or equivalent.

ENG 205 Advanced Composition (3) Study and practice of making expository writing answerable to the writer's voice, purpose, and audience. Spring semester. Prerequisite: ENG 101 or equivalent.

ENG 212 Cinema (3) Structure, technique, and values in film. Film classics and contemporary movies will be studied with written responses required. Spring semester. Prerequisite: ENG 101 or equivalent.

ENG 213 Topics in Cinema (3) Study of film focusing on theme, issue, genre, director, actor, or other film topic. Variable topics. Prerequisites: ENG 101 and HUM 103. Alternate Fall semesters; Next offered Fall 2016, 2018.

ENG 215 Creative Writing: Fiction (3) Supervision for writing short stories, seminar discussion of class members' work, and individual conferences. Alternate years; next offered Fall 2015, 2017.

ENG 216 Creative Writing: Poetry (3) Supervision for writing poetry, seminar discussion of class members' work, individual conferences. Alternate years; next offered Fall 2016, 2018.

ENG 221 Newspaper (1) Workshop course for *The Cabinet* staff. Credit-no credit basis. Every semester. Repeatable. Prerequisite: ENG 101 or equivalent.

ENG 223 Literary Magazine (1) Workshop course for *The Chimes* staff. Credit-no credit basis. Every semester. Repeatable.

ENG 232 Introduction to Rhetoric (3) Survey of rhetorical theories with applications to writing and analysis of texts. Fall semesters. Prerequisite: ENG 101 or equivalent.

ENG 241 Contemporary Newswriting (3) Fundamentals, including ethical principles and actual practice of newspaper reporting and writing. Alternate spring semesters; next offered Spring 2017, 2019. Prerequisite: ENG 101 or equivalent.

ENG 242 Editing (3) Basic concepts in editorial writing, news editing, headlining, and layout and designing applicable to any publication. Alternate Spring semesters, next offered Spring 2016, 2018. Prerequisite: ENG 101 or equivalent.

ENG 261 British Literature to 18<sup>th</sup> Century (3) Survey of British literature from its beginnings through the 17<sup>th</sup> century. Alternate Fall semesters, next offered Fall 2016, 2018. Pre-requisite or co-requisite: ENG 112.

ENG 262 British Literature from 18<sup>th</sup> Century to Present (3) Survey of British literature from 1660's to the present. Alternate Spring semesters, next offered 2017, 2019. Pre-requisite or co-requisite: ENG 112.

ENG 281 American Literature to Civil War (3) Survey of American literature from indigenous oral literature to Civil War. Alternate Fall semesters, next offered Fall 2015, 2017. Prerequisite or Co-requisite: ENG 112.

ENG 282 American Literature from Civil War to Present (3) Survey of American literature from the Civil War to the present. Alternate Spring semesters, next offered 2016, 2018. Prerequisite or Co-requisite: ENG 112.

ENG 290 Non-Western World Literature (3) An introduction to the study of nonwestern cultures and literatures that includes a range of texts (in English translation) from regions that may include the Americas, Africa, Asia, and the Pacific Rim. Alternate Fall semesters, next offered 2015, 2017. Prerequisites: ENG 101 or equivalent and ENG 112.

ENG 291 Masterpieces of World Literature (3) Study of the concept of masterwork through examining examples from Western literature and challenges to that concept in examples of post-colonial literature. Alternate Spring semesters, next offered Spring 2017, 2019. Prerequisites: ENG 101 or equivalent and ENG 112.

ENG 301 Topics in Genre Writing (3) Introduces students to writing in a variety of popular fiction forms. Seminar-style class focused on discussion of class members' work; includes individualized conferences. Alternate Spring semesters, next offered 2016, 2018. Prerequisite: ENG 101 or equivalent.

ENG 311 Writing for Business and Industry (3) Writing for technology and industry in a variety of modes. Practice in oral presentation. Alternate Spring semesters, next offered Spring 2017, 2019. Prerequisite: ENG 101 or equivalent.

ENG 320 Tutoring Writing (2) Instruction and practice of tutoring writers needing guidance in developing writing skills. Work in Writing Center is integral to course. Fall semester. Prerequisite: ENG 101 or equivalent.

ENG 328 History of the English Language (3) Development from Indo-European sources to contemporary forms. Alternate Fall semesters, next offered 2015, 2017. Prerequisite: ENG 101 or equivalent.

ENG 335 Literature of Minorities (3) Study of literature of one or related minorities in American society—for example, African American, Native American or Asian American literature. Variable topics. Repeatable with different topic. Alternate years; next offered Spring 2017, 2019. Prerequisites: ENG 101 or equivalent and ENG 112.

ENG 336 Studies in Women's Literature (3) Study of literature written by women from a variety of historical and cultural contexts. Alternate years; next offered Spring 2016, 2018. Prerequisites: ENG 101 or equivalent and ENG 112.

ENG 344 Publishing (3) Study and practice of desktop publishing, other technology of publication, and approaches to being accepted for publication. Alternate years; next offered Spring 2017, 2019. Prerequisites: ENG 101 or equivalent and consent of instructor.

ENG 351 Shakespeare (3) Representative histories, comedies, and tragedies. Fall semester. Prerequisites: ENG 101 or equivalent and HUM 203.

ENG 382 English Grammars (3) Traditional and modern, including generative grammar. Every semester.

ENG 390 Special Topics in Literature (3) Study of major author or related authors, or of a theme, issue, or other literature topic. Repeatable with a different topic. Every semester. Prerequisites: ENG 112, ENG 113, and as designated at time of offering.

ENG 394 Special Topics in Writing (3) Study and practice of various kinds of writing, creative and/or informational. Topics change from offering to offering. Offered on demand or summers. Prerequisites: ENG 101, ENG 205 and as designated at time of offering.

ENG 401 Advanced Creative Writing Workshop (3) Workshop-style format involving writing and revising in one established form in order to produce a publishable work. Fall semesters. Prerequisite: ENG 215 or 216.

ENG 402 Teaching of Language Arts, 4-8 (3) Balanced literacy methods for integrating reading, writing, speaking, listening, viewing, and critical thinking activities into a literature-based program for middle school students. Note: This course has a field requirement. Every semester.

ENG 405 Teaching of English – Secondary (3) Methods course required of all students seeking certification to teach English on the secondary level. Focus on approaches appropriate to middle and high school students. Field experience required as part of the course. Fall semester. Prerequisites or Co-requisites: Junior standing; minimum of 15 credit hours of work in literature; three credit hours of writing beyond ENG 101; ENG 205 or ENG 328.

ENG 413 Teaching English as a Second Language (3) Theory, principles, and practice of teaching English language skills to non-native speakers of English. Alternate years; next offered Spring 2017, 2019. Prerequisites: ENG 101 or equivalent; ENG 328 or ENG 382 or LIN 219 or permission of the instructor.

ENG 489 Majors Seminar (3) Focused seminar on literary, historical, or cultural topics designated in current class schedule. Research and presentation of a major paper. English and writing majors only. Fall semester. Repeatable. Prerequisites: ENG 112, ENG 232, and senior standing.

ENG 199, 491, 493, 494, 495, 499 (See page 13)

## **ENGLISH AS A SECOND LANGUAGE • ESL**

ESL 310 Academic Oral Communication (2) Development of listening and speaking skills in an academic setting. Classroom emphasis placed on video lectures, note-taking, discussions, and presentation on academic topics. Offered on demand.

ESL 320 Academic Writing (2) Development of a clear, natural, and effective written communication in English. Awareness is placed on style, levels of usage, and the difference between written and spoken language. Vocabulary enrichment through readings and compositions. Offered on demand.

ESL 330 Academic Reading (2) Development of strategies for academic reading, speed, and overall comprehension of authentic material. Vocabulary enrichment through readings and discussions of academic texts. Offered on demand.

ESL 410 Academic Oral Communication (2) Development of the ability to listen to authentic, fluent speech in lectures and note taking. Classroom emphasis placed on video lectures, note taking, discussions, and presentations on academic topics. Offered on demand.

ESL 420 Academic Writing (2) Development and refinement of a clear, natural, and effective written communication in English. Emphasis on academic grammar and rhetorical skills needed for English 101. Awareness is placed on style, levels of usage, and the difference between written and spoken language. Vocabulary enrichment through readings and compositions. Offered on demand.

ESL 430 Academic Reading (2) Development of strategies for academic reading, speed, and overall comprehension of authentic material. Vocabulary enrichment through reading and discussion of advanced academic texts. Offered on demand.

### **ENVIRONMENTAL ENGINEERING • EVE**

EVE 240 (4) Water Quality Control (4) Stewardship of God's creation; material and energy balances, physical, chemical, and biological processes for the treatment of water supplies, municipal wastewaters, and industrial wastewaters. Fall semester. Prerequisite: CHM 111. Corequisite: MAT 162.

EVE 341 Environmental Monitoring and Impact Analysis (3) Design and operation of air and water quality monitoring systems. Sampling methods for air, water, sludges, and solids. Introduction to environmental impact analysis. Spring semester. Prerequisites: EVE 240 and MAT 265.

EVE 453 Solid and Hazardous Waste (3) Generation, handling, collection, processing, treatment and disposal of municipal solid waste; unit processes for hazardous waste treatment, including incineration and solidification; landfills and ground water contamination. Spring semester, alternate years. Next offered, Spring 2016. Prerequisites: CHM 221 and either EGR 330 or CHM 307.

EVE 454 Air Pollution Control (3) Sources and impacts of air pollution, atmospheric transport, and dispersion processes, unit processes for air pollution control in stationary and mobile sources. Spring semester, alternate years. Next offered, Spring 2017. Prerequisites: CHM 221 and either EGR 314 or CHM 307; Corequisite: EGR 315 or CHM 308; beginning Spring 2019: CHM 221 and either EGR 330 or CHM 307.

EVE 461 Surface Water Hydrology (3) Hydrologic cycle, focusing on the rainfall-runoff process, stream flow, and evapotranspiration. Reservoirs, open-channel flow, flow routing, contaminant transport, and dispersion. Spring semester, alternate years. Next offered, Spring 2017. Prerequisites: CHM 111, EGR 315; beginning Spring 2017: CHM 111 and EGR 330.

EVE 462 Ground Water Hydraulics and Hydrology (3) Hydrologic cycle, focusing on infiltration, ground water flow, and aquifers. Darcy's law, continuity equation, well theory, contaminant transport and dispersion. Spring semester, alternate years. Next offered, Spring 2016. Prerequisites: CHM 111, and EGR 315; beginning Spring 2016, CHM 111 and EGR 330.

EVE 199, 491, 493, 494, 495, 499 (See page 13)

### **ENVIRONMENTAL SCIENCE • EVS**

EVS 111 Environmental Science (4) An introduction to environmental issues and Biblical principles of environmental stewardship with emphasis on human impacts on the environment as well as approaches and solutions that minimize negative impacts. This course is designed for science and environmental engineering majors. Three hours lecture and three hours laboratory per week. Spring semester. Prerequisites: BIO or EVS or EGR (env. conc) major or permission of instructor.

EVS 221 Environmental Ethics (3) Critique and application of ethical theories that influence decision-making related to environmental issues and controversies, with an emphasis on biblical principles that inform environmental ethics. The history of the modern environmental movement and the writings of influential thinkers will provide a backdrop for our study of environmental ethics. Spring semester, alternate years. Prerequisites: BIO 107 or EVS 111 or SCS 105 or permission of instructor.

### **GREEK • GRK**

GRK 101, 102 Elementary Hellenistic Greek I, II (3, 3) The purpose of these courses is to enable students to begin reading and translating the Greek New Testament on their own. Emphasis is placed upon understanding the basic grammar,

developing a working vocabulary and basic translation methods. Fall and spring semesters; alternate years. Prerequisite: GRK 101 is a prerequisite for GRK 102.

GRK 201 Intermediate Hellenistic Greek (3) The purpose of this course is to enable students to gain greater proficiency in reading and studying the Greek New Testament. Elements of advanced Greek grammar and syntax are introduced through translation assignments. Basic methods of New Testament Greek exegesis are also demonstrated and practiced. Fall semester, alternate years. Prerequisite: GRK 102 or permission of the instructor.

GRK 202 Biblical Greek Exegesis (3) A continuation of Intermediate Hellenistic Greek. It involves the further development of reading facility and the application of exegetical principles and methods. Spring semester, alternate years. Prerequisite: GRK 201 or permission of the instructor.

GRK 199, 491, 493, 494, 495, 499 (See page 13)

## **HEBREW • HEB**

HEB 101, 102 Elementary Biblical Hebrew I, II (3, 3) An introduction to Biblical Hebrew grammar, with reading in simple Biblical prose texts. Fall and Spring semesters, alternate years. Prerequisite: HEB 101 is a prerequisite for HEB 102.

HEB 201 Intermediate Biblical Hebrew (3) Continuation of Hebrew grammar and syntax with emphasis upon reading selected Biblical passages on an intermediate level. Fall semester, alternate years. Prerequisite: HEB 102 or permission of the instructor.

HEB 202 Biblical Hebrew Exegesis (3) Development of reading facility in the Hebrew Bible, with application of basic exegetical principles. Spring semester, alternate years. Prerequisite: HEB 201 or permission of the instructor.

HEB 199, 491, 493, 494, 495, 499 (See page 13)

## **HISTORY • HIS**

HIS 150 Survey of American History (3) An overview of major themes in American history from the pre-Colombian period to the present. Designed for non-history majors, especially elementary education. Special attention given to Pennsylvania history. Spring semester, every year.

HIS 201 Introduction to Historical Studies (3) An introduction to the practice and discipline of history, ranging from research and writing to more theoretical concerns. Spring semester, every year.

HIS 220 Europe I: Ancient through Medieval (3) Survey of ancient and medieval history, from fifth century BC to the 14th century AD, tracing major ideas, institutions, and events and the shift from Mediterranean to European culture. Offered on a four semester rotation.

HIS 221 Europe II: 1500–1815 (3) From the Renaissance through the Napoleonic period. The formation of modern Europe. Offered on a four semester rotation.

HIS 222 Europe III: 1815–Present (3) Nineteenth and twentieth century Europe. Offered on a four semester rotation.

HIS 250 U.S. I: Colonial (3) Survey of the colonial era from the earliest settlements to the adoption of the Constitution. Special emphasis on Pennsylvania history. Offered on a four semester rotation.

HIS 251 U.S. II: 19<sup>th</sup> Century (3) Development of the nation from the early republic through the 1890's. Special emphasis on Pennsylvania history. Offered on a four semester rotation.

HIS 252 U.S. III: 20<sup>th</sup> Century (3) Survey of major themes in US history since 1900. Special emphasis on Pennsylvania history. Offered on a four semester rotation.

HIS 260 Latin America (3) Colonial developments from discovery to independence and problems of the republics from independence to the present. Alternate years.

HIS 270 Middle East (3) History of Islam, noting especially its impact on political behavior of the Islamic countries and including the Arab-Israeli confrontation. Alternate years.

HIS 280 Modern Africa (3) History and politics of Sub-Saharan Africa, with emphasis on the interaction of indigenous and Western influences. Alternate years.

HIS 290 Modern Asia (3) Historical and political aspects of the people, particularly in China and Japan, especially since 1800. Alternate years.

HIS 300 Special Surveys (3) Specialized surveys of various historical topics not otherwise listed in the catalog. Examples would be philosophy of history, Pennsylvania history, history of the British Empire, women's history, etc. May be repeated with different topics. Offered every year.

HIS 321 19th Century European Intellectual History (3) A study of the main ideas that influenced European thought up to World War I, including Romanticism, nationalism, liberalism, socialism, imperialism, etc. Special attention will be paid to thinkers and movements that shaped the religious life of Europe in the 19th century. Offered periodically.

HIS 331 20th Century Western Intellectual History (3) Intellectual trends in the Western world since World War I: intellectual underpinnings of communism, nazism, and fascism; the emergence from colonial dependence and the rise of a global world; scientific and philosophical movements; existentialism, postmodernism, and current trends; all with emphasis on a Christian understanding of the world. Offered periodically.

HIS 342 Gilded Age and Progressive Era (3) This course provides an in-depth investigation of the years from 1877 through the 1920s, a time when many of the structures that define modern America originated. Industrialization, immigration, settlement of the West, social and national political reform, urbanization, Jim Crow-ism, the end of traditional Native American lifestyles, and New Manifest Destiny are among the topics explored. Alternate years.

HIS 351 U.S. Foreign Policy (3) Survey of the history of American foreign relations with particular emphasis on the period 1898 to the present. Investigates the ideas, decisions, personalities, and ideological underpinnings that have shaped and defined US foreign policy. Alternate years.

HIS 361 American Religious History (3) A survey of American religious history from the pre-Colombian period through the present. Alternate years.

HIS 371 United States Cultural History (3) An exploration of overarching themes in American cultural history, including marriage and family, consumerism, political culture, and sport. Alternate years.

HIS 381 History of Britain (3) Overall view from earliest times to the present, with special emphasis on the unique developments that distinguish British history from continental history. Offered periodically.

HIS 391 History of Russia (3) An overall consideration of Russian history, with emphasis on the modern period and the distinctive features of Russian history and culture. Offered periodically.

HIS 401 Selected Themes in History (3) Specialized reading and writing within a subfield. Examples: French Revolution, capitalism and its American critics, genocide, Stuart Britain, the Israel-Palestine conflict. Repeatable with different topics. Prerequisite: junior or senior standing or permission of the instructor.

HIS 421 Senior Seminar (3) A seminar on a topic or theme of the instructor's choosing, involving intensive engagement with historiographical literature as well as original research. Every fall. May be replaced by SSC 403 for Education majors only.

HIS 422 History and Theory (1) A reading course on theory and methodology, including readings on the intersection of Christian faith and the doing of history. Every fall. Prerequisite: senior standing.

HIS 199, 491, 493, 495, 499 (See page 13)



## **HONORS • HON**

HON 101, 102 Freshman Honors “College” (1, 1) This course is a two course sequence (HON 101/HON 102) designed to challenge first-year honors students to consider questions profoundly relevant to their new vocation as “college students.” What is college for? What is a Christian college? Why are you here? (i.e., in college/in a Christian college). While HON 101 in the Fall semester operates more like a traditional classroom, HON 102 in the Spring semester consists of a book discussion and various learning and service experiences, with the purpose of understanding how our studies and vocations can bring glory to God. Prerequisite admission to the First Year Honors Program. Fall and Spring semesters. Prerequisite for HON 102: HON 101, admission to the First Year Honors Program.

HON 120 Society (3) This course is for First-Year Honors Program cohort members only and is designed to explore American society, including how a few scholars have characterized the nature and relative promise of American society, as well as what might be called a Christian view of society, with the ultimate goal of helping FYHP students discern Christian faithfulness in a multifaceted society. It fulfills one social science core requirement. Prerequisites: HON 101, HUM 103 Honors Program. Spring semester.

HON 201 Book Discussion “Calling” (1) This course explores from a Christian perspective, the many dimensions, or levels of significance, the term “calling” carries (e.g., personal calling, vocational calling, religious calling, and spiritual calling, etc.) Prerequisite admission to the Young Scholars Program. Fall semester.

HON 300 Academic Faithfulness (3) This course encourages students to develop a vision for their lives that is motivated by a love for Christ and focused on helping “young scholars” to understand Christian faith and the academic life more clearly and fully. Prerequisite: Admission to the Young Scholars Program. Spring semester. BIB 300 option.

HON 303 Book Discussion “Academic Faithfulness” (1) This course furthers the conversation begun in HON 300 by focusing on an additional book related to academic faithfulness. Prerequisite: HON 300. Spring semester.

## **HUMAN SERVICES • HSV**

HSV 201 Introduction to Human Services (3) This course provides an overview of the human services profession, its history, values, goals and practices. Ethical and philosophical issues involved in providing human services to those in need will be explored. Every semester.

HSV 202 Human Diversity (3) This course surveys human diversity in terms of race, ethnicity, gender, and social class in contemporary American culture. The effects of oppression and prejudice will be explored on individuals and groups, as well as evaluating the consequences of social policy aimed at alleviating discrimination. Implications for the practice of human services will be discussed. Every semester.

HSV 215 Human Services: Foundations and Calling (2) This course assists students in developing foundational competencies essential for success in the human service major. Content includes the exploration of calling and the integration of worldview and human services. Skills related to the theoretical and the applied constructs of the field will be introduced. Fall semester.

HSV 230 The Family System in Context (3) This class will consider the dynamic family in social context. Different theories and topics such as marriage, parenting, communication, conflict and economics will be discussed. The Biblical model of creation, fall and redemption will be the context for the class. Fall semester.

HSV 301 Social Welfare Agencies and Policies (3) This course surveys the history and current development of systems designed to serve those in need. Agencies oriented to meet the needs of special populations (e.g., the aged, children and youth, rural and urban groups) will be explored and the policies influencing their development will be critically analyzed. Fall semester. Prerequisite: HSV 201.

HSV 302 Program Evaluation for Human Services (1) This supplemental course will explore agency field experience from the vantage point of administrative program evaluation. Work in this course will allow students to advance their knowledge and skills doing program administration and applied research through program evaluation in human services settings. This course will be taken with HSV 303 and with/or subsequent to PSY 205/MAT 105. Fall semester. Prerequisites: HSV 201, 202, and PSY 201.

HSV 303 Agency Field Experience (3) The course is designed to afford students 90 hours of supervised field experience in diverse human services settings. Students will complete an agency rotation supplemented by weekly class discussion. Emphasis is placed on the integration of theoretical constructs and field observations. Every semester. Prerequisite: HSV 201, HSV 202, and HSV 215 or PSY 206.

HSV 305 Counseling and Helping Skills I (3) This course is designed to prepare the student for practice in human services agencies through the development of culturally sensitive helping relationships. Emphasis is placed on enhancing communication skills, developing interview techniques, and learning basic group skills and group interactive patterns. Every semester. Prerequisite: HSV 201 or PSY 201. HSV majors and minors only.

HSV 307 Generalist Practice, Model, and Theory (3) This course is designed to further advance the student's practice skills. Emphasis is placed on identifying client strengths, problem-solving, preparing case plans for individuals and families, and community and organizational interventions. Spring semester. Prerequisite: HSV 201 and PSY 201.

HSV 401 Senior Seminar (3) This course is offered in conjunction with the internship experience. It acts as a capstone course for the major. Students will be given the opportunity to consider their worldview, the Christian worldview and a Christian response to the discipline and issues of human services. The course acts as a preparation for the professional career launch of a student. The course is taken in conjunction with the field experience and is designed to support the student's field experiences. Must be taken with HSV 450. Every semester. Prerequisites: HSV 201, HSV 202, HSV 303, HSV 305, HSV 307, PSY 201, PSY 250, and SOC 120. HSV majors only.

HSV 405 Community Intervention and Special Populations (3) An advanced human services course that builds on micro level counseling and helping, as well as, generalist practice knowledge and skills in addressing the human services needs of at-risk groups. Special attention will be given to church based and Christian strategies used to care for at-risk groups. Spring semester. Prerequisites: HSV 201, HSV 305, HSV 307, PSY 313 and junior standing.

HSV 450 Field Experience (6) This course affords the student an opportunity to apply knowledge and theories obtained in course work to actual field experience. The student will be supervised in the agency placement by both an on-site coordinator and the Geneva placement adviser. A total of 20 hours per week will be spent on site during a 15-week semester period. Prerequisite: Enrollment depends on an application process that is administered by the HSV program director. One requirement is that the student have received credit for the following seven courses: HSV 201, HSV 202, HSV 303, HSV 305, HSV 307, PSY 201, PSY 250, and SOC 120. A second requirement is the acquisition of necessary governmental clearances. There are other requirements as well. Admission is only by application and eligibility. Complete application instructions and materials are available from the instructor. Students must have attained senior standing. Must be taken with HSV 401. Every semester. HSV majors only.

HSV 199, 292, 491, 493, 495 (See page 13)

## **HUMANITIES • HUM**

HUM 103 Invitation to the Humanities (3) An introduction to the Humanities disciplines and intellectual endeavor through a study of selected topics focusing on central concerns of our cultural heritage. One lecture and two discussion meetings each week. Every semester.

HUM 200 The Humanities in England and Scotland (3) This course is designed to expose students to the history, art, architecture, and literature of England and Scotland as unique expressions of Western culture that nevertheless illustrate the main themes and patterns of Western civilization. Offered as needed. Prerequisite: HUM 103.

HUM 203 Making the West (3) This course explores three dominant themes within western cultural history as expressed through the literary, visual, and musical arts. Diverse viewpoints on the nature of beauty, freedom, and truth from the classical period through the enlightenment will be discussed and evaluated from a Christian perspective. One lecture and two discussion meetings each week. Every semester. Prerequisite: HUM 103.

HUM 300 Western Humanities in the Italian Context (9) This course explores western culture as expressed in the literary, visual, and musical arts in historical and intellectual context from origins in Judeo-Christian and Greco-Roman traditions through the 20<sup>th</sup> century. Particular emphasis will be placed on the study of ancient Rome, the Renaissance, the development of Christianity in Western Europe, and on the Italian context. The course will make extensive use of field trips in Rome and across Italy. Offered every semester in Rome. Prerequisite: HUM 103.

HUM 303 Perspectives: Faith, Culture, Identity (3) Survey of the movement of Western culture in the 19th, 20th, and 21st centuries through diverse perspectives on faith, culture, and identity as evidenced through literature, visual art, music, and in historical and intellectual contexts. Special attention will be given to contemporary issues and values. One lecture and two discussion meetings each week. Every semester. Prerequisites: HUM 103 and HUM 203.

HUM 304 Focused Options in Humanities (3) Various courses designed to deepen a student's understanding of some particular aspect of the art, history, thought, music, and literature of either Western or non-Western cultures. Courses will be offered through a variety of departments in the college and will be cross-listed as HUM 304 courses. Every semester. Prerequisites: HUM 103 and HUM 203 or consent of instructor; the instructor may choose to set additional prerequisites. NOTE: Students may take more than one course numbered HUM 304, so long as they do not repeat a course previously taken for credit.

### **HUMANITIES BOOK DISCUSSION • HMN**

HMN 491 Book Discussion (1) Reading and discussion of one book. Several options each semester. Attendance at weekly group discussions required for credit. Enrollment limits determined by each instructor. Repeatable with different books. Subject to eight credit hour limitation. Graded credit-no credit.

### **INDEPENDENT • IDM**

IDM 495 Independent Major Tutorial (1-3) Preparation of a paper, project, or completion of an internship directed by a faculty adviser that serves as a culminating experience.

### **LANGUAGES AND CULTURES • FLC**

FLC 101, 102, 201, 202 (1-4) Designed to provide enrichment in the language and culture of a designated country and its people. Courses will cover the basic aspects of pronunciation, grammatical structures, and cultural knowledge needed for using the language in conversing. Vocabulary development will be an integral part of the course. Courses may include such languages as Italian, Chinese, Japanese, Russian, and others. Some of these courses may be offered using a nontraditional format such as individualized courses using audiovisuals. Offered on demand. No prerequisite for FLC 101; FLC 101 is a prerequisite for FLC 102.

FLC 201, 202 (1-4) A continuation of the material included in FLC 102. Emphasis will be on speaking, understanding, vocabulary development and cultural knowledge. Reading and writing skills will be introduced. Some of these courses might be offered using a nontraditional format such as individualized courses using audiovisuals. Offered on demand. Prerequisite: FLC 102.

### **LEADERSHIP • LDR**

LDR 200 Introduction to Leadership Development (3) Critically examines the major theories of leadership development through a Christian worldview. Application will be made to a variety of leadership settings, as well assist students in understanding basic leadership concepts and developing their own leadership style. Introduction to Leadership Development is intended to be an entry level course, and is required for those seeking to complete the Minor in Leadership Studies. Every other fall.

LDR 292 Leadership Practicum (1) A hands on (preapproved) leadership experience, minimum of 45 hours. In addition to the practical experience, a small cohort will meet "regularly" during the semester to debrief each of their ongoing experiences. LDR 200 may be taken concurrently.

LDR 400 Leadership Studies Capstone (3) Students will have the opportunity to intentionally dialogue about what their experience was like throughout the Minor in Leadership Studies program. This course will enable students to "bring together and make sense" of the many concepts that they will have encountered through the required and elective courses. Students will also have the opportunity to develop a personal leadership perspective. Prerequisites: LDR 200 and LDR 292. Every other spring.

### **LINGUISTICS • LIN**

LIN 219 Introduction to Linguistics (3) Basic elements of phonology, morphology, syntax, and semantics. Fall semester.

LIN 220 Applied Linguistics (3) Issues and topics in historical linguistics, sociolinguistics, and psycholinguistics. Spring semester. Prerequisite: LIN 219.

LIN 384 Special Topics in Linguistics (3) Study of a major topic in theoretical or applied linguistics. Variable topics. Offered on-demand or summers. Prerequisites: LIN 219 and others as designated at time of offering.

## **MATHEMATICS • MAT**

MAT 095 Algebra (3) A study of basic algebraic concepts and skills that underlie college-level mathematics and are required background for core science and statistics courses. This course does not count toward graduation but does for financial aid and full-time enrollment. The course may not be taken as an audit. Every semester.

MAT 101 College Algebra (3) A rigorous review of Algebra I and II with some geometry. Every semester. Prerequisite: Math SAT score at least 470, Math ACT score at least 19, or MAT 095.

MAT 102 Trigonometry (3) A detailed study of trigonometry. Spring semester. Prerequisite: MAT 101 or Math SAT 500 or Math ACT 21. Students may take only one course for credit from MAT 102 and 120.

MAT 105 Elementary Statistical Methods (3) Introduction to data collection, descriptive statistics, basic concepts of probability, inferential methods, hypothesis testing, correlation, and regression. Every semester. Prerequisite: Math SAT score at least 470, Math ACT score at least 19, or MAT 095.

MAT 120 Precalculus (3) Designed to prepare students for Calculus I. Review of algebraic manipulations, functions, trigonometry, radicals, complex numbers, logarithms, and conic sections. Five hours per week. Fall semester. **Prerequisite: Math SAT score at least 500, Math ACT score at least 21, MAT 101 or MAT 102.** Students may take only one course for credit from MAT 102 and 120.

MAT 130 Discrete Math (3) Number systems, set theory, graph theory, induction, Boolean algebra. Spring semester. Prerequisite: MAT 101 or Math SAT 500 or Math ACT 21.

MAT 161 Calculus I (4) Limits, differentiation, related rates, analytic geometry, max/min problems, basic integration, area, volume of revolution, and applications. Five hours per week. Every semester. Prerequisite: Math SAT score at least 570, math ACT score of at least 25 and experience with trigonometry; or MAT 120 Precalculus **or MAT 102 Trigonometry.**

MAT 162 Calculus II (4) Exponential and logarithmic functions, inverse trig functions, L'Hopital's rule, techniques of integration, infinite series, series expansions, and polar coordinates. Five hours per week. Every semester. Prerequisite: MAT 161.

MAT 261 Calculus III (4) Multivariable calculus; introductory linear algebra and differential equations; partial derivatives; multiple integrals. Five hours per week. Every semester. Prerequisite: MAT 162.

MAT 265 Probability and Statistics (3) A calculus-based study of probability distributions and densities, mathematical expectation, sampling theory, and hypothesis testing. Every semester. Prerequisite or co-requisite: MAT 162.

MAT 307 Linear Algebra (3) Vectors, vector spaces, matrices, determinants, linear transformations, eigen values. Fall semester. Prerequisite: MAT 162.

MAT 309 Introduction to Abstract Algebra (2) Groups, rings, integral domains, and fields. Spring semester. Prerequisite: MAT 130; pre- or co-requisite MAT 310.

MAT 310 Introduction to Real Analysis (2) A rigorous axiomatic approach to real numbers, sequences, limits, continuity, and derivatives. Spring semester. Prerequisite: MAT 162.

MAT 350 Numerical Methods (3) Solution of linear and nonlinear equations, polynomial interpolation and extrapolation, numerical differentiation and integration, ordinary differential equations, matrix operations. Fall semester. Prerequisites: CSC 101 and MAT 261.

MAT 380 History of Mathematics & Mathematics Education (2) Today's efforts to reform the teaching of mathematics will be examined in an historical context. Both the history of mathematics education and the history of mathematical thought will be explored. The great thinkers and their contribution to mathematical thought will be highlighted. The implications of various worldviews, including a Christian worldview, concerning the nature of mathematics and mathematics pedagogy

will be examined. Spring semester. Corequisites: EDU 382 and requirements as mandated by Chapter 354. Cross-listed as EDU 380.

**MAT 382 Math Curricula in the Middle and Secondary School (2)** An introduction to curriculum resources focusing on what is critical for students to know and be able to do. Emphasis is on creating unity among the written, taught, and tested curricula. Those taking the course will become knowledgeable about and able to use the standards of the State of Pennsylvania and the National Council for the Teaching of Mathematics (NCTM) with regard to their own teaching of mathematics. Spring semester. Corequisites: EDU 380 and requirements as mandated by Chapter 354. Cross-listed as EDU 382.

**MAT 402 Teaching of Math, 4-8 (3)** Study of the methods and procedures needed to teach math, grades 4-8. Fall semester.

**MAT 403 Methods of Teaching Math (4)** Study of the methods and procedures needed to teach high school algebra and geometry. Fall semester. Prerequisites: math education major, MAT 261, EDU 380, and EDU 382.

**MAT 404 College Geometry (3)** Euclidean Geometry developed from basic postulates. Prerequisites: math education major and junior standing or instructor permission. Fall semester.

**MAT 405 Differential Equations (4)** Methods of solution and application of ordinary differential equations. Every semester. Prerequisite: MAT 162.

**MAT 409 Partial Differential Equations (3)** Sturm-Liouville Theory. Fourier analysis and boundary value problems. The heat and wave equations. Spring semester. Prerequisite: MAT 261. Prerequisite or co-requisite: MAT 405.

MAT 199, 491, 493, 494, 495, 499 (See page 13)

## **MECHANICAL ENGINEERING • MEE**

**MEE 321 Mechanics of Deformable Bodies (3)** A review and continuation of the deformable body topics in EGR 211. Bending, torsion, direct stress and transverse shear in beams; curved members; thin-walled members; combined stresses; experimental stress analysis using strain gauges; theories of failure; deflection of beams; statically indeterminate problems; elastic stability of columns; energy methods; introduction to plasticity. Fall semester. Prerequisites: MAT 261, EGR 211.

**MEE 324 Kinematics of Mechanisms (3)** Displacement, velocity, and acceleration analysis of linkage and cam mechanisms by graphical and analytical methods. Synthesis of mechanisms. Gears and gear trains. Fall semester, alternate years (next offered Fall 2015). Prerequisites: MAT 261, EGR 214.

**MEE 333 Applied Thermal and Fluid Engineering (3)** Application of thermodynamics and fundamental heat transfer concepts to power and refrigeration cycles and their components, with a focus on cycle modifications to improve efficiency. First and second law analysis of gas and vapor power and refrigeration cycles. Design and selection of heat exchangers. Radiation and multimode heat transfer. Thermodynamics of ideal gas mixtures with application to gas-vapor mixtures and combustion. Spring semester, beginning 2016. Prerequisites: EGR 330 and EGR 331.

**MEE 371 Instrumentation Engineering (3)** A survey of sensors and their applications. Dynamic characteristics of sensors and of the analog and digital electronics involved in making measurements. Interpretation of signals based on appropriate first and second order models of system performance. Applications include measurement of strain, velocity, pressure, flow rate, acceleration, and temperature, and others as determined by the instructor and by student project needs. Fall semester, alternate years. Next offered, Fall 2016. Prerequisites: MAT 405 and either PHY 202 or EGR 212.

**MEE 403 Mechanical Component Design (3)** Statistical concepts, reliability, factor of safety, fatigue, and wear failure. Applications to the design of shafting, bearings, gears, springs, and fasteners. Design optimization. Fall semester. Prerequisite: MEE 321.

**MEE 405 Finite Element Methods (3)** Formulation of discrete elements for structural and stress analysis. Variational theorems. Isoparametric elements. Heat conduction, elastic stability, vibration, fluid flow, magnetics, and optimization problems solved using professional software. Spring semester. Prerequisite: MEE 321 or consent of the instructor.

MEE 410 Mechanical Vibration (3) Steady state and transient analysis of systems with a single or multiple degrees of freedom. Modal analysis and dynamic response of structures and machines. Introduction to the dynamics of continuous systems. Spring semester. Prerequisites: MAT 261, MAT 405, EGR 214.

MEE 416 Design of Thermal Systems (4 through Spring 2016; 3 beginning Spring 2017) Applications of thermodynamics, fluid dynamics, and heat transfer to the design of thermal systems such as power plants, solar energy systems, and HVAC systems. Extension to complex cycles, heat exchangers, and radiation heat transfer. Includes individual and team design problems as a major component. Spring semester. Prerequisites EGR 315 and either EGR 314, PHY 307, or CHM 307; beginning Spring 2017: MEE 333.

MEE 417 Fluid Mechanics (4) Fluid properties and hydrostatics. Open channel flow, compressible flow, pipe flow and pipe networks, pumps and turbo machinery, boundary layers, dimensional analysis, similitude, lift and drag. Fall semester. Prerequisite: EGR 315. This course will be offered for the last time in Fall 2015.

MEE 418 Reacting Systems (3) Equilibrium and kinetics of reacting flows. Techniques involved in choosing a reactor to produce a desired product. Possible applications include chemical synthesis, combustion systems, incineration, and pollution control systems. Taught concurrently with CHE 401. Fall semester. Prerequisites: CHM 221 and either EGR 314, CHM 307, or PHY 307; beginning in the Fall 2016: CHM 221 and either EGR 330 or CHM 307.

MEE 199, 491, 493, 494, 495, 499 (See page 13)

## **MINISTRY • MIN**

MIN 201 Cultural Anthropology (3) General survey of cultural anthropology in which different cultural groups are studied. Particular emphasis is placed on the implications of cultural variations for Christian missions. Offered every other year.

MIN 202 Holistic Spiritual Formation (3) An introduction to principles and practices of spiritual formation, including its nature, history, means, and outcomes. Offered periodically.

MIN 205 Christian Education in the Local Church (3) Emphasis on principles essential for participation. Fall semester, alternate years. Prerequisite: BIB 113 or permission of the instructor. Offered periodically.

MIN 210 Evangelism (3) A study of the theology, the theory and the practice of evangelism. Prerequisites: BIB 112 and BIB 113.

MIN 215 Methods of Teaching the Bible (3) The focus of this course is on the structure, knowledge base, and practical application of teaching the Bible in a variety of ways and settings. Prerequisites: BIB 112 and BIB 113. Spring semester.

MIN 219 World Christian Movement (3) Selected types of societies, both past and present, that represent varying levels of cultural development. Cross-cultural and Christian approach to case studies. Offered periodically.

MIN 220 Topics in Christian Ministry (3) Exposure to new approaches and strategies to ministry. Repeatable. Prerequisites: BIB 112, BIB 113, and sophomore standing.

MIN 224 Missions and Culture (3) This course aims to prepare students for Christian service in societies that differ significantly from their own. Students will research the features of a distant people group from historical and worldview perspectives, and consider how missionaries to such places can adapt themselves to significantly different cultural circumstances while bringing the heart of the gospel into such situations.

MIN 225 Globalism and Multiculturalism (3) This course explores the phenomenon of globalism in the 21<sup>st</sup> century as the world's "global village" is being forged by the inexorable forces of instantaneous communication, international transportation and trans-national corporations. Students will learn how these forces are influencing various aspects of life, from religion to politics to family dynamics, and will be encouraged to consider Christian responses to these forces.

MIN 240 Introduction to Student Ministry (3) Consideration of the Biblical basis for a relational ministry, of the current high school scene, and of the leadership qualities, techniques, and insights required for working with adolescents, both the uncommitted and the church-nourished. Fall semester.

MIN 241 Methods of Student Ministry (3) This course exposes students to the practical foundational elements and methods necessary for student ministry. Newsletters, club talks, PowerPoint, field research, simulations, and cohort presentations make up major portions of the class itself. Spring semester.

MIN 242 Children's Ministry (3) This course will address the need to understand developmentally appropriate practices for infants through elementary-aged children as a prerequisite for effective children's ministry. Students will develop an understanding of how children learn and the appropriate ways to initiate, nurture, and sustain faith responses as children physically and cognitively grow and develop. A special focus will be given to the importance of family and church connections. In addition, students will learn how to communicate Biblical truths to children. Spring semester, alternate years.

MIN 243 Principles of Leadership (3) This course is a class that instructs students on the essential principles of being an effective leader, particularly as it pertains to the calling and giftedness of the student. In addition, study is directed to classical definitions of leadership, classical studies in leadership, and what leadership looks like in a postmodern culture.

MIN 244 Urban Student Ministry (3) The purpose of this course is to encourage in students a love for God's cities and people of the cities by giving students an introduction to urban youth, culture, dilemmas, and ministry models. Spring semester.

MIN 246 Campus Ministry (3) This course will address these key topics: developing essentials in Biblical theology; defining the mission of campus ministry; confirming calling; understanding college student development; and identifying effective approaches to campus ministry. Spring semester, alternate years.

MIN 250 Theory and Practice of Experiential Education (3) Comparing adventure education with traditional education, this class studies components of experiential education history, modalities, philosophy and effective Christian ministry. It includes practical pieces of how to develop, administer, and conduct experiential activities for a variety of settings including classrooms, youth groups, colleges, retreats, and camps. Fall semester.

MIN 253 Challenge Course Facilitation (3) This class will develop in students the ability to assess a group's need and design a challenge course experience to facilitate the necessary experience for growth. It will instruct and develop the personal and technical skills necessary to lead experiences that grasp meaning at its depth for various ages and purposes. Spring semester.

MIN 292 Ministries Practicum (2) Opportunity to gain hands-on experience in missions, student ministry or pastoral ministry in a guided setting.

MIN 319 Contemporary Adolescent Culture (3) A survey of the last 40 years of American history investigating social trends and technology that have changed the nature of adolescence and must be considered as we attempt to evangelize teenagers.

MIN 430 Senior Seminar (3) This course is dedicated to pulling all of the preliminary course work of the prior three years into one cohesive whole. Students will produce their own student ministry manual—as well as complete, in a practical manner, their ability to articulate a wholistic, theoretical, and Biblical approach to student ministry.

MIN 493 Student Ministry Internship (9) Mentored student ministry experience in a church or ministry setting taken in one or two semesters.

MIN 199, 292, 491, 493, 494, 495, 499 (See page 13)

## **MUSIC APPLIED • MUA**

MUA 105 Beginning Piano for Adults (1) Introductory class lessons for non-music majors who have no prior experience at the piano. Offered periodically.

MUA 106 Class Piano I (1) Designed for music majors who, having little or no previous experience with piano, need to acquire the skills necessary to pass the piano proficiency examination. Every semester. Repeatable.

MUA 107 Class Piano II (1) Continuance of preparation for the piano proficiency examination. Every semester. Repeatable.

MUA 121, 122 Private Lessons (1–2) Private instruction in voice, piano, organ, or other instrument. Music majors take two half-hour lessons per week for two credit hours; others take one lesson per week for one credit hour. Every semester.

MUA 153 Class Percussion (1) Class instruction in the fundamentals of all basic percussion instruments with emphasis on snare drum rudiments. Spring semester.

MUA 154 Class Strings I (1) Class instruction in fundamentals of string playing with emphasis on violin. Ranges, bowing, fingering, the use of violins in ensembles. Fall semester.

MUA 155 Class Brass I (1) Fundamental class instruction in brass instruments with emphasis on trumpet, including transposition, technique, and uses in combinations. Fall semester.

MUA 156 Class Voice (1) Class instruction in voice, tone production, posture, diction, interpretation; emphasis on teaching proper development and use of the voice. Required of music education majors. Spring semester.

MUA 157 Class Woodwinds I (1) Class instruction in the fundamentals of the clarinet, including transposition, technique, and uses in combinations. Fall semester.

MUA 193 Functional Guitar (1) Guitar class open to all students who desire to learn guitar. Every semester.

MUA 220 Accompanying (2) Principles and problems of accompanying, with practical experience. Repeatable. Two semesters required of applied majors in keyboard instruments. Every semester, on demand. Prerequisite: major or concentration in a keyboard instrument.

MUA 221, 222 Private Lessons (1–2) Continuation of private study in voice or instrument. Every semester.

MUA 254 Class Strings II (1) Class instruction in viola, cello, and bass. Fall semester. Prerequisite: MUA 154 or consent of instructor.

MUA 255 Class Brass II (1) Class instruction in baritone, French horn, trombone, tuba. Spring semester. Prerequisite: MUA 155 or consent of instructor.

MUA 257 Class Woodwinds II (1) Class instruction in saxophone, flute, oboe, bassoon. Spring semester. Prerequisite: MUA 157 or consent of the instructor.

MUA 321, 322 Private Lessons (1–3) Continuation of private study in voice or instrument. Every semester.

MUA 421, 422 Private Lessons (1–3) Continuation of private study in voice or instrument. Every semester.

MUA 451 Senior Recital (1) Presentation of the degree recital. Every semester. Required of all music education and music performance majors. Prerequisites: senior standing, approval of music department. In the semester in which the senior recital is performed, the student will register for MUS 451 (1) and MUS 421 or MUS 422 (1–2).

## **MUSIC • MUS**

MUS 108 Music Theory I (2) Review of music fundamentals. Intervals, scales, triads, inversions, voice leading. Meets three hours per week. Fall semester.

MUS 109 Music Theory II (2) Diatonic harmony of the common practice period. Meets three hours per week. Spring semester. Prerequisite: MUS 108.

MUS 120 English and Italian Diction for Singers (2) Required of performance majors in voice, recommended for music education majors with voice concentration. Spring semester, alternate years as needed.



MUS 121 German and French Diction for Singers (2) Required of performance majors in voice, recommended for music education majors with voice concentration. Spring semester, alternate years as needed. Prerequisite: competence in International Phonetic Alphabet (IPA).

MUS 128 Aural Skills I (2) Basic concepts in sight-singing, ear training, and eurhythmics. Fall semester.

MUS 129 Aural Skills II (2) Continuation aural musicianship. Spring semester. Prerequisite: MUS 128.

MUS 208 Music Theory III (2) Chromatic harmony; studies in analysis of 18<sup>th</sup> and 19<sup>th</sup> century music. Fall semester. Prerequisite: MUS 109.

MUS 209 Music Theory IV (2) Harmonic and stylistic practices of 19<sup>th</sup> and 20<sup>th</sup> century composers. Spring semester. Prerequisite: MUS 208.

\*MUS 212 Marching Band (1) The Geneva marching band is a high energy program that also includes majorettes, drill team, and a silk line. Three rehearsals per week. Fall semester.

\*MUS 213 Symphonic Band (1) Performing great compositions of yesterday and today. Two rehearsals per week. Spring semester.

\*MUS 214 Instrumental Ensemble (1) Brass, jazz, woodwind, or string instruments, depending on student interest and availability. One and a half to two hours per week. Membership by audition only. On demand.

\*MUS 215 Genevans (1) The college a cappella choir shares the pleasure and excitement of great choral music. Two rehearsals per week. Membership by audition only. Every semester.

\*MUS 216 Vocal Ensemble (1) Selected members of the Genevans. Membership by audition only. One and a half to two hours per week. Every semester.

\*MUS 218 Handbell Ensemble (1) The excitement and beauty of music for bells, rung on the college's six-octave set of English handbells. Every semester.

MUS 228 Aural Skills III (1) Continuation of sight-singing and ear training; identification of more complex chords. Fall semester. Prerequisite: MUS 129.

MUS 229 Aural Skills IV (1) Continuation of sight-singing and ear training. Spring semester. Prerequisite: MUS 228.

MUS 231, 232 Fundamentals of Conducting I, II (1, 1) Basic beat patterns, starting and stopping, rudiments of score preparation. Every semester. Required of all music education and music performance majors. Prerequisite for MUS 231: MUS 108. Prerequisite for MUS 232: MUS 231.

MUS 301 Legal and Ethical Aspects of Music Business (3) Applications of business law to music (contracts, copyright, etc.), and consideration of ethics in art and entertainment. Fall semester alternate years.

MUS 310 Music History I (3) A survey of the historical development of Western music from Antiquity through the Baroque; consideration of bibliography and research technique in music. Fall semester.

MUS 311 Music History II (3) A survey of styles, composers and performers in Europe and America from the Classical period through the present. Spring semester.

MUS 320 Literature of Piano/Voice/etc. (2) Survey of the standard literature for the major instrument, including listening and analysis. Required of music performance majors. Spring semester, on demand. Prerequisite: three to four semesters of college-level study in the applied instrument.

MUS 334 Advanced Choral Conducting (1) Advanced choral patterns and principles of directing an ensemble; score preparation; interpretation; rehearsals; programming, organization, etc. Practical experience in conducting laboratory or regular ensembles. Spring semester. Prerequisites: MUS 109 and MUS 232.

MUS 335 Advanced Instrumental Conducting (1) Advanced instrumental patterns and principles of directing an ensemble, score preparation; interpretation; rehearsals; programming, organization, etc. Practical experience in conducting laboratory of regular ensembles. Spring semester. Prerequisites: MUS 109 and MUS 232.

MUS 350 Elementary School Music (2) Music in relation to the growth needs of children; development of varied musical experiences through good literature, games, rhythm band instruments, recorders, Orff instruments, autoharp, and recordings. Fall semester.

MUS 351 Secondary School Music (3) The place of music in the education of adolescents; materials and activities for the music program; the changing voice; literature, instrumental arranging, and methods of presentation. Includes in-class demonstrations and observation in the public schools. Spring semester.

MUS 370 World and Popular Music (3). Survey of non-Western, non-art, and commercial music, with special emphasis that will vary. Spring semester. Required of music education majors; elective for all other students. Non-music majors who take this for the humanities HUM 304 must have completed HUM 303.

MUS 420 Pedagogy of the Piano/Voice/etc. (2) Methods of teaching on the major instrument, selection of materials, design of a teaching plan, and practical experience under observation. Required of music performance majors. Fall semester, on demand. Prerequisite: six semesters of college-level study in the applied instrument.

MUS 491 Special Topics (1–3) See page 13. May be repeated for different topic.

MUS 493 Internship (credit variable) Supervised internship in music or audio business, church music, etc. On demand.

MUS 199, 491, 493, 494, 495, 499 (See page 13)

\*See limitation explained on page 14.

## **PHILOSOPHY • PHI**

PHI 100 Critical Thinking (3) An introduction to the tools and terminology of logic, various argument forms and common fallacies, including hands-on practice analyzing arguments, in order to improve reasoning skills fundamental to effective communication and critical thinking in every academic discipline and avenue of life. Every year.

PHI 110 The Philosophical Conversation (3) Designed for the student with little or no background in philosophy, this course surveys the history of Western philosophy, key philosophers, and important philosophical concepts that continue to shape our perception of ourselves, our world and God. Philosophy concerns the fundamental questions of life, study, worship and work—What is reality? How do I know what I know? and What is right and good? Every year.

PHI 112 Ethics (3) Examines the nature of ethical principles, theories and judgments as these have developed historically and provides an analysis of various ethical problems such as abortion, capital punishment, euthanasia, etc.. Attention is given to several major Christian ethicists such as Augustine, Aquinas and Kierkegaard. Suitable as an introduction to philosophy. Spring semester.

PHI 113 C. S. Lewis (3) Explores Lewis' thought through philosophical themes such as, What is morality? What is love? What does it mean to be human? Why does suffering occur? Students in this course will read *The Screwtape Letters*, *The Four Loves*, *Mere Christianity*, *The Abolition of Man*, and *The Problem of Pain*.

PHI 200 Plato (3) Studies Plato's major works, including *The Republic*, *Meno* and *the Apology*. This course examines Plato against the backdrop of Pre-Socratic philosophy and engages the central questions raised in philosophy, such as the nature of the good, and of knowledge. Approved HUM 304 option. Fall semester, alternate years.

PHI 202 Augustine (3) Explores the context and content of Augustine's major works, including *The City of God*, *The Confessions* and *On the Free Choice of the Will*. Students learn how to closely read a philosophical text closely and interpret it, applying it to the history of Christendom. Early church fathers and major philosophical figures from late antiquity are examined to provide a context for Augustine's work. Approved HUM 304 option. Fall semester.

PHI 204 Aristotle (3) Studies Aristotle's major works, including *Nicomachean Ethics*, *Metaphysics* and *Politics*. Students explore the development of virtue in Aristotle's thought and engage in an analysis of the aspects of critical reasoning. Attention is given to subsequent philosophical developments in Ancient Greece and Rome, such as Stoicism. Approved HUM 304 option. Spring semester, alternate years.

PHI 206 Aquinas (3) Explores the contours of Aquinas' thought in *Summa Theologica*. Attention is given to understanding his views in light of their background in Aristotle. This course examines Aquinas against the background of the major figures in medieval philosophy such as Anselm, Bonaventure and Duns Scotus. Approved HUM 304 option. Spring semester, alternate years.

PHI 214 Business Ethics (3) Nature of ethical principles and analysis of problems, such as pollution, whistle-blowing, and employee rights.

PHI 300 History of Modern Philosophy (3) Explores the development of the theory of knowledge and ethics in the early modern period through an analysis of continental rationalism (Descartes, Spinoza, Leibnitz), British empiricism (Hobbes, Locke, Berkeley, Hume) and the American theologian/philosopher Jonathan Edwards. Approved HUM 304 option. Fall semester, alternate years.

PHI 301 Kant (3) Explores the work of this great 19<sup>th</sup> century philosopher in the areas of metaphysics, religion, morality and the theory of knowledge. Students read primary texts and examine Kant's influence on the subsequent development of philosophy.

PHI 304 Nineteenth-Century Social Philosophers and Pragmatism (3) Explores the early pragmatist philosophers, C.S. Peirce, William James, and John Dewey through their major philosophical texts. Pragmatism is a uniquely American variety of philosophy that has shaped American cultural life, its educational and political experience. It was the dominant position in the first half of the 20<sup>th</sup> century and has had a significant revival in modern philosophical discourse principally through the work of neopragmatist Richard Rorty, whose essays will be examined as well.

PHI 305 Contemporary Philosophy: The Analytic Tradition (3) Examines the work, influence, and value of key philosophers in 20<sup>th</sup>-Century analytic philosophy, such as Bertrand Russell, Ludwig Wittgenstein, J.L. Austin, and current contributors in this widespread tradition. Of special interest for students in linguistic, language, literary, communication and biblical studies. Every other year.

PHI 306 Postmodern Philosophers (3) Explores the philosophical antecedents and thought of important contemporary philosophers who represent the philosophical reaction against modernity and the dominance of the Enlightenment paradigm—specifically, Jacques Derrida, Michel Foucault, Jean Francois Lyotard, and Richard Rorty. Additionally considers Christian thinkers' responses to and appropriation of postmodern thought. Of special interest for students in sociology, literature, Christian and student ministry majors. Every year. Approved HUM 304 option.

PHI 307 Women Philosophers (3) Exposes the student to the work of important women philosophers such as Marjorie Grene, Simone de Beauvoir, Hannah Arendt, Simone Weil, and Martha Nussbaum, Lorraine Code, Caroline Simon, and Elenore Stump.

PHI 308 Contemporary Continental Philosophy (3) This course considers major themes of 20<sup>th</sup> Century Continental Philosophy, through a closer look at the work of important Continental philosophers such as Heidegger and Merleau-Ponty: existence, being-in-the-world, and the lived body. Alternate years.

PHI 309 Kierkegaard and Nietzsche (3) Explores the early foundations of the 19<sup>th</sup> century philosophical movement called existentialism by examining the two main philosophers in its genesis. Students will read a number of major works by both philosophers including (Kierkegaard) *Sickness Unto Death*, *Fear and Trembling*, and *Practice in Christianity* and (Nietzsche) *Thus Spake Zarathustra*, *Genealogy of Morals*, *Beyond Good and Evil*, as well as some others. This course provides the framework for understanding the critique of modernism by the postmodernists.

PHI 310 Christian Understanding of Life (3) This seminar course introduces students to covenant epistemology: an innovative, biblically compatible holistic, epistemological vision which effectively offers a Christian understanding of life. Students' interactive exposure to a variety of works which shape and imply this epistemology proves to be personally transformational and profoundly practical. Every year. Approved HUM 304 and BIB 300 option.

PHI 318 Philosophies of World Religions (3) A study of the major religions of the world including Buddhism, Hinduism, Taoism, Confucianism, Islam and Judaism from the vantage point of a Christian world view. Students explore the question of exclusivity (only one religion is true) and what constitutes a religious experience. Approved HUM 304 option. Fall semester, alternate years.

PHI 353 Philosophy of Science (3) Examines fundamental philosophical questions undergirding and implied by the practice of science, and major positions and debates in contemporary philosophy of science regarding scientific explanation, confirmation, discovery, and the realist or antirealist status of scientific claims. Additional attention will be given to the insights of scientist-turned-philosopher Michael Polanyi, as well as to the implications of Christian commitment for philosophy of science. Of special interest for students in the sciences. Alternate years. Approved HUM 304 option.

PHI 354 Political Philosophy (3) Studies in the variety of political philosophies of the last 300 years including social contract theory, liberalism, Marxism and socialism, tolerance or pluralism by concentrating on the major theories with a view toward contemporary analysis and criticism. Cross-listed as POL 309 and offered periodically.

PHI 355, Philosophy for Theology (3) Explores philosophical developments and discussions which have proven germane and valuable in service to the recent theological enterprise, e.g., hermeneutics, deconstruction, speech act theory, and reformed epistemology. Alternate years.

PHI 356 Knowledge and Reality (3) This course will explore the major theories and issues involved in metaphysics and contemporary epistemology.

PHI 410 Senior Seminar (3) This course is designed for philosophy majors and minors to study a contemporary or historical philosophical topic in-depth. Students will learn to do advanced research in philosophy and will write a major paper in the process. Prerequisite: junior or senior standing.

PHI 430 Philosophy of History (3) Nature of historical knowledge and great speculative theories, such as those of Augustine, Hegel, Marx, and Toynbee with an attempt at a Christian critique. Alternate years.

PHI 199, 491, 493, 494, 495, 499 (See page 13)

## **PHYSICAL EDUCATION • PED**

PED 101 Physical Education (1) Instruction in, and application of, the fundamental skills, rules, and concepts of various sports and physical activities. Various sections include aerobics, badminton, basketball, golf, tennis, volleyball, racquetball, and weight training. Course syllabi include a more precise description of each section.

PED 103 Physical Fitness (1) Instruction in the role and improvement of health-related components of fitness in conjunction with each student's lifestyle. Special emphasis will be given to proper Christian stewardship of the body, developing an individual fitness program, and understanding the structure and function of several body systems as they are related to fitness.

PED 104 Intercollegiate Sport Participation (1) Beginning in the 2010-11 academic year, an intercollegiate sport-athlete may earn a PED 104 credit for each season of intercollegiate athletic participation, up to four per sport. The first season of participation counts toward the physical education requirement PED 101. The only recognized intercollegiate sports are baseball (men), basketball (women and men), cross-country (women and men), football (men), soccer (women and men), softball (women), tennis (women), track and field (women and men), and volleyball (women). Prerequisite: PED 101.

PED 150 Coaching Effectiveness (3) This course is designed to provide students with knowledge and practical experiences related to coaching. It focuses on knowledge, skills, and issues in coaching. This course aims to develop insight and knowledge in the areas of philosophy, conditioning and training, and pedagogy. The course will study issues involved in coaching in an attempt to expose the complicated demands of coaching and the necessary tools one should possess in order to be successful in coaching. Alternate Spring semesters (even years-2012).

PED 205 Sport Coaching Practicum (3) The course offers opportunity for coaching minors to develop the knowledge, practical application, and skills necessary to become more proficient leaders in sport. Students' ability will be enhanced and assessed in various coaching and administrative duties. Students should register for this course with the instructor when

they are admitted to the coaching minor and remain active until all the requirements are completed. Prerequisite: PED 150. Alternate Fall semesters (even years- 2014).

PED 247 First Aid and Emergency Care (2) Instruction and practice in the prevention, evaluation and treatment of injuries and illnesses that require first aid with certification in standard first aid and CPR. Requires small fee for certification.

PED 255 Athletic Training (3) Instruction in understanding basic muscular skeletal dynamics and how they relate to the care and prevention of athletic injuries. Identify and evaluate common athletic injuries, learn basic skills related to taping, as well as how to use equipment commonly found in athletic training rooms.

PED 405 Sport Coaching Seminar (1) No description available at time of printing. Prerequisites: PED or SPM 205 and Junior status. Spring semester.

## **PHYSICS • PHY**

PHY 160 Introduction to Acoustics (3) Practical applications of physical, physiological, psychological, musical, and architectural acoustics. Sound recording, reproduction, and measurements. Wave phenomena, harmonic analysis, and their application to musical scales and instruments, speech, hearing, transducers, and reverberation. Techniques and equipment demonstrated. Spring semester. Prerequisite: SCS 110 or PHY 181 or PHY 201.

PHY 181, 182 General Physics I, II (4, 4) Mechanics, properties of materials, thermodynamics, electromagnetism, light, sound, atomic and nuclear structure. Problems require knowledge of algebra. PHY 181 in Fall semester, PHY 182 in Spring semester. Three lectures and one laboratory per week.

PHY 201, 202 College Physics I, II (4, 4) Mechanics, heat, and sound the fall semester, electricity, optics, and modern physics the spring semester. Three lectures and one laboratory period per week. PHY 201 in fall semester, PHY 202 in spring semester. Prerequisite: MAT 162, which may be taken concurrently with PHY 201. PHY 201 is a prerequisite for PHY 202.

PHY 250 Observational Astronomy (3) A quantitative survey course in general astronomy with an observational laboratory component for students in the technical majors. The students will master the operation of the LX200 telescope at the Geneva College observatory and its associated CCD camera to complete a series of observing projects. Prerequisite: MAT 161. Offered on demand at department's discretion.

PHY 301 Classical Mechanics (3) Principles and techniques of non-relativistic mechanics. Includes motion of a point mass in a vector force field, potential theory, conservation laws, rotating coordinate systems, and the Lagrangian and Hamiltonian techniques, with applications to planetary motion, scattering, rigid body motion, forced oscillations, and continuous media. Fall semester, odd numbered years. Prerequisites: PHY 202 and MAT 405.

PHY 303, 304 Advanced Physical Measurements I, II (1–3, usually 2 credits) An intermediate course in experimental physics. Equipment available for work in atomic physics, nuclear physics, solid state physics, thermodynamics, optics, electromagnetic fields, and gravitation. Areas of experimentation selected by the student in consultation with the instructor. Special experiments available for future science teachers. Prerequisite for PHY 303: PHY 182 or PHY 202 or consent of the instructor. Prerequisite for PHY 304: PHY 303.

PHY 306 Optics (3) Begins with the electromagnetic wave solutions of Maxwell's equations. Includes matrix formulation of paraxial geometrical optics, wave propagation, polarization, interference and diffraction, stimulated emission and lasers, Fourier transform spectroscopy, and non-linear optics. Spring semester, even numbered years. Prerequisite: PHY 202.

PHY 307 Thermodynamics (3) Includes the laws, kinetic theory of gases, and introduction to classical statistical mechanics. Fall semester. Prerequisites: PHY 202 and CHM 221 and MAT 162. Cross-listed as CHM 307.

PHY 333 Introduction to Quantum Mechanics (3) Introduces the basic concepts of quantum mechanics and develops the mathematical techniques used in studying quantum mechanical systems. Prerequisite: PHY 201.

PHY 405, 406 Methods of Theoretical Physics I, II (3, 3) Applications of wave mechanics to atomic phenomena, matrix elements, perturbation theory and variational methods, and relevant mathematical techniques. Other topics may include molecular bonds, classical and quantum statistical mechanics, relativistic electrodynamics, quantum theory of scattering,

nuclear structure, and elementary particles. PHY 405 on demand, PHY 406 on demand. Prerequisite: PHY 202 or consent of the instructor.

PHY 408 Modern Physics (3) Introduction to wave mechanics and its application to the hydrogen atom, atomic structure and spectra, and electrons in solids and semiconductors. Other topics may include molecular bonding, special relativity, nuclear models, and crystal structure. Spring semester, odd numbered years. Prerequisites: PHY 202 and MAT 261.

PHY 199, 491, 493, 494, 495, 499 (See page 13)

## **POLITICAL SCIENCE • POL**

POL 151 American Government (3) Structure and operation of the national political institutions of the United States. (Political Science majors may not use this course to fulfill the social science core requirements.) Fall semester.

POL 203 International Relations (3) Introduction to the theory of international politics and the foreign policies of the major powers. Offered every other year. Spring semester.

POL 211 Comparative Politics (3) Introduction to the theory and practice of comparative politics; case studies of key political systems. Offered every other year. Spring semester.

POL 253 Parties, Elections, and Interest Groups (3) Development and present role in America. Brief investigations of other party systems for comparative analysis. Offered every other year. Prerequisite: POL 151 or consent of the instructor.

POL 254 State and Local Government (3) Overview of structure and function in the United States, followed by exposure to city, county, borough, and township governments in the area. Offered periodically.

POL 255 Congress and the Presidency (4) An introduction to processes, powers, functions, limits, and interactions of Congress and the presidency. Offered periodically.

POL 305 Constitutional Law (3) A consideration of the development of American constitutional law and its relevance to political processes today. Offered alternate years. Prerequisite: POL 151 or one course in American history.

POL 309 Topics in Modern Political Thought (3) Studies in the variety of political theories during the last 300 years, including contract theories, Marxism and socialism, and liberalism, concentrating on one or two major theories. Alternate years, may be repeated with different topics. Cross-listed with PHI 354.

POL 312 History of Political Thought (3) Reading and discussion of major works of political theory from Plato to the present. Alternate years. Prerequisite: sophomore standing.

POL 313 Democratic Political Thought (3) A consideration of both “normative” and “non-normative” democratic theory and evaluation of these in the light of the Scriptures. Offered periodically.

POL 331 Foreign and National Security Policy (3) This course introduces students to key concepts and basic theories about foreign policy, national security, and homeland security in the United States and other countries, as well as current debates such as just war vs. pre-emptive war, privacy vs. security, and sovereignty vs. alliances and international organizations. Offered every other year. Prerequisite: POL 203 or consent of instructor.

POL 332 Topics in Comparative Politics (3) This course introduces students to diverse regions of the world and to key issues in comparative politics. This course will focus on a different region or group of nations each time it is offered, including the Middle East, Latin America, the former Soviet Republics, and comparative democratic governments. Students will look at key issues for that region in areas such as economics, culture, politics, military affairs, and religion. Offered every other year.

POL 341 Politics of Global Economics (3) This course introduces students to key concepts and basic theories about how institutions affect global economics, particularly in trade, finance and investment, debt, development, and fiscal and monetary policy. Those institutions include not only governments, but non-governmental organizations, multinational corporations, and multilateral treaty organizations. Offered every other year. Prerequisite: POL 203 or consent of instructor.

POL 342 Topics in International Relations (3) This course introduces students to contemporary key issues in international relations. Each time it is offered, the course will focus on a different topic, such as transnational crime and terrorism, international law and organizations, intelligence, or public health and the environment. Students will learn about the underlying issues for each subject, the main actors involved, and the relevant public policy strategies utilized by the United States and other nations. Offered every other year.

POL 352 Great Issues in Politics (3) Some significant questions asked by philosophers in the study of politics and some ways they have been answered. Writings of Christian political theorists included. Prerequisites: successful completion of BIB 112 and BIB 113; HUM 103, HUM 203, and HUM 303 and junior or senior standing (completion of 60 credit hours). Offered every semester.

POL 360 Public Administration (3) Introduces students to the literature, theories, and key concepts that underlie the academic *study* of public administration. It also aims to familiarize students with some of the core areas of the *practice* of public administration, including personnel, budgeting, and decision-making and policy evaluation. Offered every other year. Prerequisite: POL 151 or consent of instructor.

POL 361 American Public Policy (3) Process at national level, using currently significant policies as case studies. Offered periodically. Prerequisite: POL 151 or consent of instructor. Alternate years.

POL 421 Senior Seminar (3) A review of academic political science, focusing on its relevance to the student as a Christian, as a professional, and as a citizen. Required of political science majors. Spring semester. Prerequisite: senior standing.

POL 199, 491, 493, 494, 495, 499 (See page 13)

## **PSYCHOLOGY • PSY**

PSY 201 Introduction to Psychology (3) Problems, principles, and methods to serve as a part of a liberal education and as preparation for more advanced work in psychology, or for professional study: development, motivation, emotion, learning, intelligence, personality, and abnormal behavior. Every semester.

PSY 202 Biological Bases of Behavior (3) Neuroanatomical and neurophysiological foundations and neurological and chemical events underlying sensory processes, learning, motivation, emotion, motion and mental disorders. Fall semester. Prerequisite: PSY 201.

PSY 205 Psychological Statistics (3) An introduction to the methods used by social scientists to understand data. Covers descriptive statistics, basic probability theory, and inferential statistics. Proficiency in high school algebra is assumed. Fall semester. Prerequisite: PSY 201, Math SAT of at least 470, Math ACT of at least 19, or MAT 095.

PSY 206 Orientation to Psychology (2) This course focuses on the essential skills necessary for success in the psychology major. Broad issues such as introduction to the integration of worldview and psychology, as well as, vocation and career planning will be discussed. Specific skills relevant to the psychology major such as reading empirical research and writing in APA style will be addressed. Fall semester

PSY 207 Research Methods in Psychology (3) An introduction to psychology as a scientific process. The course covers philosophy of science, designing and performing experiments and quasi-experiments, ethics in experimentation, interpreting data using inferential statistics, and scientific writing. Spring semester. Prerequisites: PSY 201 and PSY 205 or permission of the instructor. Spring semester.

PSY 211 Educational Psychology (3) Psychological principles and theories applied to teaching. The coverage of psychological variables that influence teacher functioning in the classroom, the role of human development, learning, instructional models, motivation, classroom management and discipline, the nature of and the response of teachers to exceptionality, and ethnic, racial, and social differences in schools. Every semester. Cross-listed with EDU 211.

PSY 214 SPSS and Statistical Analysis (1) This course will guide students through the use of SPSS as a statistical analysis tool. Topics will include descriptive statistics, and hypothesis testing for multiple groups, correlation and regression. Every semester. Pre or co-requisite: PSY 205 or MAT 205.

PSY 229 Lab – Developmental (3) This directed experience will focus on current research and methodologies. Readings will relate to the theoretical and methodological approaches addressed in class. Students will develop and implement research protocols, as well as, collect, analyze and interpret data. Alternate years. Prerequisite: PSY 201, PSY 205 and PSY 207.

PSY 250 Life Span Development (3) Covers developmental patterns of human beings from conception to death all in the context of God's created order. Physical, cognitive, social, emotional, and spiritual aspects of development will be considered. Research methods and approaches will be explored as well. Fall semester. Prerequisite: PSY 201.

PSY 251 Child Development (3) Development and behavior from conception through middle childhood, including genetic influences, developmental processes, and psychological processes related to physical, linguistic, social, intellectual, emotional, and personal development. Fall semester. Prerequisite: PSY 201.

PSY 252 Adolescent Development (3) Physiological, psychological, social, developmental, and educational aspects from the beginning of puberty to the attainment of maturity. Spring semester. Prerequisite: PSY 201.

PSY 253 Adulthood and Aging (3) Processes and principles of development in adulthood and in aging. Consideration of normal life stages, social and physical changes, and the special issues associated with geriatric populations. Spring semester. Prerequisite: PSY 201.

PSY 260 Tests and Measures (3) Methods, techniques, and instruments, including methods of construction, critical analysis, laboratory experience. Fall semester, even years. Prerequisite: PSY 201 and PSY 205.

PSY 313 Abnormal Psychology (3) Empirically-based principles of psychopathology. Surveys classical "mental illnesses" from various perspectives. Every semester. Prerequisite: PSY 201.

PSY 320 Conditioning and Learning (4) Experimental and theoretical approaches to the principles of learning as seen in classical conditioning, operant conditioning, verbal learning, etc. Special emphasis placed on the principles of reinforcement. Laboratory experiences with control of animal behavior and field experiences in the observations of behavior included. Fall semester, alternate years. Prerequisites: PSY 201, PSY 205 and PSY 207 or permission of the instructor.

PSY 325 Cognitive Psychology (4) Investigates human mental processes. Covers the current research and theory of cognition, perception, representation of knowledge, models of memory, problem solving, reasoning, use of language, cognitive development, and intelligence. Spring semester. Prerequisites: PSY 201, PSY 205 and PSY 207.

PSY 326 Emotion and Memory (3) This course will provide an overview of biological, cognitive, and social factors involved in how emotion effects memory. Some specific areas of study include: what brain areas mediate memory and emotion, how emotion can lead to either improved or impoverished lifespan issues such as what capacity do infants and children have to remember emotional experiences, and how does old age or mental illness effect memory. Spring semester, alternate years. Prerequisite: PSY 201, PSY 205, and PSY 207.

PSY 328 Learning and Cognition (4) This course examines the experimental and theoretical approaches to the principles of classical conditioning, operant conditioning, models of memory. Laboratory experiences will assist students in studying theories of learning and memory, while applying them to out-of-class contexts. Fall semester. Prerequisites: PSY 201, PSY 205 or MAT 205, PSY 207.

PSY 329 Lab–Basic Processes (3) This directed experience will focus on current research and methodologies. Readings will relate to the theoretical and methodological approaches addressed in class. Students will develop and implement research protocols, as well as, collect, analyze and interpret data. Fall semester, alternate years. Prerequisite: PSY 201, PSY 205 and PSY 207.

PSY 350 International Psychology (3) This course provides an overview of various global issues from a psychological or psychocultural perspective including the identification and treatment of mental health problems, emotional functioning, the struggles of disempowered and marginalized groups, and societal transformation, and national development. Cross cultural psychology is an important aspect of international psychology. The course will include opportunities to communicate and network with academics, professionals, and other students from other cultures, countries, and nations to raise awareness of the importance of cultural perspectives in psychological research and practice. The course will also examine the role of the Geneva College



Christian Psychology, Christian Counseling and missionary efforts in providing counseling and care internationally and cross culturally. Summer semester, even years. Prerequisites: PSY 205 or MAT 105, PSY 207.

PSY 404 Personality Psychology (3) An introduction to theory and research into personality and motivational processes. Covers psychodynamic, trait, social learning, and social cognitive approaches to the field. Both historical and current thinking will be stressed. Spring semester. Prerequisites: PSY 201, PSY 205, and PSY 207.

PSY 405 Psychology of Gender (3) This seminar focuses on psychological theories and research pertaining to both genders and similarities and differences. Relevant topics will include discussion of biological bases and socialization bases of gender roles, family issues, workplace issues, and sexuality. Fall semester, alternate years. Prerequisite: PSY 201.

PSY 406 Psychology of Prejudice (3) This seminar focuses on both classic and current research in the realm of prejudice and prejudice reduction. Issues will include: What is prejudice? How is it related to stereotyping and discrimination? How does identity affect prejudice? What are the consequences of prejudice? How can prejudice be reduced? Spring semester, alternate years. Prerequisite: PSY 201

PSY 408 Social Psychology (3) Social and environmental influences on interpersonal relationships such as friendship, perception, altruism, aggression, conflict, and peacemaking. Spring semester. Prerequisites: PSY 201, PSY 205 and PSY 207.

PSY 411 History and Theories of Psychology (3) Development of important theoretical attitudes, especially the influence of various types of theory. Spring semester. Prerequisite: senior standing as a psychology major.

PSY 423 Psychological Research Literature (1) Readings in current psychological literature. Students will meet one hour per week to discuss a set of articles from a major psychological journal. Students will gain more experience in reading and critiquing psychological research and will be exposed to research across the topic areas in psychology. May be taken up to four times for credit. Spring semester, alternate years. Prerequisites: PSY 201, PSY 205 and PSY 207.

PSY 424 Applied Psychological Research (2). Applied research methodology. Topics to include needs assessment, data analysis, program evaluation, and qualitative research in community settings. Each student in the class will complete an approved research project under the direction of the course instructor. May be taken up to four times for credit. Spring semester, alternate years. Prerequisites: PSY 201, PSY 205 and PSY 207, junior standing, overall GPA of 3.0 or higher.

PSY 425 Senior Seminar in Psychology (1) Students will write an APA-style review paper about the area of psychology or biopsychology in which they have an occupational interest and create a portfolio of the documents they will need to gain employment or admission to graduate school. Fall semester. Prerequisites: senior standing, major in psychology or biopsychology.

PSY 429 Lab – Social (3) This directed experience will focus on current research and methodologies. Readings will relate to the theoretical and methodological approaches addressed in class. Students will develop and implement research protocols, as well as, collect, analyze and interpret data. Fall semester, alternate years. Prerequisite: PSY 201, PSY 205 and PSY 207.

PSY 450 Special Topics in Psychology (3) Specialized courses in psychology not otherwise listed in the catalog. Examples would be persuasion and the psychology of consumerism. May be repeated with different topics. Offered periodically. Prerequisite: PSY 201

PSY 199, 491, 493, 494, 495, 499 (See page 13)

## **SCIENTIFIC STUDIES • SCS**

SCS 105 Environmental Science (3) Overview of current environmental issues in the context of science and society. The course emphasizes scientific principles, the impact of human activities on the environment, and the role of Christians as stewards of creation. Every semester.

SCS 110 Introduction to the Natural Sciences (4) A study of selected topics in physics, chemistry, and biology that focus on the unifying themes of energy and the method by which scientific theories develop. Proficiency in high school algebra is required, as demonstrated by math SAT score of at least 470, or ACT score of at least 19, or passing score on algebra

placement exam, or passing grade in either MAT 095 or MAT 101. Three hours lecture and three hours laboratory per week.

SCS 201 Astronomy (3) History of modern astronomy, solar system models and orbits, structure of the sun and other stars, stellar development, galaxies, and cosmology, with emphasis on recent discoveries and theories. Fall semester. Prerequisite: Math Proficiency is required as demonstrated by a math SAT score of at least 470 or ACT score of at least 19 or a passing grade in either MAT 095 or MAT 101 or permission of the instructor.

SCS 215 Earth and Space Science (3) This course incorporates the disciplines of geology, meteorology and astronomy into a holistic study of planet earth. A major goal of the course is to give the student an understanding of the mechanics of God's creation. Fall semester, evening school.

SCS 403 Teaching of Science in Middle and Secondary Schools (4) Basic elements of instruction as they apply to the secondary science classroom. Includes the planning, presentation, and evaluation of several types of science lessons. Involves observations in local school district classrooms. Fall semester.

SCS 404 Teaching of Science, 4-8 (4) This course provides the future teacher with preparation for teaching in the content area of science for grades 4-8. A variety of strategies, assessments and philosophies for teaching will be explored. Inquiry-based science is an important focus of the course as well as the integration of science into other content areas. A major component of this course is field experience which includes some teaching of lessons. Prerequisites: PSY 211 and requirements mandated by Chapter 354. This course must be successfully completed before student teaching. Fall semester.

SCS 495 Independent Study (1-4) (See page 13)

## **SOCIAL SCIENCE • SSC**

SSC 101 Learning and Transition (1) Information and experiences designed to aid students in their intellectual, social, physical, and spiritual growth. The class should especially help facilitate the transition from high school or work to college, thus promoting success in college.

SSC 120 Academic Prolegomena I (2) A course to aid in the academic and faith transition from high school to college. Fall semester.

SSC 130 Academic Prolegomena II (2) A course to aid in the academic and faith transition from high school to college. Spring semester.

SSC 210 Crime, Law, and Society (3) This course will provide students with an introductory survey of the basis of American civil and criminal law; key contemporary legal issues; and the processes and institutions of the justice system, including law enforcement, courts, and corrections. Particular attention is placed on the relationship between the law and society's norms, and the relationship of both to Scriptural principles of justice. Spring semester, odd years. Cross-listed as CRJ 210.

SSC 280 Human Geography (3) Elements of the natural and cultural environment as they affect and are affected by human activities. Offered as needed. Prerequisite: education major or secondary education certification in social studies.

SSC 310 Criminal Justice: Theories and Systems (3) An overview of correction theories and services in the United States and an evaluation of these in light of Biblical principles. Offered every other year. Prerequisite: SSC 210.

SSC 348 Methods of Social Science Research (3) Introduction to the logic of the scientific method applied to the social sciences including, theory construction, research ethics, research design, measurement, sampling techniques, data collection devices, and field research. Offered as needed but at least every other year. Prerequisite: POL 151 or SOC 120.

SSC 349 Social Science Statistics (4) The application of statistics to social research including, the use of computers, coding, SPSS, descriptive graphs and statistics, sampling and probability theory, statistical inference and hypothesis testing, cross tabulation and associated bivariate tests, and other statistical tools used in political science and sociological research. Three hours in class and one hour in computer lab. Offered as needed but at least alternate years. Prerequisite: SSC 348 and satisfaction of college math proficiency requirement.

SSC 403 Social Studies Teaching Methods (4) Explores the various methods for teaching the social studies on the secondary level and involves advance field practice in the high school setting. Fall semester, evening school. Prerequisites: junior standing and 15 credit hours of social studies courses. Fall semester.

SSC 404 Teaching of Social Studies, 4-8 (3) This course provides the future teacher with preparation for teaching in the content area of social studies for grades 4-8. A variety of teaching strategies and philosophies related to teaching social studies will be explored. A major component of this course is field experience which includes teaching of lessons. Prerequisites: PSY 211 and requirements as mandated by Chapter 354. This course must be successfully completed before student teaching. Fall semester.

## **SOCIOLOGY • SOC**

SOC 120 Society (3) This course is an exploration of the fundamental human social reality. Drawn from basic sociological foundations and theories, this course develops the call for civic engagement that can transform the world people live in light of Biblical moorings. Offered every semester.

SOC 202 Italy's Timeless Cities and Their People (3) Through inductive study, this course introduces Semester in Rome participants to the fundamental elements of sociology. Employing the vibrant cities of Rome, Pompeii, Florence, Venice, and Siena as observational laboratories allows students to apply methods of sociological investigation as they reside in Rome and encounter the other cities during field trips. The primary purposes of this course are to introduce students to a way of seeing the world through social spectacles that comports with God's creational intentions and to help participants better understand Italian culture. Offered, every semester, in Rome only.

SOC 220 Social Change (3) A survey of macro and micro social change revolving around the civil rights movement, mediating institutions, neighborhood design, and economic foundations. Offered every other year.

SOC 221 Social Groups and Institutions (3) A study of the foundational theories and practices of group behavior. This is developed in the framework of civic engagement and institutional contexts. Offered every other year.

SOC 223 The Sociological Imagination (3) Develops a way of seeing the social realm sociologically. It uses the tools of social research including: social epistemology; qualitative research, quantitative research; and, style requirements for writing. Offered every semester.

SOC 230 Introduction to Community Development (3) This course is designed to help students learn how to interact with the broader community especially in the attempt to develop resources necessary for ministry to youth. Fall semester, alternate years.

SOC 235 The Philosophy and Practice of Christian Community Development (3) This course will introduce students to the rich history of Christian Community Development including the ongoing formulation of its Biblical underpinnings and the practices that follow. The course will challenge students to comprehend the strengths and weaknesses of CCD philosophy and the importance of context for application of the CCD principles and practices. As such, the course will introduce students to the wide-ranging applications of CCD principles by various non-profits, while challenging students to understand and articulate the significant role of the church in the CCD model.

SOC 242 Criminology (3) The social causes and prevention of crime and the relations between society and the criminal. Prerequisite: SOC 120. Offered every other year.

SOC 245 Dynamics of Community Leadership and the Spiritual Formation of Community Leaders (3) This course explores leadership principles rooted in Christian belief and practice and reflects on Christian discipleship as foundational for leading in the way of Jesus. The course begins with an introduction to spiritual disciplines and approaches to Christian formation in the Church Fathers. It then shifts to engage contemporary approaches to servant leadership and assess the leadership strengths, styles, and values of each student. Lastly, the course ends by considering the distinct character of Christian leaders shaped by the life of Jesus Christ.

SOC 249 Restorative Justice (3) This course proposes an alternative way of administering criminal justice. It involves the victim (when possible), the community and the offender in a process of restoration following the damage of a crime. Offered every other year.

SOC 254 Seeking Reconciliation: Gender, Class, and Race (3) Central sociological concepts are surveyed and placed in a community context. The course is framed by the Biblical concept of reconciliation. Offered every other year.

SOC 255 Christian Cultural Engagement (3) This course explores the intersection of worldview, and the Biblical themes of the Image of God, stewardship and cultural mandate. The course will examine and evaluate the philosophical and Biblical groundings for understanding faithful stewardship of all human endeavor. The course will also provide a rubric for the evaluation and critique of competing narratives of human cultural endeavor that are rooted in idolatrous commitments.

SOC 262 The American Civil Rights Movement (3) This is an interdisciplinary course designed to introduce students to the history, rhetoric and social forces surrounding the Civil Rights Movement. Cross-listed as COM 330 and HUM 304.

SOC 270 Civic Engagement I (3) This course is designed to encourage a vision for deep personal transformation set in the context of neighborhood engagement. A multidisciplinary approach will be used to try and bring resources to bear on understanding a city in distress. Sites include Beaver Falls or Aliquippa. Prerequisite: Sophomore standing.

SOC 271 Restoring the City (3) This course is a continuation of SOC 270 but will have a different set of units. Sites include Beaver Falls or Aliquippa. Prerequisite: Sophomore standing.

SOC 300 Special Topics (3) Specialized courses in sociology not otherwise listed in the catalog. Examples would be sociology of the city, the civil rights movement, or new urbanism. May be repeated with different topics. Prerequisite: SOC 120. Offered every other year.

SOC 310 Deviance and Marginalization (3) Investigating the social processes that marginalize individuals and groups due to norm violation and labels them deviant such as addicts, mentally ill, aging or murderers. Prerequisite: SOC 120. Offered every other year.

SOC 311 Sociology of the City (3) This course introduces students to the central role the city plays in social life today. It is set in the long history of sociology's interest in urbanism and highlights current attempts to thriving neighborhoods. Offered every other year.

SOC 312 Black Culture in the U.S. (3) An exploration of the rich historical, cultural and social dimensions of the black experience in America. Topics will vary. Offered annually.

SOC 346 Sociology of Religion (3) The relationship between religion and society with special attention to the role of the church in American society. Prerequisite: SOC 120. Offered every other year.

SOC 360 Readings in Social Theory (3) An in-depth reading of primary sources of classic and contemporary social theory done in seminar format. Prerequisites: SOC 120, and junior standing. Offered every other year.

SOC 380 Public Scholarship (3) This is an applied research project to be done in conjunction with an existing organization, agency, or ministry where the student's research is conducted in response to an identified problem.

SOC 401 Utopia and Shalom (3) The sociology capstone course surveying the historical quest of human groups for utopia contrasted with the Biblical concept of shalom. Prerequisites: SOC 120 and junior standing. Offered every other year.

SOC 421 Seminar (3) Independent work guided by faculty lectures and class discussion. This course will cover different topics and will only be offered as an elective necessitated by student interest. Prerequisites: sociology major, and junior standing. Offered every other year.

SOC 493 Sociology Internship (3) Field experience or research related to social practice in the community. Students are expected to spend approximately 10 hours per week in this experience. Offered every semester. Prerequisite: junior standing. Offered every other year.

SOC 493WY Community Development Internship (6) This course will serve as the living lab for the student at The Way in Pittsburgh. Through the lens of the internship experience, students will gain understanding about the joys and challenges that accompany faithful Christian Community Development. He/she will gain appreciation for the importance of context, creativity and local leadership for successful community development. Students will also gain insight into the relative importance of the Church for the work of Christian Community Development. Students will select from a variety of

internship sites for the internship experience. The internship experience will include hands-on service with a community development organization under the supervision of the leadership of the organization. The student will also engage in careful and guided reflection on his/her experience.

SOC 199, 491, 493, 494, 495, 499 (See page 13)

## **SPANISH · SPA**

SPA 101, 102 Elementary Spanish I, II (3, 3) This two-course sequence is an introduction to the fundamentals of the Spanish language offering opportunity in the classroom, using real-life situations, for the development of abilities in listening and speaking. Reading and writing skills will be conducted primarily outside of class but integrated with the listening and speaking focus of the course. The course is designed for students who have had none to one year of Spanish in high school, or equivalent for SPA 101 (Fall semester), and one and a half to two years or equivalent for SPA 102 (Spring semester). New students will take a placement evaluation during orientation or on the first day of class in order to be placed in the most appropriate level.

SPA 201, 202 Intermediate Spanish I, II (3, 3) A two-course sequence that is a continuation of the material learned in SPA 101 and SPA 102. Continued development of the use of the Spanish language in listening and speaking with a further development of reading and writing abilities. Classroom emphasis on listening and speaking. Reading and writing are primarily developed through outside classroom assignments. Writing of guided and original short compositions is an integral part of these courses. These courses are designed for students who have completed three to four years of Spanish in high school or equivalent, or SPA 102 for SPA 201 (Fall semester), or four to five years of Spanish in high school or equivalent, or SPA 201 for SPA 202 (Spring semester). New students will take a placement evaluation during orientation or on the first day of class in order to be placed in the most appropriate level.

SPA 315 Culture and Civilization of Spanish America (3). A survey of the cultural patterns of Spanish America from the pre-Columbian period to the present time. Emphasis is placed on the basic elements of life in Spanish America that have been decisive in forging its culture from the earliest times to the present. Cultural elements: political, geographic, educational, attitudinal, psychological, social, economical, religious, and literary, in addition to the role of Spanish America in today's world and its cultural contributions. Spring semester. Prerequisite: SPA 319.

SPA 319 Advanced Spanish Conversation (3) Development of oral and aural language skills through free and directed class conversation and individually prepared oral presentations. Speaking activities and group discussions utilize readings on current events, cultural issues, and literature. Attention will be given to vocabulary building, pronunciation, fluency, and idiomatic expressions. Fall semester. Prerequisite: SPA 202.

SPA 320 Advanced Spanish Composition (3) Development of a clear, natural, and effective written communication in Spanish. Awareness is placed on style, levels of usage, and the difference between written and spoken language. Vocabulary enrichment through readings, compositions and other exercises. Compositions are based on a variety of topics and include different types of essays. Every other spring – even years. Prerequisite: SPA 321.

SPA 321 Advanced Spanish Grammar (3) Detailed examination of grammatical structures introduced in elementary and intermediate Spanish courses. Students will have practice in oral and written communication using more complex grammatical structures not included in previous courses. Vocabulary enrichment through written compositions, readings, and oral activities. Fall semester. Prerequisite: SPA 315.

SPA 330 Hispanic Film (3) Study of Latin American films, focusing on cultural themes and the development of language skills and fluency through discussion, vocabulary building and written assignments. Every other spring-even years. Prerequisite: SPA 321.

SPA 491 Special Study. A seminar on an announced topic related to Spanish. Repeatable for credit with a new topic. Spring semester. Prerequisite: SPA 320.

## **SPORT MANAGEMENT · SPM**

SPM 101 Introduction to Sport Management (3) Theories and principles of management for sport programs. Introduces students to career opportunities and responsibilities in sport management, as well as basic information on topics such as legal liability, fiscal management, facilities operation, personnel supervision, and public relations. Fall semester.

SPM 201 Legal Issues in Sport (3) Negligence, liability, risk management, product liability, insurance, contracts, equal opportunity, eligibility and control of activities and facilities are topics of study. Prerequisite: SPM 101 or permission of instructor. Alternate Spring semester (Odd years- 2015).

SPM 205 Sport Management Practicum (3) The course offers opportunity for sport management minors to develop the intellectual learning and practical application skills necessary to become more proficient leaders in sport. Professional building experiences will be achieved through interaction with sport managers from different fields. Fall semester, alternate years. Next offered 2014.

SPM 206 Governance and Organization of Sport (3) A study of the various agencies that govern sport at the professional, collegiate, high school, and amateur levels. Organizational theory, research, labor relations, and administrative responsibilities in sport will be presented and discussed. Spring semester, alternate years. Next offered, 2013. Prerequisite: SPM 101 or permission of instructor.

SPM 302 Facility Management and Design (3) An introduction to the management, planning, and maintenance of facilities for athletics, sport, recreational programs, play fields, buildings, and auxiliary structures. Attention will be given to staffing, security, accessibility, safety, and legal aspects of facility management and design. Prerequisite: SPM 101 or permission of instructor. Alternate Fall semester (odd years-2015).

SPM 401 Sport in American Culture (3) Presentation of sociological dimensions of sport and sport participation and the impact of sport on society in general. Review of related research covering such areas as youth sport, women in sport, professional sport, religion and sport, sport and education, sport and politics, and the effects of sports on the economy. Discussion of various theories (i.e. conflict, critical, etc.) Special attention will be placed on analyzing sport in American culture from a Christian perspective. Prerequisites: SPM 101 and junior standing. Alternate Spring semester (even years-2016.)

## **VISUAL COMMUNICATION · VIS**

VIS 201 Art Fundamentals (3) Learn the basics of art and design through pencil, pen and ink, watercolor, and acrylics. Fall semester.

VIS 202 Painting Techniques (3) Learn classical, impressionistic, and personal painting styles. Spring semester.

VIS 205 Visual Communication Practicum (1) Practical experience. Repeatable with permission of the instructor. Every semester.

VIS 300 Drawing Techniques (3) Learn various drawing techniques through different mediums. Prerequisite: VIS 201 or permission of the instructor. Spring semester.

VIS 330 Topics in Visual Communication (3) Special studies in aspects of expression and communication in visual media. Fall semester. Repeatable. Prerequisite: any other course in visual communication concentration.

VIS 199, 491, 493, 494, 495, 499 (See page 13)

## Off-Campus Study Opportunities

Acceptable personal and academic qualities and habits are required for off-campus study. Because many qualities affect off-campus study process and success, a student can be evaluated on non-academic performance issues which may include adherence to ethical standards, personal maturity, motivation, and dependability, in addition to academic qualifications. These characteristics may be inferred by the College from a number of sources, including but not limited to, results of formal assessment(s), recommendations from faculty and staff, personal interviews, and written materials. The College reserves the right to refuse to allow any student to study off-campus and to involve any appropriate campus personnel in the decision-making process.

The following is a list of semester-long off-campus programs offered by Geneva College and our partners. Short term Geneva programs are planned by faculty on a less regular basis. More information can be found on the Geneva College website at [www.geneva.edu/object/crossroads](http://www.geneva.edu/object/crossroads).

### Arcadia Center for Education Abroad

Arcadia University offers over 100 programs around the world through its Center for Education Abroad. Arcadia currently offers coursework in 56 fields—from African Studies, Architecture, and Engineering to Geology, Information Technology, and Veterinary Science. For more information and application materials, contact the Crossroads Office.

### Art Institute of Pittsburgh

Qualified Geneva College students may apply for one of the Junior-year College Affiliate Programs at The Art Institute of Pittsburgh. Students who are graduates of the Art Institute of Pittsburgh are able to articulate into Bachelor of Arts and Bachelor of Science programs being offered at Geneva College.

Geneva College students in their third year may enroll at The Art Institute of Pittsburgh for a specialized two-quarter (30 quarter credit hours equal to 20 semester credit hours- or three-quarter (45 quarter credit hours equal to 30 semester credit hours) program in one of the following subject areas in which the student is interested and qualified. For the two-quarter option, students will enroll during the Summer quarter or Winter quarter and for the three-quarter option, students will enroll in the Fall quarter.

An optional fourth quarter would add an additional 10 semester credit hours, the acceptance of which is determined solely by the home institution (15 quarter credit hours equal to an additional 10 semester credit hours transfer back to Home institution).

- A. Advertising
- B. Digital Filmmaking & Video Production
- C. Digital Photography
- D. Entertainment Design
- E. Fashion Design
- F. Fashion Marketing & Management
- G. Game Art & Design
- H. Graphic Design
- I. Industrial Design
- J. Interior Design
- K. Media Arts & Animation
- L. Visual Effects & Motion Graphics
- M. Web Design and Interactive Media

Qualified students will have completed two years, 58-64 credits at their Home Institution and must have a GPA of 2.5 or better. They must have received approval from their Department Chairperson and Advisor and have received approval to enter a specific program at the Art Institute of Pittsburgh.

Following the completion of the Junior-year option, the student will return to their Home Institution for completion of their senior year and graduation requirements.

For additional information and application materials, contact the Crossroads Office.

## **Au Sable Institute of Environmental Studies**

As described on page 35 under the biology department, Geneva cooperates with the Au Sable Institute of Environmental Studies by offering credit for summer courses at Au Sable's nature studies centers in the Great Lakes, Pacific Rim, India, and Costa Rica. Courses can be chosen from the following list:

- Alpine Ecology
- Animal Ecology
- Aquatic Biology
- Conservation Biology
- Directed Individual Studies
- Ecological Agriculture
- Ecology of the Indian Tropics
- Environmental Applications for GIS
- Environmental Chemistry
- Environmental Health
- Field Biology in Spring
- Field Botany
- Field Ecology of Birds
- International Development and Environmental Sustainability
- Lake Ecology and Management
- Land Resources
- Marine Biology
- Marine Mammals
- Molecular Tools for the Field Biologist
- Research
- Research Methods I and II
- Restoration Ecology
- Tropical Agriculture and Missions
- Watersheds in Global Development
- Wildlife Ecology

For complete course descriptions and registration procedures, obtain an official Au Sable bulletin from Professor Marjory Tobias, [mctobias@geneva.edu](mailto:mctobias@geneva.edu), or log on to the Au Sable web site at [ausable.org](http://ausable.org). Any Au Sable course with 90–100 contact hours will give four credit hours of BIO, CHM, or SCS, depending on the specific course. In combination with specified courses at Geneva, students can qualify for certification as naturalists, as environmental analysts, as land or water resources analysts, or as stewardship ecologists, or for an environmental science minor (page 37).

## **BCA Study Abroad**

BCA Study Abroad is an independent, non-profit international education organization with programs around the world committed to the advancement of peace and justice.

## **Chinese Language, Culture and Missions Semester Abroad Program (CLCM)**

The Chinese Language, Culture and Missions Semester Abroad Program (CLCM), located at Christ's College in Taipei, Taiwan, gives students the opportunity to study Chinese language and culture in a Chinese-speaking environment. It also allows students to gain an understanding of the history of Christian missions in China and how to do ministry within Chinese contexts. Students earn 15 semester hours of credit. Students also have a variety of opportunities for community service both on and off campus.

## **Cornerstone Institute**

Located in the heart of beautiful Cape Town, South Africa, Cornerstone Institute is one of the premier leadership development facilities in Southern Africa. While it may be one of the largest Christian colleges in South Africa, they remain a small college at heart. They value relationships as they seek to live out their commitment to be a transforming community in their nation and beyond. While at Cornerstone, students will have the amazing opportunity to live with a host family as they study subjects in a range of disciplines including Christian Studies, Biblical Studies, Psychology, Sociology, and Community Development. During the semester there will be plenty of opportunities for local site visits. Students may also have the opportunity to participate in a three-week fieldwork placement in an impoverished community near Cape



Town. This program is held during the Spring semester. For additional information and application materials, contact the Crossroads Office.

### **Geneva College Semester in Scotland (Covenanter Theological Institute)**

Via the Covenanter Theological Institute in Airdrie (Glasgow).

This semester-long program gives Geneva College students the opportunity for a life-changing experience in a historic Christian setting in the British Isles. Students will gain knowledge of the Scottish Reformation and the “Covenanters” (who struggled for freedom of the church apart from state interference) and study their relevance for ministry today.

The program gives students access to ministry in a church-growth situation, as they are discipled by Pastor Andrew Quigley in the greater-Glasgow area. The study program includes four hours per day of structured personal study time, along with seminars and lectures. Students in this program are opened to a range of ministry opportunities and personal discipleship time with an experienced pastor in a congregational environment. Also included are organized trips to the great landmarks of Scottish history and culture, as well as free time to allow plenty of opportunities for sightseeing in this picturesque country. From studying past history to ministering in present-day reality, Christ and His Kingdom are at the heart of the Scotland Study Program.

Students earn a total of 15 semester credit hours, though additional credit hours to augment this program may be arranged individually with Geneva faculty.

For additional information and application materials, contact Dr. Jonathan Watt (Biblical Studies) or the Crossroads Office.

### **Jerusalem University College**

Geneva College maintains membership in the Associated Schools of Jerusalem University College. Geneva students therefore can take classes in Jerusalem for Geneva College credit. Adviser to the program is Dr. Byron G. Curtis.

Subscribing to the historic Christian faith in the evangelical and nondenominational tradition, Jerusalem University College, facilitating the interests of its consortium of associate schools, offers graduate and undergraduate programs of study at its campus on Mount Zion in Jerusalem, Israel.

The programs of study seek to enhance students’ understanding of the Bible and of the cultures of the Middle East. Specifically, students may achieve their educational objectives by:

- A rigorous study of the history, archaeology, and geography of Israel and other areas of the Middle East.
- A mastery of Biblical language and literature and a working knowledge of other Semitic languages appropriate to their study programs.
- An accurate understanding of the cultural, philosophical, and religious expressions of the ancient and modern peoples of Israel and other countries of the Middle East, including the relationship of Israel with other Middle East nations and the role of Israel in the ancient and modern worlds.
- A maximal use of and personal interaction with the unique academic and cultural resources available to them in the classroom and their fieldwork in Jerusalem, throughout Israel, and in other regions of the Middle East.

### **LCC International University**

A university education within an international learning community that transforms people for servant leadership, the goal of LCC is to engage students in a transforming educational experience. To create a generation of leaders for Eastern Europe who think critically, promote democratic ideals, develop a market economy, and re-build the network of civil society within the context of a Christian worldview. LCC is located in Klaipeda, Lithuania: a major ice-free port city on the Baltic Sea connecting Russian and Western European business and industry. The semester at LCC is a five (5) course fifteen (15) credit program. Included in the program is an orientation week with travel throughout Lithuania, and a one week trip to St. Petersburg and Moscow. For additional information and application materials, contact the Crossroads Office.

### **Lorenzo de Medici Institute**

LdM offers academic and professionally-oriented courses designed to complement a variety of study abroad programs as well as enrich students’ knowledge, education and skills. Students can choose from over 400 different courses in 37 subject areas, which are taught in English at LdM’s three locations: Florence, Rome, and Tuscania. Courses fall under five main academic divisions: Arts and Sciences, Sciences, Creative Arts, Design, and Italian Language and Culture.

Lorenzo de' Medici is committed to delivering a high-quality international learning experience through which students advance along their formal educational paths, develop their creativity, realize their own potential, and empower themselves to impact the world around them. Experiential learning is LdM's main tool to foster students' future professional development.

### **NYC Semester at The King's College**

Experience the best King's has to offer with NYC Semester. Interact with top professors, experience New York, and study in-depth in one of four areas of study: Advance Business, Journalism, Film & Media, or Politics & Government. Courses and electives are based on fall and spring semesters.

NYC Semester at The King's College immerses students in a unique academic experience. At our campus in Manhattan's Financial District, you will engage in an exciting and rigorous academic program while taking advantage of unparalleled internship opportunities, cultural experiences, and more.

### **Semester In Spain**

In affiliation with Trinity Christian College, Geneva College students may study abroad in Seville, Spain. Students are offered beginning, intermediate, and advanced courses in Spanish. During the semester students will be challenged academically in the study of the Spanish language, culture, history, and art by a faculty of all native Spaniards. Students will also live with a host family, learning their traditions and experiencing the ways in which they live. The education will be so much more than sixteen (16) course credits. Participants are able to visit Córdoba, Toledo, Granada and the small pueblos outside Seville. During their semester, students will gain improved language fluency and a greater understanding of Spain and Europe. Semester In Spain provides high quality academic instruction in an experiential format. The program offers a global perspective with depth of study in Spanish language, culture, and history. Consistent with Geneva's mission of equipping students for lives of Christ-like service, the program nurtures a context of Christian support and community. For additional information and application materials, contact the Crossroads Office.

### **Spring Semester in Thailand**

The Spring Semester in Thailand is an intensive 16 week semester program offering the unique opportunity to experience Thai culture and society from an indigenous perspective. Students will be able to analyze their experience from a multidisciplinary perspective including history, sociology, anthropology, politics, economics, education, family and religion. Students will also participate in a study/service internship that will enable them to draw from their Christian commitments as they serve others in church, governmental, medical, and educational institutions. Finally, students will live with Thai families, take field trips, and live for a month in a Karen tribal village in the foothills of the Himalayas.

### **Studies Program in Nicaragua (S.P.I.N.)**

The Studies Program in Nicaragua (SPIN) is a fall semester academic and cultural opportunity of Dordt College in cooperation with The Nehemiah Center. The overall goal of SPIN is to immerse students in Nicaraguan life so that they see similarities and differences among cultures and develop in the light of God's Word a Christian understanding of cultural diversity and the shaping power of differing worldviews. Students will live with host families in Leon and have opportunities to interact with other Nicaraguans as they study the Spanish language, Nicaraguan/Central American worldviews, culture, history, contemporary society, transformational development, and other subjects. Living, studying and serving in a Christian community, SPIN students will have opportunities to explore what faith means to them and how it affects their relationships with those at home and with persons from other cultures. Eligibility: Minimum requirements are sophomore status and a GPA of 2.5.

### **The East Asia Institute at Tokyo Christian University**

The East Asia Institute at TCU is a fall-semester program that offers students the opportunity to study the history and culture of Japan and the Far East. Students also study Japanese language and art, and experience dorm life with Japanese, Korean, Chinese, and other international students from around the world. They worship and serve in local Japanese, Korean-speaking, Chinese-speaking, and/or English-speaking churches. Each fall semester, the Institute offers four primary courses. However, students may replace up to two of the primary courses with electives. Students ordinarily take 12 credits but may add an additional 3 credit course to earn a total of 15 for the semester.

### **The Council for Christian Colleges & Universities Programs (BestSemester)**

BestSemester proudly offers twelve off-campus and study abroad programs around the world through the Council for Christian Colleges and Universities (CCCU). These programs offer a unique opportunity for students to make the world

their classroom. These interdisciplinary learning opportunities are available to second-semester sophomores, juniors, and seniors. For further information, contact either the Crossroads Office.

### **American Studies Program (ASP)**

The American Studies Program (ASP) has Washington D.C. as its “campus”. Whether it is public policy or strategic communication, you will engage in what it means to be in community and to be a leader. Address the questions that have shaped our political system for over two centuries. Continue this conversation as you interact in a dozen on-site visits with expert scholars and policy makers. Internships, professional mentorship and service opportunities prepare you for an extraordinary and unique D.C. experience. (Recommended Credits 15-16)

### **Australia Studies Centre (ASC)**

The Australia Studies Centre (ASC) is offered in partnership with Christian Heritage College (CHC), a CCCU affiliate member, in a suburb of Brisbane, Queensland. The ASC is designed to integrate the firsthand observation and study of Australian culture, history, religion, politics, and Indigenous cultures together with experiential service learning and formal instruction in Christian Studies, Business, Ministries, Social Sciences and Education and Humanities. (Recommended Credits 16)

### **China Studies Program (CSP)**

The China Studies Program (CSP) is your ticket to one of the world’s most globally significant and culturally rich nations. Experience Chinese culture firsthand by participating in internships and learn about the historical, cultural, religious, geographic and economic realities of China during your course seminars. In addition to the study of the Chinese language, you could teach English to Chinese students or you might put your one-on-one talents to work in an orphanage. CSP immerses you in an increasingly important part of the world in an informed, Christ-centered way. (Recommended Credits 15-18)

### **Contemporary Music Center**

The world of music, though you may not have noticed, was an entirely different landscape 20 years ago. The Contemporary Music Center (CMC) has been adapting to this business, because music is a blend of the old and the new. Your days begin with morning classes followed by composing, performing, mixing and promoting until you put your inspired soul to sleep. After 10 weeks of solid creativity, you’re out on tour, living the experience and savoring every note. (Recommended Credits 16)

### **India Studies Program (ISP)**

India’s literature or business might seem as unapproachable and distant as the country itself. This is why The India Studies Program (ISP) features two core courses that provide a breadth of knowledge about India’s culture, society and challenges, and its vast religious landscape. At the same time, you will build upon this knowledge as you participate in three elective courses, each one taught by Bishop Appasamy Colleges of Arts & Sciences faculty. As you develop a deeper understanding of this diverse nation, your own worldview will be refined. (Recommended Credits 16)

### **Los Angeles Film Studies Center (LAFSC)**

Imagine pitching your screenplay to working Hollywood producers (it could happen) or attending the premiere of your short film. The LA Film Studies Program (LAFSC) provides a well-rounded yet in-depth understanding of what makes the business of Hollywood run. Workshops combined with electives teach you relevant production processes and protocols, as well as the vital skills of collaboration. Talent and literary agencies, managing companies, film developers and postproduction facilities are just some of the exciting internship options. (Recommended Credits 16)

### **Middle East Studies Program (MESP)**

The Middle East Studies Program (MESP) students learn first-hand from locals who live out the subject matter. You will live, work, eat, play, and travel among these people, becoming a member of their neighborhoods. By the end of the semester, your life will have become entangled with theirs- their cultures, languages, passions and joys. MESP is committed to this Christ-centered approach, aiming to serve, process, and evaluate your immersion as you grow in your understanding of what it means to be an incarnational follower of Jesus in a land that needs such followers now. (Recommended Credits 16)

### **Oxford Summer Program (OSP)**

The Oxford Summer Program (OSP) fuels intellectual development at all levels of education: undergraduate, post-graduate, professorial, and beyond. Engage one-on-one with Oxford's acclaimed and widely-published faculty in scholarship guided by Oxford's primary pedagogy: the tutorial. Allow Oxford University to change the way you read books, write sentences, and think; then travel the nation's diverse, historical landscapes with a sharp new mind and the guidance of your tutors. (Recommended Credits 6)

### **Scholars' Semester Program (SSO)**

The Scholars' Semester Program (SSO) is not for the faint of heart. Designed specifically for students seeking an academically rigorous and robust experience like no other, even the brightest of minds will be stretched at SSO. It happens during your tutorials. Here, you and an accomplished Oxford scholar go head-to-head on a topic chosen from hundreds of subjects relating to history, literature, languages, philosophy or science. And when the semester is all said, done, debated and graded, you'll return home with a community of alumni that continually reconnect over the bond that SSO creates. (Recommended Credits 17)

### **Uganda Studies Program (USP)**

The Uganda Studies Program (USP) will be a spectacular lesson in authentic relationships- at home, at school and throughout the Ugandan community- encouraging deeper thought about your own cultural identity. Whether it is social work, ministry, or just a deeper yearning to explore the intricacy of cross-cultural relationships, Uganda will bring you there. The USP academic curriculum is designed to help you process and comprehend the impact of this intercultural experience in your own life. (Recommended Credits 13-16)

### **Washington Journalism Center (WJC)**

The Washington Journalism Center (WJC) is designed to equip you with the tools, insider knowledge and courage to be a world-class storyteller. You'll discuss this complex era of modern reporting and contemplate the role you'll play as a believer in the mainstream media. With courses on fine-tuning your writing skills for a national audience and how the media impacts public policy, you'll be more than ready for your future as a journalist. The WJC internship adds another dimension to your time there by supplementing your mentoring, lectures, readings and service opportunities with practical hands on experience. (Recommended Credits 16)

## Non-Traditional Undergraduate Programs

### The Center for Urban Biblical Ministry (CUBM)

The Center for Urban Biblical Ministry (CUBM) was established in Pittsburgh in 1992 using the CUTS model in Philadelphia. The purpose of the program is to offer biblically based education to urban church leaders and active laypersons who have had little or no previous college experience. The program is based at the Reformed Presbyterian Theological Seminary in the Point Breeze area of Pittsburgh. The program offers associate of arts in Christian ministry and in Leadership, an associate of arts in business administration, and an associate of science in human services that prepare students to enter the Geneva Degree Completion Program in human resources or community ministry leadership or other four-year degree programs. Classes are offered in the evening and students can take from one to three classes per semester. The program is staffed by a director who is supported by the various administrative offices on the Beaver Falls campus.

For curriculum details call 412-247-9010 or e-mail [kbyrd@cubm.org](mailto:kbyrd@cubm.org).

### Adult Degree Programs

These special programs are available for students who have had prior college and work experience and who are seeking to obtain or complete a baccalaureate degree. The Geneva College Adult Degree Programs (ADP) offer a Bachelor of Professional Studies (BPS) degree in a selection of majors through online or classroom formats, or a combination of these formats.

There are two categories of courses in the ADP: courses within each of the majors and core and elective courses. Classroom sessions are held from 6 p.m. to 9 p.m. in facilities geographically convenient to the students. Online courses are asynchronous (learners log on and participate at the time of their choosing, not at a set time.) Learning in these non-traditional methods may be evaluated through multiple means, depending on the format (classroom or online), such as written reflection, online discussion forums, oral and/or video presentations, classroom and/or online activities, and exams.

Advantages of the Adult Degree Programs include:

- Curriculum designed specifically for adults
- Flexible tuition and financial packages
- Comfortable, small group settings
- Eight-week courses offered in two blocks in each of the fall and spring terms\*
- One eight-week block of courses offered in the summer\*
- Classroom courses meet one night per week from 6 p.m. to 9 p.m.
- Online course offerings provide added flexibility
- Textbooks and materials delivered directly to the students
- Highly qualified faculty who are experienced in their fields
- Easy online registration

*\*The courses for Human Services majors are five weeks long, not eight. Two of the Human Services courses are delivered in a six-week hybrid format in which students attend the first and last sessions in person, with four sessions conducted online in between those two face-to-face sessions.*

To be admitted to an ADP major, adults must have a minimum of 64 credit hours of transferable credit from an accredited college or university with a GPA of 2.0 or above, five years of post-high school experience, and demonstration of writing competency. This program is not intended for the traditional undergraduate student.

A minimum of 120 credit hours is required to obtain the Bachelor of Professional Studies.

For specific details on curriculum, admission and graduation requirements, tuition and fees, class start dates, or any other aspects of the ADP, contact the Adult Degree Programs in the Department of Professional and Leadership Studies at 800-576-3111.

ADP students must satisfy Geneva College core requirements, either by ADP's Core and Elective offerings or by transfer.

## Minimum Core Requirements -18 credit hours

English composition	3 credit hours
Humanities	6 credit hours
Natural science	6 credit hours
Social science	3 credit hours

## ADP Core and Elective Courses

The ADP's Core and Elective courses help adults who have earned fewer than the 64 credit hours required to enter major courses in the ADP, or who need additional credits to complete their degree requirements. Through ADP's Core and Elective credits, students can continue their education in a program designed specifically for adults. These Core and Elective offerings provide adults who have been away from the college classroom for some time the opportunity to acquaint themselves with Geneva's innovative and adult-friendly format. Core and Elective courses are offered in the fall, spring, and summer. Check Geneva's web site or call the ADP office 800-576-3111 for course offerings.

## Child and Family Services Major- B.P.S. *Online only.*

The B.P.S. in Child and Family Services prepares students for the issues faced by human services professionals working with families and children. Students examine current social systems and policies that impact families, as well as various forms of family dysfunction. In addition, they develop an understanding of child growth and development, as well as the key role that family has in maturation. Understanding how a family truly functions is a difficult task- each individual, no matter how big or small, plays a vital role in the makeup of a family.

### Courses are delivered fully online.

#### Major Courses- 36 semester hour credits

HSS 201	Introduction to Human Services	3
HSS 202	Human Diversity	3
CFS 251	Child and Adolescent Development	3
CFS 230	The Family System in Context	3
CFS 301	Child and Family Policy	3
CFS 401	Development of Professional Skills	3
CFS 450	Program Management and Evaluation	3
CFS 490	Professional Ethics	3
BBL 408	Foundations of Christian Thought	3
HMT 411	Humanities	3
ADL 470	Career and Professional Development	3
ADL 432	Research and Resources	3

## Christian Ministry Leadership Major – B.P.S. *Offered online, in the classroom, or in combination.*

Curriculum in the Christian Ministry Leadership (CMN) major is focused on developing Christian leaders to serve effectively by enabling them to envision, plan, implement, and evaluate church or parachurch ministries that may transform their communities.

#### Major Courses- 36 semester hour credits

ADL 445	Theory and Practice of Adult Learning	3
BBL 408	Foundations of Christian Thought	3
CMN 403	Personal Leadership Assessment and Development	3
CMN 404	Old Testament Principles for Ministry	3
CMN 406	The Church In Its Community	3
ADL 432	Research and Resources	3
CMN 407	New Testament Principles for Ministry	3
HMT 411	Humanities	3
CMN 409	Principles of Family Ministry	3
CMN 416	Theology and Practice of Evangelism	3
ADL 470	Career and Professional Development	3
CMN 410	Leadership for Mission and Ministry	3

**Human Resources Major – B.P.S.** *Offered online, in the classroom, or in combination.*

Curriculum in the Human Resources (HRS) major is focused on the challenges faced in management, supervision, and organizational behavior. Topics include human resources administration, group dynamics, styles of leadership, business and research writing, problems of supervision, decision-making, organizational behavior, problem solving, effective interpersonal relationships, faith and worldview analysis, and ethics.

**Major courses- 36 semester hour credits**

ADL 445	Theory and Practice of Adult Learning	3
BBL 408	Faith Perspectives	3
HRS 451	Introduction to Human Resources	3
HMT 411	Humanities	3
HRS 441	Business and Interpersonal Communication	3
HRS 453	Policies and Personnel Management	3
ADL 432	Research and Resources	3
HRS 457	Principles of Management and Supervision	3
HRS 455	Employee & Labor Relations	3
HRS 443	Training and Development	3
ADL 470	Career and Professional Development	3
HRS 458	Current Issues in Human Resources	3

**Human Services Major – B.P.S.** *Offered in the classroom only (with two hybrid courses)*

The Department of Psychology, Counseling, and Human Services at Geneva College designed the academic curriculum Human Services (HSS) major with the needs of the community in mind to provide students with a theoretical and practical framework that will prepare graduates to assume positions in the human service field. Graduates are expected to demonstrate mastery of academic content: 1) Normal human development from conception to death; 2) Abnormal and deviant behavior, including mental illness, drug/alcohol abuse, criminality, etc.; 3) Social problems, including poverty, racism, ageism, and the social organizations designed to address these problems; 4) Human diversity, including racial, ethnic, cultural, gender, age, and religious differences; 5) The role of marriage and the family in various social contexts; 6) The history of human services and social welfare policies; 7) Successful intervention skills including the nature of helping relationships, communication, delivery of individual, group and community services, effective casework management; 8) The interrelatedness of social agencies and the roles they play in social interventions; 9) The integration of Christian faith with stewardship and service to others.

Please note that the courses for Human Services majors are five weeks long, not eight weeks. Two of the Human Services courses are delivered in a six-week hybrid format in which students attend the first and last sessions in person, with four sessions conducted on-line (in between those two face-to-face sessions).

**Major Courses- 36 semester hour credits**

HSS 201	Introduction to Human Services	3
HSS 301*	Social Welfare Agencies/Policies	3
BBL 408	Foundations of Christian Thought	3
HSS 205	Cultural Competence	3
HSS 305	Counseling and Helping Skills	3
HSS 432	Research and Resources	3
HSS 307	Generalist Practice, Model and Theory	3
HMT 411*	Humanities	3
HSS 434	Applied Research and Statistics**	3
HSS 450	Field Experience**	6
HSS 401	Senior Seminar**	3
(**NOTE:	HSS 434/450/434 will be delivered concurrently over the 17 week term.	
	HSS 434 will meet on weeks #53, 56, 60, 63, and 68)	

*\*The courses marked with an asterisk (\*) are delivered in a hybrid format in which students attend the first and last sessions in person, with four sessions conducted online (in between those two face-to-face sessions).*

## **Management Major – B.P.S. Online only.**

The B.P.S. in Management is a distinctive bachelor's completion program in business designed for adult students. With a fully online format that allows busy adults to complete coursework when it's most convenient, students develop functional management skills and knowledge through practical curriculum grounded in best business practice. Courses prepare graduates to be effective leaders who can manage resources, solve problems and oversee employees.

### **Courses are delivered fully on-line.**

#### **Major courses-36 semester hour credits.**

BBL 408	Foundations of Christian Thought	3
HRS 451	Introduction to Human Resources	3
HRS 441	Business and Interpersonal Communication	3
HRS 457	Principles of Management and Supervision	3
HMT 411	Humanities	3
ORD 460	Organizational Behavior	3
MGT 330	Principles of Finance	3
MGT 151	Principles of Accounting	3
MGT 213	Principles of Micro/Macroeconomics	3
MGT 241	Quantitative Analysis	3
MGT 311	Business Law	3
MGT 320	Marketing	3

## **Organizational Leadership Major– B.P.S. Offered online, in the classroom, or in combination.**

The B.P.S. in Organizational Leadership degree equips students to ascend to administrative and leadership positions in their organizations. Building upon the adult student's existing work experience, the BPSOL provides the concepts and tools that: 1.) help students mobilize and motivate employees to reach desired goals; 2.) give students a better understanding of the complex challenges facing today's organizations and how leaders can react to them; and 3.) provide an ethical framework which the student can use to make decisions that affect others in the workforce.

#### **Major courses- 36 semester hour credits**

ADL 445	Theory and Practice of Adult Learning	3
BBL 408	Foundations of Christian Thought	3
HRS 451	Introduction to Human Resources	3
HRS 441	Business and Interpersonal Communication	3
ADL 432	Organizational Leadership: Research and Resources	3
LDP 395	Principles of Teambuilding	3
HRS 457	Principles of Management and Supervision	3
HMT 411	Humanities	3
ORD 460	Organizational Dynamics	3
LDP 305	Principles of Negotiation	3
ADL 470	Career and Professional Development	3
LDP 438	Principles of Organizational Change	3

## **Minor in Biblical and Theological Studies**

Complete the following 18 credits hours:

BIB 112	Biblical Introduction I: Creation to the Post-Exilic Period	3
BIB 113	Biblical Introduction II: Intertestamental Period through Apostolic Age	3
BBL 200	How to Read the Bible	3

Choose one Old Testament Course:

BBL 135	Wisdom Literature	3
BBL 232	Christian Redemption in the Old Testament	3
BBL 234	Old Testament Major Prophets	3
BBL 236	The Messiah in the Old Testament	3

Or other Old Testament course approved by the Bible Department.



Choose one New Testament Course:		
BBL 104	Gospel of Luke	3
BBL 106	John's Revelation	3
BBL 114	Gospel of John	3
BBL 131	First Corinthians	3
Or other New Testament course approved by the Bible Department.		

Choose one Theological Studies course:		
BBL 112	The World of Islam	3
BBL115	Readings in Calvin's Institutes	3
BBL 228	Development of Christian Theology	3
BBL 251	Church History I	3
BBL 252	Church History II	3
Or other Theological Studies course approved by the Bible Department.		

### Human Resources Minor

HRS 443	Training and Development	3
HRS 451	Principles of Human Resources	3
HRS 453	Policies and Personnel Management	3
HRS 455	Employee and Labor Relations	3
HRS 457	Principles of Management and Supervision	3
HRS 458	Current Issues in Human Resources	3

### Human Services Minor

Take the following 18 credit hours:		
HSS 201	Introduction to Human Services	3
HSS 202	Human Diversity	3
HSS 230	Family System in Context	3
HSS 301	Social Welfare Agencies and Policies	3
HSS 307	Generalist Practice, Model, and Theory	3
Take one additional Human Services course or any one Psychology course 3		
HSS 401, 450, and 434 are for majors only.		

### Organizational Leadership Minor

Take the following 18 credit hours:		
HRS 457	Principles of Management and Supervision	3
LDP 449	Principles of Negotiation	3
LDP 447	Principles of Teambuilding	3
LDP 441	Business and Interpersonal Communication	3
LDP 438	Principles of Organizational Change	3
ORD 460	Organizational Dynamics	3

### Psychology Minor

PSS 201	Introduction to Psychology	3
PSS 250	Life Span Development	3
PSS 251	Child Development	3
PSS 253	Adulthood and Aging	3
PSS 313	Abnormal Psychology	3
HSS 205	Cultural Competence	3

### ADP Course Descriptions

ACE 101 History of the 60's (3) Through primary source materials this course examines the turbulent decade of the 1960's in the United States: its hopes and fears, its optimism and despair. The leaders, the war, the riots, the assassinations, and the man on the moon are all examined in light of the impact on the US today.

ACE 103 Reflections on Work (3) In this course, students will read, discuss and write narratives that question and reflect on, the author's work from technical, organizational, and spiritual perspectives. Students will also have the opportunity to write about their own work as well as that of another person. All written work will be submitted in draft form first, and then in a final, revised form, based on instructor feedback on drafts.

ACE 105 Computer for Academic Application (3) This course features work in word processing, spreadsheet, database and presentation applications that carry the user beyond basic skills. By knowing how to insert footnotes and endnotes, create indexes, track revisions and annotations, add cross-references, use object linking and embedding and integrating data from many different sources, students will be able to prepare and present academic and profession reports with ease.

ACE 107 Introduction to Acting (3) This introduction to acting is a course on how the total person contributes to character development and how character work enhances communication skills and work with people. Exploring acting techniques will also contribute to a more skillful execution of people-related job responsibilities.

ACE 108 Ecology of Wildlife (1) The course looks at the inter-relationship of wildlife and its biotic and physical environments. It includes a description of the ecology of the National Wildlife Federations (NWF) Backyard Habitat Program. There is special emphasis on principles of maintaining wildlife habitats in areas of human population growth.

ACE 109 Insects (1) This course is a study of insect structure and function in interaction with the environment. There is special emphasis on theory of insect population with a focus on Integrated Pest Management (IPM) for horticultural applications.

ACE 110 Science of Soils (1) This course covers physical and chemical properties of various soil types correlated with horticultural principles. Instruction will include building soil by amendment, differences in soil mixes, uses of soil types, soil testing and preparation. There will be an emphasis on the impact of soil on plants, insects and diseases of plants.

ACE 111 Adult Learner (3) Adult and Continuing Education 111 is a course designed to encourage adults as life-long learners, whether they prepare to succeed in academic course work or to develop themselves professionally. Major requirements of the 21<sup>st</sup> Century workforce include specific dimensions of learning generally addressed by college-level thinking and communication: critical thinking and perspective-taking, effective writing, collaborative inquiry, and creative problem-solving. Building on individual experiences and identified learning strengths, participants may expect to develop techniques of practical use in the workplace and in future academic endeavor.

ACE 116 Oral Communication in the Professions (3) Students will survey communication theory and practice within workplace environments. Interviewing, group problem solving, sales speaking, technical presentations, and other communication techniques within organizations are studied and applied.

ACE 120 All Fall Down (1) Modern fears of bioterrorism and the re-emergence of diseases we thought eradicated can't help but remind thoughtful contemporary folks of the fragility of human civilization. Historians and novelists have been equally fascinated by the devastation of the bubonic plague brought to Europe in the 14<sup>th</sup> Century. This course examines two books In the Wake of the Plague: the Black Death and the World it Made by Norman F. Cantor and Doomsday Book by Connie Willis. The first treats the historical context of the epidemic and the second, in the genre of science fiction, explores the human and religious dimensions. Students may expect discussion and activities based on attention to the texts and to contemporary issues. Cooperative presentations and final reflection paper will assess student learning.

ACE 125 E-Commerce Strategy, Architecture, and Design (3) This course provides the student with an opportunity to explore the Internet as a way to communicate and do business in the changing technological world around us. It will explore such things as how to evaluate tools, hosting services, visual design, and website management issues that face any organization that wants to have a "web" presence. The student will do research and hands-on development to better understand all the issues surrounding the use of the Internet. The student would be exploring every aspect of E-Commerce and would apply it to a project.

ACE 126 Greek Grammar I (3) This course familiarizes students with the fundamentals of Hellenistic Greek grammar using Basics of Biblical Greek by William D. Mounce along with its workbook.

ACE 127 Media and Culture (3) Media and Culture considers who media environments shape cultures for good or ill. The course asks how media of communication affect human perception, understanding, feeling and value.

ACE 128 Church Renewal (3) This course uses DVD's from nationally-known Church Renewal leaders. It is designed for pastors and laypersons who are interested in growing churches through preaching, prayer, and evangelism. Students will meet together in the first and last session, with papers and readings in between.

ACE 129 Anthropology (3) This course explores the multi-disciplinary field of anthropology, including the study of human cultures- past and present. We begin by considering some biblical correlates of anthropology, and then survey the range of topics in the field as it is compartmentalized by anthropologists today (including worldview, material culture, language and heritage).

ACE 130 Lead Like Jesus (3) This course provides the tools to lead like Jesus and put them into practice. The student will learn to be a servant leader that Jesus mandated his followers to be and making a difference in the lives of those you influence.

ACE 150 Accounting Fundamentals (3) This course is an overview into the many accounting functions used in a student's workplace. The textbook and examples are chosen to combine theory and experiences in such a way as to increase a student's understanding of accounting theory and the role the accounting function supports the understanding and operation of every business.

ACE 155 Faith and Money (3) This class will teach the students what God says about handling money and possessions with a goal of the student learning to be financially free and spiritually free. A practical method of budgeting is included. It will also cover God's principles of living honestly, being accountable, dealing with debt, giving, work, and eternity.

ACE 220 Ministry Communication (3) This course is designed to equip students to become better communicators in various ministry settings. Areas of focus are preaching, small groups, and mission involvement.

ACE 226 Greek Grammar II (3) As the sequel to Greek Grammar I, this course continues to familiarize students with the fundamentals of Hellenistic Greek grammar using Basics of Biblical Greek by William D. Mounce along with its workbook. It gives particular attention to the formation of the Greek verb and participles and concludes with selective readings from the *First Epistle of John*.

ACE 230 Life & Art: Poetry as a Human Resource (3) Robert Frost commented that "poetry is a way of taking life by the throat." Marianne Moore discovers in poetry "a place for the genuine," that is, those things which are "important not because a high-sounding interpretation can be put upon them but because they are/useful." Participants in this course will have opportunity and guidance in connecting life experience and poetry, discovering in the play, craft, and art of poetry and its contexts both the pleasures children experience in poems and the insights that adults can find in poetry when they allow themselves to feel and think about the experiences poetry embodies.

ACE 231 Business in Literature and Film (3) In this course, students will analyze literature and films that depict diverse aspects of business: money, consumers, ethics, products, and service. Course assessment includes written work and tests.

ADL 430 Organizational Analysis: Christian Ministry Leadership (3) Completing this course will prepare students to analyze the structure and function of an organization in light of contemporary organizational models. Participants apply theoretical knowledge about organizations to a specific organization and explore how organizations can be transformed into redemptive agents in this world and contribute to human flourishing.

ADL 432 Research and Resources (Human Resources, Christian Ministry Leadership, Organizational Leadership)  
This course encourages students to develop familiarity with the literature in their major field of study with an emphasis on information literacy. Students will identify, access, retrieve, and summarize respected information in the field that is relevant to a research topic. In addition to identifying themes in the literature, students will compare, contrast and evaluate the major perspectives that emerge from their investigation.

ADL 445 Theory and Practice of Adult Learning (3) In this course adult students will explore several theories of adult learning, including the Kolb model of adult learning, and then students will apply one of the models to their own experience of learning. This course will have application both to the student's own self-discovery but also to the work that the student may perform as a leader in a workplace or ministry setting.

ADL 470 Career and Professional Development (3) In this course, students will reflect on the learning that they have experienced during the entire program. They will develop a compendium of learning and accomplishments in the program, as well as key professional documents that are typical of a person looking to advance in their chosen profession.

ACE 491 Church and Its Mission (3) In this course students will examine the question: What is Church and what is its mission? This course emphasizes some foundational concepts concerning what the Bible teaches about the Church.

BBL 104 Gospel of Luke (3) Through a study of the gospel of Luke and its emphasis on living in the Kingdom of God, the student will be able to identify the influences that impact their interpretation of the Scriptures. The focus of the course will be on application of the kingdom principles, fulfilled in Jesus' messianic ministry, to everyday living. Readings will include commentaries on Luke as well as from texts that focus on a holistic approach to understanding the kingdom teaching of Jesus. Assignments will include reflection on weekly readings and a final paper.

BBL 106 John's Revelation (3) This will not be a typical course on the Book of Revelation. Learners will understand that the key to interpreting the Book of Revelation is through understanding its genre- "Apocalyptic Literature" – which emphasizes God's Sovereignty over history and focuses on God as Redeemer. Learners will evaluate and critique some of the popular interpretations of the Book of Revelation.

BBL 112 The World of Islam (3) This course studies the historical roots of Islamic religion in the sixth and seventh centuries, including persons, forces, and cities instrumental in its development. It considers the key tenets and emphases of the Koran and the different branches that have existed since that time (Shiite and Sunni). The course addresses the phenomenon of modern Fundamentalist movements in Islam and the features (ethnic, religious, and economic) that mark its relationship with Western cultures.

BBL 114 Gospel of John (3) The focus of this course will be a study of the main theological themes found in the Gospel of John.

BBL 115 Readings in Calvin's Institute (3) John Calvin was a French Christian who lived in the 1500's, ministering primarily in Switzerland. He became the first great theologian of the Reformed wing of the Protestant Reformation. He wrote a pamphlet that after several editions and amplifications became known as *The Institutes of the Christian Religion*. In this course, students will read and discuss excerpts from the Institutes and reflect on the significance of Calvin's theology on contemporary church/societal life.

BBL 131 First Corinthians (3) This upper-level Bible content course addresses the message, theological themes and historical and cultural backgrounds of Paul's *First Epistle to the Corinthians*. Students are required to have a general reading knowledge of the English Bible and to have taken BIB 112, BIB 113, and BIB 200 prior to taking this course. As you acquire a greater understanding of this canonical first-century Christian document, you will be encouraged to examine how it informs and challenges your own life, and to do so while interacting with doctrinal traditions other than your own.

BBL 135 Wisdom Literature (3) This course explores the primary works of wisdom literature in the Old Testament (Job, Proverbs and Ecclesiastes) along with related materials in some of the Psalms and the New Testament Epistle of James.

BBL 200 How to Read the Bible (3) A study of the process that led to the creation of the English Bible and its authority, a survey of the principles and practice of independent Bible study, including an emphasis on the grammatical historical approach to biblical interpretation. The student will study methods of application leading to the development of them, proposition and finally the lesson itself.

BBL 228 Development of Christian Theology (3) Following the major theological issues and developments throughout the Church age, the course will discuss the differences in theology which distinguish the major Christian traditions. Topics addressed will include the Trinity and the Creeds. Iconoclastic debates and questions: Disagreements on authority, the role of the Lord's Supper, the doctrine of salvation, religious freedom, baptism, and the work of the Holy Spirit.

BBL 232 Christian Redemption in the Old Testament (3) This course is an in-depth study of Ruth and Jonah, exploring not simply their historical and textual aspects but particularly focusing on their role in God's overall redemptive plan.

BBL 234 Old Testament Major Prophets (3) This Bible content course addresses the message, theological themes and historical & cultural backgrounds of the three major Old Testament prophets (Isaiah, Jeremiah, and Ezekiel). Students are required to have a general reading knowledge of the English Bible as preparation for taking this course. Students will study

the historical backgrounds of pre-exilic Judah to see how historical events and the religious life of the later Israelite monarchy bear upon our understanding of the theology and situations being addressed in these books. We aim for a greater understanding of the prophetic themes, including their Christology. Students will be encouraged to examine how they inform and challenge modern life while interacting with the doctrinal traditions of other students that may differ from their own.

**BBL 236 The Messiah in the Old Testament (3)** The course will help lay the groundwork for a faithful and fruitful reading of the old testament-identifying the overall arch of biblical redemption and its Christ-centered message.

**BBL 251 Church History I (3)** A study of the history of the Christian Church from its founding on the day of Pentecost to the beginning of the Reformation with special emphasis upon people, events and doctrinal controversies that were significant in the growth of Christianity.

**BBL 252 Church History II (3)** A study of the history of the Christian Church from the dawning of the Reformation to the present time with special emphasis upon the people, events and doctrinal controversies that were significant in the growth of Christianity.

**BBL 315 Acts (3)** A study of the Acts of the Apostles that specifically follows the historical expansion of the church through doctrinal development, growth in understanding, evangelism and geographical expansion through the missionary activities of its members. We will become acquainted with the activities of the great church leaders of the first century, e.g. Peter, James and Paul.

**BBL 408 Foundations of Christian Thought (3)** This course explores the phenomenon of “worldview” as the assumptions that everyone has about reality- a vision for life that drives how people view the nature of the world, the remedy for the world, and the future of the world. And, this course challenges students to critique their own worldview in light of the worldview presented in the Bible. At the end of the day, students will be equipped to examine their own life and work in light of the biblical worldview.

**BBL 409 Christianity in Dialogue (3)** Students will explore the basics of Christian apologetics in terms of identifying the assumptions that drive life-commitments. In particular, the most common and influential perspectives will be evaluated, and the contradictions inherent in living out worldviews will be considered. It will be the perspective of this course that a biblical worldview, with its assumptions deriving from Scripture, best explains the world and human experience.

**BIB 112 Biblical Introduction I—Creation to Post-Exilic Period (3)** Introduction to the history of salvation as expressed in the Old Testament, including historical and theological study focused on Israel as the covenant people of God, with special attention on the relationship of the Old Testament to Jesus Christ.

**BIB 113 Biblical Introduction II—Intertestamental Period through Apostolic Age (3)** The political, social, and religious background and setting of the New Testament; the Gospels as witness to Jesus Christ; and the development of Christianity in the first century.

**BIO 210 ID and Evolution (3)** This course explores the debate between the proponents of Intelligent Design (ID) and the defenders of Darwinian Evolution, by reading and discussing compelling publications written by each camp. Fall semester, alternate years. Fulfills part of the natural science requirement for graduation but does not give credit toward a major in biology.

**BSS 201 International Business (3)** Course description unavailable at the time of catalog printing.

**BSS 217 Entrepreneurship (3)** This course covers the various disciplines, activities and skill sets required to be successful as an entrepreneur. It explains the physiological and analytical aspects of successful entrepreneurship as well as skill sets needed in the disciplines of management, marketing, accounting, operations, and law.

**CFS 230 The Family System in Context (3)** This class will consider the dynamic family in social context. Different theories and topics such as marriage, parenting, communication, conflict and economics will be discussed. The biblical model of creation, fall and redemption will be the context for the class.

CFS 251 Child and Adolescent Development (3) Development and behavior from conception through puberty and the subsequent attainment of maturity, including genetic influences, developmental processes, and psychological processes related to physical, linguistic, social, intellectual, emotional, and personal development.

CFS 301 Child and Family Policy (3) This course provides an historical overview of family and child policy in the United States, including policies toward children and families in poverty. The role of the economy, politics, race, class, gender, legal, and advocacy issues are discussed.

CFS 401 Development of Professional Skills (3) This course teaches professional skills necessary to be a successful service provider. The course covers confidentiality, professionalism, boundaries and roles, cultural diversity and personal values.

CFS 450 Program Management and Evaluation (3) This course focuses on program development, administrative procedures, and program evaluation. Specifically, there is an emphasis on the basic skills required for development, delivery and evaluation of a wide range of human service programs including preventive interventions for families and individuals.

CFS 490 Professional Ethics (3) This course focuses on ethical and legal issues relevant to the delivery of human services. Topics include ethical principles based on the guidelines of the American Counseling Association, National Association of Social Workers, and American Psychological Association. Ethical and legal issues related to vulnerable populations, behavioral interventions, self-determination, and professional boundaries will be included.

CHM 140 Fundamentals of Chemistry (3) This course is designed with the adult learner in mind. Students taking this course will enjoy its interactive format and the emphasis of connecting the principles of chemistry to everyday life. Requires some math, but a math refresher will be sent to the students prior to the beginning of the course. In addition to lecture and discussion, the sessions include hands-on-labs and workshops.

CMN 403 Personal Leadership Assessment and Development (3) This course will establish principles and requirements for leadership, depict biblical examples of how God develops leaders for His ministry, provide opportunity for students to apply this understanding to their own lives through self-assessment of leadership characteristics, and guide students in recognizing and describing God's calling and development of their own lives for a particular field of ministry.

CMN 404 Old Testament Principles for Ministry (3) This course will be an introduction to Old Testament interpretation. Furthermore, special attention will be paid to the application of ministry principles found in the Old Testament to a variety of community ministry settings.

CMN 406 The Church In Its Community (3) This course will examine the role of the congregation as a moral agent for positive change in the community. The course will be divided into three phases of discussion: (1) Developing a theological framework for understanding community (heirs and disinherited), giving special attention to the faith community as a support group; (2) Overcoming obstacles to community building and exploring resources and strategies for community organizing; and (3) Strategies for reconciliation and conflict resolution in small groups and in addressing public issues.

CMN 407 New Testament Principles for Ministry (3) A study of the book of Acts with practical application for ministry today.

CMN 409 Principles of Family Ministry (3) The focus of this course is on an understanding of the family from a biblical perspective and the development of an underlying biblical theology of family ministry.

CMN 410 Leadership for Mission and Ministry (3) This course will examine the biblical foundations for the church and its ministry, review the biblical concept of leadership, explain how to discern and develop spiritual gifts, describe selection and training of leaders, develop a biblical philosophy of ministry and practice formulating strategies and programs which are deliberately rooted in such a biblical philosophy.

CMN 416 Theology and Practice of Evangelism (3) Adult students in this course will explore both the theological underpinnings of evangelism as well as explore various methods for doing evangelism, with a view toward both becoming more articulate in sharing their own faith and becoming more equipped to giving leadership to an evangelistic effort in their own communities.

ECN 101 Contemporary Economic Issues (3) Course description unavailable at the time of catalog printing.  
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EGL 101 English (3) This course is designed to prepare students for the thinking and writing tasks required of a college student. Students may expect studies and experiences in the processes of expressive and academic writing and in the editorial conventions of Standard English: grammar, usage, punctuation, spelling, and citation. During the course students will explore, develop and strengthen critical thinking abilities. Students will plan, draft, read, and revise their work from other students, the textbook, and other sources. Students will use word processing and Internet technology to support and apply their learning.

HMT 411 Humanities (3) Students will explore the humanities as a manifestation of human responses to the Cultural Mandate- to “rule over the earth and subdue it”. The humanities reflect the cultural values of the culture from which they spring, therefore students will be equipped with the theological and philosophical categories needed to properly discern the truth (and untruth) of the cultural messages embedded in the humanities. On the one hand, students will be equipped to appreciate the common grace truth embedded in the humanities, but on the other hand, students will be equipped with the biblical categories of antithesis needed to discern where those truths fall short. At the end of the course, students will be equipped to engage both aesthetic considerations and “truth considerations” in the humanities.

HRS 441 Business and Interpersonal Communication (3) Emphasis is placed on the interpersonal skills that students may use to facilitate effective relationships. Attention is given to the importance of being an effective communicator in both interpersonal and organizational contexts. Students have the opportunity to practice and assess communication and presentation skills. Class sessions include discussion of assigned readings, role playing exercises, small group activities, and presentations. Course concepts are modeled in a final presentation as well as in a reflection paper.

HRS 443 Training and Development (3) Students in this course study theories, concepts, and processes that are used to develop, implement, and sustain training programs in organizations. As part of the course, students examine the principles for establishing effective training and development methods including design, delivery, and assessment. The major project for this course is the creation of a training and development plan that is applied to their organization.

HRS 451 Introduction to Human Resources (3) This course provides an introduction to the field of Human Resources and discusses the emerging role of HR professionals as strategic business partners as well as their relationship to other functions within the organization. Legal and contemporary approaches to diversity management are discussed. Key legislation discussed will include EEO, ADA, FMLA, and Title VII. This course will provide a foundation for further study of Human Resources.

HRS 453 Policies and Personnel Management (3) This course is the second course in the sequence of courses covering the Human Resources body of knowledge and it focuses on human resource development. Human resource development topics include training, development, and performance management.

HRS 455 Employee & Labor Relations (3) In the sequence of courses covering the human resources body of knowledge, this course includes the topics of employee relations in both union and non-union settings as well as workplace health and safety. The National Labor Relations Act and the Occupational Health and Safety Act will be covered.

HRS 457 Principles of Management and Supervision (3) Students identify the actual roles managers play in complex organizations. Students are prepared for managerial roles while helping them work more effectively with current managers. Management theory is critically evaluated for its usefulness in light of actual practice.

HRS 458 Current Issues in HR (3) The focus of this course is not the acquisition of new knowledge and theories in the field of Human Resources, but rather the application of knowledge gained in previous learning modules and courses to current issues and trends in the field today. Students will be expected to research trends and issues that are relevant and understand how they affect the HR Manager.

HSS 201 Introduction to Human Services (3) This course provides an overview of the human services profession, its history, values, goals and practices. Ethical and philosophical issues involved in providing human services to those in need will be explored.

HSS 202 Human Diversity (3) This course surveys human diversity in terms of race, ethnicity, gender, and social class in contemporary American culture. The effects of oppression and prejudice will be explored on individuals and groups, as well as evaluating the consequences of social policy aimed at alleviating discrimination. Implications for the practice of human services will be discussed.

HSS 205 Cultural Competence (3) This course provides an overview of various theories, methods, and applications concerning the concept of cultural competence within human service and psychological disciplines, as well as within the Church and the kingdom of Christ. The course examines cultural competence in terms of secular and Christian perspectives with an emphasis on Christ-centered and biblical strategies of implementation.

HSS 301 Social Welfare Agencies/Policies (3) For classroom ADP cohorts this is a hybrid course- 60% On-line, 40% Classroom

This course surveys the history and current development of systems designed to serve those in need. Agencies oriented to meet the needs of special populations (e.g., the aged, children and youth, rural and urban groups) will be explored and the policies influencing their development will be critically analyzed.

HSS 305 Counseling & Helping Skills I (3) This course is designed to prepare the student for practice in human services agencies through the development of culturally sensitive helping relationships. Emphasis is placed on enhancing communication skills, developing interview techniques, and learning basic group skills and group interactive patterns.

HSS 307 Generalist Practice, Model & Theory (3) This course is a continuation of HSS 305 and is designed to further advance the student's practice skills. Emphasis is placed on identifying client strengths, problem solving, preparing case plans for individuals and families, and community and organizational interventions.

HSS 401 Senior Seminar (3) This course is offered in conjunction with the internship experience and is designed to support the student's field experience with structured educational perspectives. The focus is to assist the student in integrating Christian viewpoints and human services theories with actual field practice.

HSS 405 Community Interventions (3) This advanced human service course builds on micro level counseling and helping, as well as generalist practice knowledge and skills, in addressing the human service needs of at-risk groups (e.g. impoverished, mental health, drug and alcohol, children and families involved in child protective services, domestic violence, community violence, adult and juvenile justice, and AIDS/HIV). The course examines special populations in the context of human needs, crisis intervention, and other community systems and interventions. Special attention will be given to church based and Christian strategies used to care for at risk groups.

HSS 432 Human Services: Research and Resources (3) This course encourages students to develop familiarity with the literature in their major field of study with an emphasis on information literacy. Students will identify, access, retrieve, and summarize respected information in the field. In addition to identifying themes in the literature, students will compare, contrast and evaluate the major perspectives that emerge from their investigation.

HSS 434 Applied Research & Statistics (3) Data analysis and evaluation techniques are presented. Specific information covered includes entering data in a database, frequencies, measures of central tendency and dispersion, analyzing correlation and variance, and working with tests of significance.

HSS 450 Field Experience (6) This course affords the student an opportunity to apply knowledge and theories obtained in course work to actual field experience. The student will be supervised in the agency placement by both an on-site coordinator and the Geneva placement advisor. A total of 270 hours will be spent on site during the 17-week term.

HUM 118 Classical and Christian Cultures (3) This course examines human cultural achievement in western civilization from ancient times until the Renaissance. The philosophical, theological, and political contexts will be examined, along with literature, visual and musical arts.

HUM 119 Western Culture: Renaissance to Modernity (3) This is a survey course of the historical, cultural, social, economic, and religious developments in western civilization. This course will examine, through reading, writing, and discussion, the dominant ideas in western culture as expressed in the philosophy, art, literature, and music from a Christian perspective.

LDP 421 Case Studies in Leadership (3) Case studies will be selected for in-depth study of the application of leadership concepts with particular reference to those concepts found in Scripture. Students will develop a written analysis of their style of leadership. Related issues are introduced through readings.



LDP 438 Principles of Organizational Change (3) Students explore types and forms of organizational change, the process of transforming organizations and the impact of change on people in organizations. Students translate theoretical concepts into active strategies for implementing recommendations for change in case studies and real-life scenarios. Transformation as a redemptive concept is also explored.

LDP 447 Principles of Teambuilding (3) Study of how teams influence leadership effectiveness, with emphasis on how to develop interactive and dynamic groups, working in the virtual or face-to-face environment. Topics include the various means of sharing information when working in any team environment and the strategy of conducting environmental scanning to identify communication issues and formulate solutions.

LDP 449 Principles of Negotiation (3) This course examines the art and science of negotiation. This course develops important leadership skills by combining lectures with practice, using exercises where students negotiate with each other. Over the course of this module, students engage in exercises and associated readings, exploring the basic theoretical models of bargaining, handling conflict, mediation, and consensus-building.

LDP 460 Organizational Dynamics (3) In this course, students are introduced to the theory and concepts related to individual and group behavior in organizations. Students examine the reasons why people act the way they do in organizations, as well as identify methods that can improve the behavior and attitudes of organizational members. Topics related to individual and group problem solving are studied within the context of organizational structures and processes. Case studies and group practice allow students to apply these theories and concepts in presentation and written form. In addition, an application paper in which students address an organizational problem is submitted as part of the course assessment.

MGT 151 Principles of Accounting (3) Accounting application is critical to this course as the preparation of trial balances, adjusting and other journal entries, and financial statements are the focus. Financial and managerial decision making techniques are discussed and applied in detail.

MGT 213 Principles of Micro/Macroeconomics (3) This course examines consumption and production at the household, firm and industry level; explains methods of economics analysis and price formulation; and examines the various market structures and behavior of pure competition, monopoly, oligopoly, and monopolistic consumption. Additional course material explains the characteristics and operations of the national economy, including the measurement of national employment, production and income, the role of money and banking, and international trade. Students also learn methods of economic analysis, the role of government, and economic policy.

MGT 241 Quantitative Analysis (3) Introduction to basic statistics and spreadsheets. Includes data collection, descriptive statistics, basic concepts of probability, inferential methods, hypothesis testing, correlation, and regression.

MGT 311 Business Law (3) General principles applied to contracts, agency and employment, business organizations, government regulation, and real and personal property.

MGT 320 Marketing (3) This course introduces the student to basic principles and foundations of marketing. Topics include defining marketing and the market process, understanding the marketplace and consumers, designing a customer-driven marketing strategy and mix, and the major trends and forces that impact marketing.

MGT 330 Principles of Finance (3) Principles of corporate financial management. Course topics include ratio analysis, cash flow forecasting, leverage, working capital management, cost of capital, capital budgeting, and security types.

ORD 460 Organizational Dynamics (3) In this course, students are introduced to the theory and concepts related to individual and group behavior in organizations. Students examine the reasons why people act the way they do in organizations, as well as identify methods that can improve the behavior and attitudes of organizational members. Topics related to individual and group problem solving are studied within the context of organizational structures and processes. Case studies and group practice allow students to apply these theories and concepts in presentation and written form. In addition, an application paper in which students address an organizational problem is submitted as part of the course assessment.

PLS 401 Christian Faith & Politics (3) Students will explore the Scriptural and philosophical underpinnings of government and survey the history of political thought with particular emphasis on the Christian tradition, including a discussion of the American Founding. In addition, the biblical principles of justice, economics, and liberty will be explored in the context of Geneva College

a reflection on modern political ideologies. Lastly, students will investigate a number of important issues in contemporary political debate, such as war, globalization, and the environment.

**PSS 105 Goals, Priorities, and Attitudes (3)** The setting of goals, as well as priorities among those goals, with an emphasis upon how those goals and priorities relate to the realities and aspirations of life. The attitude of the individual including other aspects of psychological makeup and how it impacts upon the ability and willingness to set goals and priorities. An emphasis upon how goals, priorities, and attitudes can lead to effective Christian personal management.

**PSS 201 Introduction to Psychology (3)** This is a foundational course. Myers defines psychology as a scientific study of behavior and mental processes. This study includes an exploration of how these processes are affected by the physical state, mental state and external environment of an organism. Introduction to Psychology 201 material applies not only to future courses in psychology, but also to sociology, education, business, biology, and other academic areas. Allow the course to challenge the way you understand others, yourself, your relationships and your overall environment.

**PSS 250 Lifespan Development (3)** The Lifespan Development course is designed to provide information that will assist students in understanding the normal developmental process of individuals over the entire lifespan starting with conception and ending with death.

**PSS 251 Child Development (3)** This course is designed for the adult learner working, or seeking to work, in the area of human services, psychology, counseling, social work or other people oriented professions. The central concern of child development is the sequence of physical, cognitive, psychological and social changes that children undergo as they grow older. In this module, the adult learner will survey various areas and sub-disciplines within the field of child developmental psychology, review and begin to learn the types of questions child developmental psychologists ask and the type of work and research in which child developmental psychologists are involved.

**PSS 253 Adulthood and Aging (3)** A course covering the major issues in the psychology of adult development and aging.

**PSS 313 Abnormal Psychology (3)** This is a foundational course. Textbook authors Barlow and Durand define psychopathology as a scientific study of psychological disorders. Until several years ago the science of psychopathology had examined the separate effects of psychological, biological and social influences. Recent advances in science confirm that the integrative approach to understanding psychological disorders is most effective. The approach of this course reflects the current state of our clinical sciences and enhances the learning process. Allow the course to challenge the way you conclude that a behavior is either normal or abnormal.

**SCS 105 Environmental Science (3)** Overview of current environmental issues in the context of science and society. The course emphasizes scientific principles, the impact of human activities on the environment, and the role of Christians as stewards of creation. Every semester.

**SCS 215 Earth and Space Science (3)** This course incorporates the disciplines of geology, meteorology and astronomy into a holistic study of planet earth. A major goal of the course is to give the student an understanding of the mechanics of God's creation. Fall semester, evening school.

**SGY 410 Restoring Social Institutions: A Christian View of Marriage, Family, Church, and Neighborhood (3)** The social world is full of institutions, and is held together by institutions. These institutions change over time, sometimes for better and sometimes for worse. In this course we will explore the contours of four social institutions- marriage, the family, the church, and neighborhoods. How are these institutions changing? Why are they changing? And what is our own role in these institutions? Biblical norms for these social institutions will be considered, and we will work together to develop a Christian perspective to apply to other social institutions as well.

**SOC 110 Sociological Perspectives** The primary purpose of this course is to introduce students to a way of seeing the world through social spectacles. More than that, the course is designed to help students see our very social world through Christian lenses. This course has been designed to help the adult student identify some of the sociological theories behind the social dimension of their own lives and for social institutions, how current social institutions have fallen short as well as the potential for renewal within various social institutions.

**NursingABC/Portage**

Geneva College offers nursing school pre-requisite courses through the NursingABC Program. These courses are only offered through NursingABC and do not count toward any major, minor, or core college requirements. Interested students should contact NursingABC.

## Graduate Programs

Geneva College offers seven graduate programs in a variety of formats. These seven programs are listed below with relevant contact information. More specific information for each program follows, although the most detailed information is available at the websites of the respective programs.

### MASTER OF ARTS IN COUNSELING

Dr. Shannan Shiderly, Program Director  
Ms. Marina Frazier, Program Manager  
724-847-6697  
724-847-6101 (FAX)  
[counseling@geneva.edu](mailto:counseling@geneva.edu)

### MASTER OF ARTS IN HIGHER EDUCATION

Dr. Keith Martel, Program Director  
Ms. Jerryn Carson, Program Manager  
724-847-5567  
724-847-6107 (FAX)  
[hed@geneva.edu](mailto:hed@geneva.edu)

### MASTER OF BUSINESS ADMINISTRATION

Dr. Gary Vander Plaats, Program Director  
Ms. Marina Frazier, Program Manager  
724-847-6571  
724-847-6101 (FAX)  
[mba@geneva.edu](mailto:mba@geneva.edu)

### MASTER OF SCIENCE IN ORGANIZATIONAL LEADERSHIP

Mr. Tim Edris, Interim Program Director  
Program Manager  
724-847-2715  
724-847-4198 (FAX)  
[msol@geneva.edu](mailto:msol@geneva.edu)

## Introduction

Four principles shape our approach to graduate education. By definition, all graduate education necessarily deals with issues fundamental to an academic discipline, requires the student to work from original, not purely secondary, sources, and requires the student to develop the entry-level skills and knowledge of a professional in the field. Finally, graduate education is defined by, and must conform to, the philosophy of education and institutional policy of Geneva College; this point is defined and expanded below as our fourth principle.

Expressing the first three of these four principles in student educational outcomes means graduate students must develop competencies in:

- knowledge of the original literature(s),
- knowledge of the theories and fundamental questions in the discipline,
- knowledge of classic answers to the fundamental questions,
- development of personal answers to the fundamental questions,
- development of the skills of independent thinking,
- development of skills for the critique of ideas, theories, and methods,
- and such applied and professional skills in the field as appropriate.

Our fourth principle is that the philosophy of education, the focus, and the implementation for all graduate programs of the college are established by the Foundational Concepts, by the mission statement, by other policy as published in the catalog, and by the document Principles and Policies for Graduate Education (PPGE). An important educational outcome of this principle is that each student should be able to understand, at an appropriate level, both scripture and theology as they relate to the discipline. It also follows that programs must be operated within the context of the college's institutional strategic plan and administrative policies (PPGE, 2008).

## General Admissions and Academic Standards and Policies

Admissions and academic standards for graduate education are determined by the Faculty Senate's academic program committee and respective graduate programs. In addition to the institution's general admissions and academic standards that follow, each graduate program has specific expectations for admissions and for satisfactory academic progress. Some of these program-specific standards are presented in subsequent sections of this catalog, but the most complete information should be accessed from the college website, and/or from the respective program managers.

### Included in the general standards are the following:

- It is recognized that programs in different disciplines will have different expectations for admissions standards, successful progress, and successful completion of the program. In some cases, specific competencies must be acquired or specific standards must be met. These are published in the descriptions of the individual programs.
- All graduate students must have earned a baccalaureate degree from a school that has been accredited by an agency recognized by Geneva College as determined by the Registrar.
- Maximum transfer credit granted for students entering a Geneva graduate program is 9 credit hours. However, if classes are an exact match with the Geneva classes and are acceptable to the program director, course work up to half of the program's credit hours will be accepted. If the academic work was taken before matriculation at Geneva, the credits and courses are accepted without grades.
- Admission to a graduate program is based on evidence of the ability, preparation, and aptitude of the student, indicating that the student is capable of successful graduate work.
- Full-time status in graduate programs is 9 credit hours per semester or the equivalent.<sup>1,2</sup>
- The minimum GPA in graduate courses for graduation is 3.0.
- College accounts must be current each semester for the student to enroll in the next semester.
- Programs may vary in length, but each master's program will be at least 30 credit hours with at least 24 hours in academic courses (excluding thesis, practicum, and internship).
- The maximum time to complete a program is seven years from matriculation. Students may petition for extensions of this deadline, and those petitions will be reviewed by the graduate program director.

<sup>1</sup>As of Spring 2012, the Special Education and Reading programs require 6 credits for full-time status.

<sup>2</sup>As of Fall 2013, the Higher Education and MBA programs require 6 credits for full-time status.

## **Grade Reports**

A 3.0 GPA is the minimum to earn a master's degree. Additional GPA and specific grade standards may apply at various points in a graduate program; for example, a specific GPA may be required for admission to an internship or to advanced standing in the program.

Graduate students do receive academic credit for a grade of C, but should be cautioned that C level work is not considered to be acceptable graduate work, that a 3.0 is required for graduation, and that students may not have more than two C's. Each graduate program may identify more specific consequences to C grades. (The CVS program, for example, does not permit any C grades).

Repeating a course for which credit has been granted will not increase hours toward graduation, but the new grade earned may be substituted for the old in determining grade points. Credits graded D or F are included in the GPA but do not count toward graduation requirements. Repeating a course graded D or F does not increase the hours used to determine the GPA but will increase both grade points and credits toward graduation according to the new grade earned, students who receive a D or F must retake the course at Geneva. No transfer courses will be allowed to make up a D or F grade.

Academic credits for specific courses cannot be used to meet the credit requirements of two degrees. That is, an undergraduate may, with permission, take a graduate course. Completion of the course may mean that the student has met a course requirement when subsequently enrolled in the graduate program, but the credit for the course cannot be used to meet the credit-hour requirements of the graduate degree program. Consequently, in some cases where an undergraduate student took graduate-level classes, the student may need to take courses beyond the basic curriculum requirements to accumulate the credit hours needed for graduation.

Official grade reports made be viewed on-line no later than three weeks after the grades are received by the Registrar's office. However, the respective program offices may be able to generate grades for each individual class for those who receive corporate tuition reimbursement one course at a time.

## **Graduation Requirements**

Students must apply to graduate- this doesn't happen automatically. The graduation application is to be completed and returned to the Registrar's office. Students who apply for graduation after the deadline will be included for the next degree conferring date. Failure to meet stipulated deadlines may result in the student being ineligible for commencement and will delay the awarding of a diploma. Students who find that they will not complete their requirements for graduation by the date for which they have applied must call or write both the graduate department with which they are affiliated and the Registrar's office to request a change in their degree award date.

Graduating students will participate in the annual graduate commencement ceremony in the spring. This is usually held on Saturday afternoon. Graduate students are welcome to attend Baccalaureate which is held on the Friday evening before the graduation ceremony. Students may only be excused from the commencement ceremony by permission of the academic dean on recommendation of their program director. This permission must be requested in writing. All graduates will be mailed their diplomas.

## **Program-specific policies and procedures**

Each graduate program normally provides their students with a program handbook or its equivalent in which specific policies, procedures, opportunities, assessment steps, and issues specific to the program or instructional site are clarified. Please contact the program directly for this information or access it via the college website.

## **Financial Policies**

### **Tuition**

Tuition for most graduate programs is set annually on a semester-hour basis. Payments can be made with cash or a check made payable to Geneva College and are due prior to the first class. Transcripts and diplomas will not be furnished until the student's account is paid in full. If a student's employer is willing to reimburse for graduate course work, the student must notify the respective program office.

### **Financial aid**

Limited financial aid, in the form of scholarships or assistantships is available in some programs. Campus work-study funding may also be available. A free application for federal student aid (FAFSA) form must be filed each year before any student can be considered for financial assistance. The federal financial aid policy continues to evolve each year; at this

point the best option for graduate studies is the federal loan program. Geneva College's financial aid office has been approved to award loans under the Ford Federal Direct Loan Program to qualified students.

Students who are enrolled for less than six credit hours are not eligible for federally subsidized loans. If there will be a semester when students will be working on an internship, practicum, or some other part of the academic program, but will not be registered for any courses, they may not be eligible for aid in that semester. There are ways that the financial aid and graduate service offices can help students plan for this process- please contact them in advance of registration.

Continued eligibility for financial aid is based on satisfactory academic progress, adherence to filing deadlines, and on other eligibility requirements and guidelines set by the U.S. Department of Education.

### **Refund Schedule**

To drop a course, a student must turn in a drop form to the Registrar's office as soon as a decision is made to drop the course.

### **Loan deferment**

Special issues arise when students use loans to finance their education. Each lending institution has its own guidelines for loan repayment. Students are entirely responsible for that financial relationship. Loans due from the student's undergraduate education may be deferred while the student is in a graduate program. If a student does not maintain the status required for loan deferment, loan repayments will need to be made until the student is again verified by the Registrar as meeting the appropriate status requirements for loan deferment. To maintain part-time status, a student must register for a minimum of six credits per semester. For full-time status, students must register for nine credits per semester.<sup>3,4</sup> An incomplete grade will jeopardize a student's part-time or full-time status.

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<sup>3</sup>As of Spring 2012, full-time status for the Special Education and Reading programs is 6 credits.

<sup>4</sup>As of Fall 2013, full-time status for the Higher Education and MBA programs is 6 credits.

# Master of Arts in Counseling

## Marriage and Family Counseling Program, Clinical Mental Health Counseling Program, School Counseling Program

### Statement of Philosophy

Professional counselors use various interventions to facilitate wellness, personal growth, and mental health among those whom they counsel. A multidimensional holistic view of persons examines the interplay of physical, psychological, social, and spiritual aspects of life. The practice of professional counseling is based on knowledge of mental health, counseling, and human development principles and involves cognitive, affective, behavioral and systems interventions and strategies.

### Mission Statement

The mission of the Master of Arts in Counseling Programs is to educate and train students to develop knowledge, skills, and personal awareness necessary for them to function as professional counselors. The Marriage and Family, Clinical Mental Health, and School Counseling Programs serve students from both local and wide geographic areas who wish to integrate an understanding of Christian faith with professional counseling of diverse counsees in a variety of religious and secular settings. The programs are based on a holistic biological, psychological, social and spiritual understanding of human development. In addition to general counseling proficiency, students specifically are trained to become marriage and family, mental health, or school counselors.

- The mission of the Marriage and Family Counseling Program is to train students in the knowledge, skills, and professional understanding of couples and family counseling.
- The mission of the Clinical Mental Health Counseling Program is to train entry-level counselors capable of functioning competently and effectively in mental health delivery environments wherein they work from an overall developmental/wellness model utilizing a biopsychosocial framework that employs diagnostically informed intervention strategies.
- The Mission of the School Counseling Program is to prepare school counselors capable of supporting students and their development, and the work of the other professionals in educational systems through (1) excellence in knowledge and practice, (2) integrity through adherence to codes and standards for ethical practice, (3) management of their own professional development, and (4) competent school counseling and educational practice.

### Outcomes

- Students will demonstrate knowledge, skills, and personal awareness in the following core areas: human growth and development, foundations of faith-based counseling, group work, social and cultural foundations, the helping relationship, career and lifestyle development, appraisal, statistics, research and program evaluation, and professional orientation and ethics.
- Students will demonstrate knowledge and understanding of the Christian faith and an ability to analyze and evaluate counseling issues from that perspective.
- Students will demonstrate mastery of counseling knowledge, skills, and personal awareness in practicum and internship experiences and in a counseling specialization (marriage and family counseling, mental health counseling, or school counseling).
  - Students in the Marriage and Family Counseling Program will demonstrate skills and knowledge so as to assess couple and family function and dysfunction; and join the respective relational system using interventions to create therapeutic change for the purpose of creating greater relational satisfaction within a framework of theoretical and ethical guidelines while being aware of social, cultural, sexual, and religious factors which impact the relational system in internship experiences.
  - Students in the Clinical Mental Health Counseling Program will demonstrate basic mental health counseling skills and master of essential mental health knowledge in internship endeavors.
  - Students in the School Counseling Program will demonstrate the knowledge and performance competencies to facilitate the academic, career, and social/emotional development of students through effective ethical application of counseling, consulting, coordinating, and appraising skills.
- Given the array of different personal skills and abilities possessed by diverse individuals, students will select and develop a personal style of practice, supervised experiences, and professional development.



## **Program Description**

The 60-credit Clinical Mental Health Counseling Program and the 60-credit Marriage and Family Counseling Program are designed in accordance with national counselor certification and state licensure standards and provide students with academic training necessary to become professional counselors. The 51 credit School Counseling Program additionally prepares students to be certified as elementary and/or secondary school counselors by the Pennsylvania Department of Education (PDE). All students receive exposure to core knowledge of the profession, which includes developmental theory, career development, assessment, research, ethics, multicultural awareness, counseling theory, and group work as well as training in the skills of helping. All students are required to participate in a 10-hour group laboratory designed to train group facilitators. Each student receives intense individual and group clinical supervision during practicum and 600 hour internship. Recent graduates of the programs have found employment in a variety of work settings including schools, clinics, church counseling centers, and public and private agencies.

Application materials are available from the MA in Counseling Office (724-847-6697 or [www.counseling@geneva.edu](mailto:www.counseling@geneva.edu)). In addition to the completed application, prospective applicants are required to submit official transcripts from all colleges and universities attended, an essay focusing on academic and career goals, and three academic or employer recommendations from individuals not related to the applicant. Personal or phone interviews are conducted by MA in Counseling Faculty. Prospective applicants are rated according to their academic background and aptitude, interpersonal skills, work-related experiences, and compatibility with program goals and perspectives. Provisional admissions status may be granted to students who meet most but not all criteria for full admission. Students applying to the MA in Counseling Program should be aware that, prior to the practicum and internship, they will be required to complete PA State Police, FBI records and PA child abuse checks to determine whether they have felony convictions or any record of child abuse perpetration.

**Statistics Competency:** Basic statistics competency is a prerequisite for CNS 505 (Testing and Appraisal) and CNS 512 (Research Methods and Program Evaluation), both of which are required courses for students in the MA Counseling Program. This competency can be met in one of three ways: (1) by successfully completing CNS 504 (Statistics) as a student in the MA Counseling Program, (2) by providing evidence of having earned a grade of B- or better in an approved undergraduate statistics class in the last 5 years, or (3) by earning a score of 80% or better in the final exam of Geneva's undergraduate psychological statistics class.

Student progress is evaluated throughout the program. Following the completion of 12-27 credits, each student must apply for degree candidacy. At the time of degree candidacy, each student's professional development, attitudes, academic achievement, written and verbal skills, adherence to ethical standards, personal maturity, relational skills, motivation, dependability, emotional stability, professional commitment, and fitness for the counseling profession are assessed. Following the completion of core courses and prior to beginning the internship, students are required to pass a nationally standardized counseling comprehensive examination. Students also are evaluated upon completion of the practicum and internship.

In accordance with the Geneva College Procedures for Administrative College-Initiated Withdrawal of Student, a student may be dismissed from the program if the student exhibits evidence of psychological, physical or behavioral problems that could disrupt the academic process or present a danger to the student or other members of the College community (students, faculty, administration, staff, or others). This would include individuals and potential counselees at a practicum or internship site.

According to Geneva College's Graduate Education Policy, "graduate students do receive academic credit for a grade of C but should be cautioned that C level work is not considered to be acceptable graduate work, that a 3.00 is required for graduation, and that students may not have more than two C's." In the MA in Counseling Programs, students must maintain a 3.0 Grade Point Average (GPA) to remain in good standing. Students whose GPA's fall below 3.0 will be placed on academic probation for a maximum of three semesters (fall, spring, summer) or until the GPA is raised to a 3.0 or higher. Students on academic probation must consult with their advisor to develop a written revised Plan of Studies aimed toward remediation. Students on academic probation will be evaluated by a faculty committee before probationary status is removed. Students on academic probation or with more than two "C" grades will not be permitted to take the Comprehensive Examination or schedule practicum/internship credits. Students may be on academic probation for no more than three semesters, after which they will be dismissed from the MA in Counseling Program if the GPA remains below a 3.0. Students with more than two "C's" must retake classes so that no more than two "C" grades remain on the final MA in Counseling transcript.

**Students in the Marriage and Family Counseling Program (60 credits) will complete:**

CNS 504: Statistics	3
CNS 505: Testing and Appraisal	3
CNS 510: Foundations for Faith-Based Counseling or CNS 511: Christian Counseling within the Mental Health Professions	3
CNS 512: Research Design and Program Evaluation	3
CNS 514: Human Development	3
CNS 520: Counseling Theory	3
CNS 521: Counseling Skills or CNS 579: Child and Adolescent Counseling Skills	3
CNS 533: Career and Lifestyle Counseling	3
CNS 534: Social and Cultural Foundations of Counseling	3
CNS 536: Group Counseling	3
CNS 537 Professional Issues and Ethics in Marriage and Family Counseling	3
CNS 575: Foundations of Marriage, Couple and Family Counseling	3
CNS 577: Family Counseling/Therapy	3
CNS 578: Marital and Couple Counseling/Therapy	3
Three Electives	9
CNS 581: Marriage and Family Counseling/Therapy Practicum	3
CNS 582: Marriage and Family Counseling/Therapy Internship	6

**Students in the Clinical Mental Health Counseling Program (60 credits) will complete:**

CNS 504: Statistics	3
CNS 505: Testing and Appraisal	3
CNS 510: Foundations for Faith-Based Counseling or CNS 511: Christian Counseling within the Mental Health Profession	3
CNS 512: Research Design and Program Evaluation	3
CNS 514: Human Development	3
CNS 520: Counseling Theory	3
CNS 521: Counseling Skills or CNS 579: Child and Adolescent Counseling Skills	3
CNS 533: Career and Lifestyle Counseling	3
CNS 534: Social and Cultural Foundations of Counseling	3
CNS 536: Group Counseling	3
CNS 538: Professional Issues and Ethics in Mental Health Counseling	3
CNS 501: Psychopathology and Diagnosis	3
CNS 541: Clinical Mental Health Counseling	3
CNS 548: Psychopharmacology	3
Three Electives	9
CNS 586: Mental Health Counseling Practicum	3
CNS 587: Mental Health Counseling Internship	6

**Students in the School Counseling program (51 credits) will complete:**

CNS 504: Statistics	3
CNS 505: Testing and Appraisal	3
CNS 510: Foundations for Faith-Based Counseling or CNS 511: Christian Counseling within the Mental Health Profession	3
CNS 512: Research Design and Program Evaluation	3
CNS 514: Human Development	3
CNS 520: Counseling Theory	3
CNS 521: Counseling Skills or CNS 579: Child and Adolescent Counseling Skills	3
CNS 533: Career and Lifestyle Counseling	3
CNS 534: Social and Cultural Foundations of Counseling	3
CNS 536: Group Counseling	3
CNS 539: Professional Issues and Ethics in School Counseling	3
CNS 502: Advanced Child & Adolescent Treatments and Interventions	3

CNS 563: Organization & Management of School Counseling Programs	3
CNS 564: Curriculum, Learning, Inclusion, and Instruction for School Counselors	3
CNS 565: School Counseling Practicum	3
CNS 566: Elementary School Counseling Internship	3
CNS 567: Secondary School Counseling Internship	3

### Course Descriptions

CNS 501 Psychopathology and Diagnosis (3) An exploration of understanding of mental illness. The study of the classification, etiology, and treatment of psychopathology and personality disorders. The course deals with the Diagnostic and Statistical Manual of the American Psychiatric Association (DSM) categorization of criteria for specific diagnoses. Spring semester.

CNS 502 Advanced Child & Adolescent Treatments and Interventions (3) Theory and practice of counseling children and adolescents in school and community settings. Characteristics of at-risk children and exceptional needs students and the provision of counseling services to these children. Various topics include counseling related to disabilities, autism spectrum disorders, death and dying, child abuse, substance abuse, youth violence, teenage pregnancy, risky sexual behavior, behavioral disorders, mood disorders, anxiety, intellectual disabilities, learning disabilities, traumatic brain injury, chronic health problems, and eating disorders. Fall semester.

CNS 504 Statistics (3) An introduction to descriptive and inferential statistics. Topics include descriptive statistics, bivariate distributions, sampling, estimations, and tests of hypotheses. Fall semester.

CNS 505 Testing and Appraisal (3) Basic individual and group assessment techniques, test item construction, reliability, validity, and standardization. Students will become familiar with authentic, screening, diagnostic, formative, benchmark, and summative assessments relative to decision-making. Students will critique various assessment instruments (intelligence tests, ability tests, achievement tests, screening tests, interest tests, and personality tests) used by counselors. Socio-cultural factors, ethical factors, and legal codes relative to assessment of special populations, diverse learners, and English language learners will be addressed. Prerequisite: CNS 504. Spring semester.

CNS 510 Foundations for Faith-Based Counseling (3) A study of basic concepts of evangelical and Reformed Christian theology with special emphasis on biblical anthropology and the way it informs and critiques various counseling theories. Fall semester.

CNS 511 Christian Counseling within the Mental Health Profession (3) The course is offered as an elective for counseling students who are interested in exploring the ramification of Christian faith upon their burgeoning roles as mental health professionals. This course will enable students to better evaluate the philosophical assumptions of the major counseling theories as well as apply empirically verified modalities and techniques that can be faithfully housed within the Christian tradition. Students will learn to administer formal and informal assessment tools, as well as adopt counseling theories and clinical interventions which will enable them to competently address the religious/spiritual dimension of client functioning in culturally and ideological diverse treatment settings. Summer semester.

CNS 512 Research Design and Program Evaluation (3) Course provides the student with the necessary skills to professionally evaluate the current research in the field of counseling. Topics include research strategies, scaling and coding, internal and external validity, and program evaluation. Prerequisite: CNS 504. Summer semester.

CNS 514 Human Development (3) An exploration of major events in human development from conception through death. Developmental concepts that have universal application will be covered. Fall semester.

CNS 520 Counseling Theory (3) A comprehensive overview and integration of the major theoretical perspectives on the counseling process. An examination of the historical development of counseling theory, an exploration of affective, behavioral, and cognitive counseling theories, and the application of theoretical material to case studies. Foundational elements of the counseling process will be explored via academic activities and observation and critique of videotaped master therapist counseling sessions. Students will develop an initial personal theoretical orientation for counseling endeavors. Fall semester.

CNS 521 Counseling Skills (3) A comprehensive overview, integration, and application of major theories and techniques employed in the counseling process. Specific advanced counseling interventions by master counselors will be reviewed via videotape and critiqued. Initial counseling skills will be developed via *in vivo* role play and will be reviewed and critiqued by the instructor. Basic models and strategies of consultation will be explored from theoretical and pragmatic points of view, and applied to case material. Spring and Summer semester.

CNS 533 Career and Lifestyle Counseling (3) A survey of theory and practice of counseling associated with career selection, career development, relationships among career, life-style, and family, and relevant appraisal tools. Spring semester.

CNS 534 Social and Cultural Foundations of Counseling (3) Theories and techniques of effective multicultural counseling to include consideration and appreciation of cultural, racial, ethnic, disability, gender, language, and other diversity issues within a pluralistic society. Students will examine the role of the counselor in advocacy, conflict resolution, cultural awareness and work with English Language Learners. Spring semester.

CNS 536 Group Counseling (3) Elements of group dynamics, ethical issues special to group work, and group leadership skills. Students will compare four types of groups—task and work groups, psychoeducational groups, counseling groups, and psychotherapy groups. Various theoretical approaches to groups counseling as well as adaptations with specific populations and specific settings will be addressed. Includes a 10-hour group laboratory experience. Fall semester.

CNS 537 Professional Issues and Ethics in Marriage and Family Counseling (3) A survey of professional identity, ethical standards, and legal codes for marriage and family counselors and therapists. Topics will include: 1) history and philosophy of the counseling profession; 2) knowledge of professional roles including consultation and group work; and 3) moral principles and virtues in counseling practice, training, supervision, and consultation. Spring semester. (This course is offered as a one-week intensive.)

CNS 538 Professional Issues and Ethics in Mental Health Counseling (3) A survey of professional identity, ethical standards, and legal codes for mental health counselors and therapists. Topics will include: 1) the history and philosophy of the counseling profession; 2) knowledge of professional roles including consultation and group work; and 3) moral principles and virtues in counseling practice, training, supervision, and consultation. Spring semester. (This course is offered as a one-week intensive.)

CNS 539 Professional Issues and Ethics in School Counseling (3) The course is a survey of professional identity, ethical standards, and legal codes for professional counselors with emphasis on elementary and secondary school counseling. Students are to demonstrate knowledge of and ability to apply, in decision-making situations, ACA and ASCA ethical standards, the Pennsylvania Code of Professional Practice and Conduct for Educators, and legal obligations and public policies that address institutional and social barriers that impede access, equity, and success of all counseling clients, particularly K-12 students. Special emphasis is on professional issues, ethical standards, and legal codes relevant to the school counselor's role with diverse students and English language learners. Spring semester. (This course is offered as a one-week intensive.)

CNS 541 Clinical Mental Health Counseling (3) Assumptions and roles of mental health counseling within the context of the community and its health and human service systems, including functions and relationships among interdisciplinary treatment teams, and the historical, organizational, legal, and fiscal dimensions of the public and private mental health care systems. Fall semester.

CNS 543 Advanced Mental Health Counseling Skills (3) This course is designed for advanced students to learn in depth the theory and practice of various individual counseling orientations as these counseling perspectives are applied with clients over time. The theoretical models addressed will be reviewed and critiqued for strengths, weaknesses and applicability to various client populations. The specific counseling theories covered will vary from semester to semester. Prerequisite: CNS 521.

CNS 545 Substance Abuse Counseling (3) This course provides a basic introduction to the assessment and counseling treatment of clients manifesting alcohol and substance abuse disorders. Theoretical formulations, etiological issues, presenting symptomatology, and courses of these disorders, and interventions models will be addressed. Spring semester.

CNS 548 Psychopharmacology (3) A review of the most commonly used drugs for psychological conditions, their effects and their side effects, and the methods of action. Particular attention is paid to the synaptic events relevant to drug actions. Summer semester.

CNS 563 Organization and Management of School Counseling Programs (3) The course covers the nature, development, and management of school counseling programs, and differences between elementary and secondary school contexts. Students will develop knowledge of concepts, skills, and issues necessary to function effectively as school counselors. Students will be able to assess, plan, and integrate the elements of a comprehensive program that reflects the programmatic and ethical standards of the American School Counselor Association, including structuring of essential services to foster personal, social, educational, and career development in students. Summer semester.

CNS 564 Curriculum, Learning, Inclusion, and Instruction for School Counselors (3) The course focuses on school counselors in K-12 inclusive settings as they work with diverse learners, English language learners, parents, administrators, teachers, and community agents. Students will become familiar with special education guidelines, multidisciplinary assessment, educational planning, and behavioral intervention. They will be able to articulate the standards-driven nature of curriculum, learning theory, instructional practice, and inclusion. Focus will be on 1) inclusive counseling practices, 2) types of disabilities and implications for learning; and 3) classroom management, 4) school-wide behavioral support, 5) literacy and instruction in core areas, 6) English Language Learning, 7) instructional methods, and 8) Evidence-Based academic and behavioral interventions.

CNS 565 School Counseling Practicum (3) The 100-hour experience places students in a professional setting in which they will develop counseling skills with school-aged children. Students in the course are required to have 40 hours of direct service contact with K-12 students through individual or group counseling. They also participate in 1½ hours of weekly group supervision with the Geneva practicum instructor and, in addition, receive an hour a week of additional supervision with the course instructor. Prerequisites: Requires Acts 33 and 34 clearances, FBI clearances, a recent TB test, and proof of malpractice insurance. Fall semester.

CNS 566 Elementary School Counseling Internship (3) The internship is a field experience in which students apply knowledge and hone skills needed for successful practice as an elementary school counselor. This is a 300-hour internship under the supervision of an approved site supervisor who is a practicing elementary school counselor. Students are to demonstrate mastery-level performance in: 1) the essential services of counseling, consulting, coordinating, and appraising; 2) planning and implementation of classroom guidance activities; 3) professional conduct in interactions with field and college supervisors, students, teachers, administrators, and community members; and 4) such other activities defined as the responsibility of the school counselor at their elementary school placement. Supervision is for one hour weekly in the field and 1½ hours per week on campus. Prerequisites: CNS 565. Requires Acts 33 and 34 clearances, FBI clearances, a recent TB test, proof of malpractice insurance, and a passing grade on the comprehensive exam. Spring semester.

CNS 567 Secondary School Counseling Internship (3) The internship is a field experience in which students apply knowledge and hone skills needed for successful practice as a secondary school counselor. This is a 300-hour internship under the supervision of an approved site supervisor who is a practicing secondary school counselor. Students are to demonstrate mastery-level performance in: 1) the essential services of counseling, consulting, coordinating, and appraising; 2) planning and implementation of classroom guidance activities; 3) professional conduct in interactions with field and college supervisors, students, teachers, administrators, and community members; and 4) such other activities defined as the responsibility of the school counselor at their secondary school placement. Supervision is for one hour weekly in the field and 1½ hours per week on campus. Prerequisites: CNS 565. Requires Acts 33 and 34 clearances, FBI clearances, a recent TB test, proof of malpractice insurance, and a passing grade on the comprehensive exam. Spring semester.

CNS 575 Foundations of Marriage, Couple, and Family Counseling/Therapy (3) This course is designed to introduce students to the history, philosophy, etiological premises that define the practice of marriage and family counseling/therapy. The domain of professional ethics, the legal system, and professional organizations pertaining to the field will be presented. Professional issues will be presented as well as implications pertaining to social, cultural, diversity, and equity pertaining to couples and families. Students will articulate a foundation view of marriage, couple, and family counseling consistent with their own biblical worldview. Summer semester.

CNS 576 Contextual Dimensions: Marriage, Couples, and Family Counseling/Therapy (3) This course is designed to introduce students to couples and families as social and theological systems with an understanding of counseling/therapy through the development of the marital and family lifestyle. To be studied are: 1) the family lifestyle; 2) marital and family issues; 3) developmental stages; 4) healthy family functioning; 5) socioeconomic status; 6) religious belief systems; 7) Geneva College

cultural heritage; 8) family of origin; and 9) intergenerational influences. Focus will also contain a variety of treatment issues that couples and families face.

**CNS 577 Family Counseling/Therapy (3)** This course is designed for students to learn knowledge and skills for the practice of family therapy. Models of family therapy will be reviewed and critiqued in light of the Christian worldview of the student. Techniques, assessments, interventions, and strategies will be discussed and role-played to develop preventative approaches as well as resolving specific problems that impede family functioning. Fall semester.

**CNS 578 Marital and Couple Counseling/Therapy (3)** This course is designed for students to learn knowledge and skills for the practice of couple and marital therapy. Models of marital therapy will be reviewed and critiqued in light of the Christian worldview of the student. Techniques, assessments, interventions, and strategies will be discussed and role-played to develop preventive approaches as well as resolving specific problems that impede marital functioning. Fall semester.

**CNS 579 Child and Adolescent Counseling Skills (3)** This course will focus specifically on counseling skills used to work with children and adolescents. This differs from the current counseling skills course, which focuses on counseling skills in general. This course will incorporate both the American School Counseling Association Personal/Social Domain standards for students as well as CACREP. Students will learn evidence-based best practices and user-friendly techniques for counseling this unique and often challenging population. The integration of the child's faith into assessment and treatment will also be discussed. Summer semester.

**CNS 581 Marriage and Family Counseling/Therapy Practicum (3)** This course is a 100-hour experience on and off campus under supervision of an experienced master's-level clinician. It includes 40 hours of direct service with couples or families; group supervision 1½ hours per week on campus; and one hour of additional faculty supervision per week. Development of clinical skills is a key focus of the practicum. Prerequisites: CNS 521 and CNS 536. Acts 33 and 34 clearances and proof of malpractice insurance. Fall Semester.

**CNS 582 Marriage and Family Counseling/Therapy Internship (6 credits over two semesters)** This course is a 600-hour experience off campus under supervision of an experienced master's-level clinician involving direct service with couples, families, or individuals with marital or family issues. Supervision is held for one hour weekly in the field and in group supervision for 1½ hours per week on campus. Students must be registered for this course while completing the internship. Prerequisites: CNS 581. Requires Acts 33 and 34 clearances, proof of malpractice insurance, and a passing grade on the comprehensive exam. Spring semester.

**CNS 586 Mental Health Counseling Practicum (3)** This course is a 100 hour experience which includes 40 hours of direct service with individuals and groups; group supervision 1½ hours per week on campus; and one hour of additional faculty supervision per week. Open only to students who have been admitted to the program as degree seeking students. Prerequisites: CNS 536 and CNS 521. Requires Acts 33 and 34 clearances and proof of malpractice insurance. Fall semester.

**CNS 587 Mental Health Counseling Internship** This course is a 600-hour experience off campus under supervision of an experienced master's-level clinician and includes direct counseling and service hours with individuals and groups. Supervision is held for one hour weekly in the field and in-group supervision 1½ hours per week on campus. Open only to students who have been admitted to degree candidacy and who have completed all other coursework. Students must be registered for this course when completing the internship as the internship may extend beyond one semester. Prerequisites: CNS 586. Requires Acts 33 and 34 clearances, proof of malpractice insurance, and a passing grade on the comprehensive exam. Spring semester.

**CNS 591 Special Study (1-3)** A seminar or directed study on an announced topic or set of topics. Credit specified at registration. Repeatable for credit with a new topic.

**CNS 595 Independent Study (1-3)** Individualized advanced study, research, or project development in a clearly defined and limited area not covered by a regular course. The work should be primarily initiated by the student but undertaken with the consent, regular guidance, and direction of an instructor qualified in the area. Prerequisites: approval by the instructor and the department chair.

# Master of Arts In Higher Education

## Mission and Outcomes

The mission of the Master of Arts in Higher Education (MAHE) program is to cultivate a vision for higher education that is rooted in a Christian view of life, characterized by a consideration of foundational issues, and committed to the preparation of perceptive and principled leaders for colleges and universities.

Our sincere hope is that students who complete the MAHE program will have made substantial progress towards the following educational outcomes:

- Articulate the relevance and application of a Christian view of life to the study and practice of higher education;
- Understand contemporary higher education through theological, philosophical, historical, and sociological lenses;
- Advocate and model a holistic human development in higher education settings, with a particular emphasis on college students' success in and out of the classroom;
- Develop beliefs, knowledge, attitudes, and skills that reflect a professional identity rooted in Christian vocation; and,
- Effectively communicate, in writing and in speaking, the results of an exploration of a specific topic within the field of higher education.

## Academic Information

The MAHE program comprises 36 credit hours. All students take the 30-credit hours foundations core designed to ensure a broad grasp of the field of higher education, clear insight into the nature of learning and the learner, and principles of professional practice—all in the context of a Christian perspective. Two elective courses (6 credit hours) also are required.

## Program Delivery

The MAHE program can be pursued in the following formats depending on a student's time and commitments:

In the accelerated program, students earn degrees by taking core classes once a week over a continuous 20-month period, beginning each September, at Geneva College. A one-week break often follows each course and two longer breaks occur at the Christmas holidays and in the summer respectively. Students typically complete elective courses by enrolling in one of the institute programs. Most students in the accelerated program hold graduate assistantships at Geneva or at nearby colleges and universities.

Graduate assistantships are available to students enrolled in the accelerated program. The professional positions available for assistantships may include residence life, admissions, campus ministry, coaching, teaching, or student activities. Graduate assistantships normally are nine-month positions (usually renewable for the second year) and they include a one-third reduction in tuition as well as a monthly stipend.

The institutes program allows students to pursue a master's degree without having to leave their current positions. Institutes are offered in mid-June and early January. Students can take either one or two courses per week at the two-week summer institute. At winter institute, students can take one course offered in early January. Readings, assignments, and ongoing conversations are undertaken during the semester or semesters following each institute.

The institutes program is the ultimate in flexibility. Students who desire to finish the MAHE in three years may take four courses each year by attending both weeks of the summer institute (or a combination of summer and winter institutes). However, students who desire to take longer to complete the program may opt for two or three courses per year, utilizing any combination of the summer and winter institutes.

The self-directed studies program offers students the opportunity to design their pursuit of the MAHE in the most feasible way. That is, students interested in this format can simply choose courses whenever they are offered until they fulfill all of the program requirements, whether it takes two to three years or four to five years for them to do so.

Foundations core (30 credit hours):

HED 501: Foundations of Learning and Knowledge	3
HED 502: Historical Foundations of Higher Education	3
HED 503: College Students in America	3
HED 504: Foundations of Higher Education	3
HED 505: The Higher Education Professional	3

HED 510: College Student Success	3
HED 517: Capstone in Higher Education	3
HED 521: Leadership and Change	3
HED 592: Practicum in Higher Education	3
Plus <b>one</b> of the following:	
HED 531: Foundations of Campus Diversity	3
HED 532: Comparative Higher Education	3
Elective Courses (6 credit hours/choose two; some of these courses are offered more frequently than others):	
HED 508:Sociological Foundations of Higher Education	3
HED 511: Residence Life	3
HED 513:Counseling and Advisement	3
HED 514: Contemporary Trends in Higher Education	3
HED 515:Foundations of Educational Research	3
HED 523:Legal Issues in Higher Education	3
HED 534:Assessment and Retention	3
HED 540:Vocation of Teacher	3

## Foundations Core

HED 501 Foundations of Learning and Knowledge (3) This course explores the major philosophic systems that have functioned as foundations for western higher education, and investigates the interplay of theories of knowing and models of learning in the context of higher education. In either case, it pays special attention to the use of biblical categories to analyze and to direct the discussion toward the development of normative and practical alternatives for higher education.

HED 502 Historical Foundations of Higher Education (3) This course provides a general overview of the historical development of American colleges and universities, beginning with the colonial period and continuing through the current scene. The course will also explore the interplay of Christian faith with the historical development of American higher education.

HED 503 College Students in America (3) This course offers a comprehensive overview of American college students. More specifically, it provides a multifaceted profile of who is currently in college. The course also examines and critiques major human development theories that attempt to explain students' development. In this context, the course considers the feasibility of a Christian theory of students' development during the college years.

HED 504 Foundations of Higher Education (3) This course is designed to introduce students to what might be called the worldviews that shape and have shaped the academy. More specifically, students will uncover and analyze underlying assumptions, perspectives, and practices that are present in American higher education historically and presently. Students will also be introduced to a biblical worldview as a framework for examining other worldviews that are currently operating in the American academy.

HED 505 The Higher Education Professional (3) This course examines the concepts of vocation, work, and faith commitment particularly as they take shape within the context of higher education. We will discuss biblical and theological perspectives on vocation and work in an effort to assess their merit and relevance for professional and personal life. In addition, we will consider the issue of leadership and its relationship to personal and professional development.

HED 510 College Student Success (3) Since national six-year college graduation rates hover at approximately 50%, it seems reasonable to inquire about the extent to which the American colleges and universities are effectively promoting student success in college. This course takes on this "problem" by examining research and literature about college student success to identify particular policies, programs, and practices that promote students' success in American higher education.

HED 515 Foundations of Educational Research (3) This course is intended to provide an introduction to various research design and methodology skills that are relevant to educational research. We will also examine the nature of the research process as well as the roles of researcher. Our hope is that students will become both more proficient and more accustomed to understanding, valuing, and interpreting educational research as well as designing, conducting, and presenting effective research.



HED 517 Capstone in Higher Education (3) As a capstone course, this course is intended to provide integration, cohesion, and summary to the entire course of study. We will revisit and reflect upon the foundational hopes of the program for student learning. Likewise, students will complete a culminating project that illustrates their interests, knowledge, and proficiencies within the field of higher education.

HED 521 Leadership and Change (3) This course examines literature and research on leadership planning and practice in American colleges and universities, particularly in the context of addressing macro (societal) and micro (organizational) change effectively. In so doing, we will attempt to evaluate ways in which a Christian perspective may provide understanding, critique and direction to academic leadership in response to changing landscapes.

HED 531 Foundations of Campus Diversity (3) This course will explore the complex issues facing university and college professionals when addressing diversity and multiculturalism. We will examine the development of dominant and dominated cultures in the United States and how an increased understanding in these regards might shape how higher education professionals do their work. A Christian perspective will ground and shape the dialogue with special attention to how Christians have attempted to address issues of diversity in the past. Distinctions will be made between individual and institutional diversity challenges, and we will examine specific policies in various areas of the academy. Specific attention will be given to dialogue on issues of gender, class, race, and religious affiliation.

HED 532 Comparative Higher Education (3) This course studies the higher education systems of selected other countries in an effort to understand such systems on their own terms, as well as to utilize the higher education systems of other countries as a lens through which to understand the American system more clearly. This course will involve travel to selected countries to explore their higher educational policies, practices, and people first-hand while also examining relevant literature and research about each respectively.

### **Elective Courses**

HED 508 Sociological Foundations of Higher Education (3) This course examines various contexts in which American higher education currently operates. We will explore macro contexts that focus on higher education systems and include issues such as classification taxonomies, institutional diversity, accountability, governance, and society's investment. We will also examine micro contexts that focus on colleges as organizations and include issues such as institutional missions and values, leadership, decision-making, and organizational change. Understanding larger and smaller contexts ostensibly offers significant insight into how to function more effectively in the academy.

HED 511 Residence Life (3) This course examines the development of residence life in American higher education. It will explore theoretical issues such as residence life as education, as well as more functional issues such as staffing and supervision, program development and assessment, architectural design, and addressing relevant personal and structural problems. The course emphasizes translating theoretical understanding into practical initiatives to enhance student learning.

HED 513 Foundations of Counseling and Advisement (3) This course is designed to provide a working knowledge of the theories, concepts and competencies necessary for students interested in pursuing a career in student affairs/higher education. In keeping with a scholar/practitioner focus, this course will provide theoretical underpinnings and practical tools associated with counseling, advising and mentoring college students including professional association guidance and standards, developing communities of care and a mentoring culture, emergency and crisis response, legal and ethical concerns, counseling diverse populations, counseling for life-calling, and academic advising.

HED 514 Contemporary Trends in Higher Education (3) Though this course will be offered relatively infrequently or on special occasions, it provides an opportunity to examine specific topics in contemporary higher education such as technology, college costs, student preparedness, non-traditional learning models, innovative pedagogy and the like. As such, the course offers a means to examine powerful developments and trends in the academy of which professionals must be apprised and for which discernment is critical.

HED 523 Legal Issues in Higher Education (3) This course will discuss current policies and legal concepts concerning American institutions of higher education. The aim of this course is to develop in the student a compass for spotting possible legal concerns that may arise in a variety of professional settings. Students will have the opportunity to weigh and balance the sometimes competing rights and responsibilities of institutions, staff, and students through lecture, discussion and case studies.

HED 534 Assessment and Retention (3) This course examines the roles, theories and practices of assessment and retention in American higher education. We will introduce students to factors that contribute to effective assessment and retention practices, implementation strategies and models, and various resources that provide continuing information and insight. We will also evaluate ways in which a Christian perspective may provide understanding, critique, and direction to assessment and retention conversations.

HED 540 The Vocation of Teacher (3) In this course, students examine various aspects of the college professorate in contemporary academe. Students will discuss and critique particular demographic descriptors of the academic profession and the numerous roles that faculty members fulfill. In addition, students will be challenged to bring Christian criteria to bear on the nature and expression of the academic calling.

HED 592 Practicum in Higher Education (3) This course is intentionally connected to the contextualized learning experiences that all students are required to complete, and emphasizes hands-on professional opportunities and focused reflection of such opportunities. Students will explore various resources in the field of higher education, consider relevant insights from experienced professionals and professional opportunities (e.g., workshops, conferences, etc.) and be challenged to more fully understand the interplay between beliefs, ideas, and professional practice.

## **Master of Business Administration**

*Nationally accredited by the Association of Collegiate Business Schools and Programs*

### **Mission**

The mission of the Master of Business Administration (MBA) program is to prepare men and women for leadership by providing learning experiences which consider business principles within our faith context. We believe that business is a calling of God, and that there is an ever-increasing need for managers acting in biblically sound ways. There is an understanding that such a program cannot reduce the rigor and content of a management program, since we must strive for excellence in all that we do. In light of this mission, the curriculum and instruction focuses on the belief that the business vocation is inseparably coupled with one's faith and core beliefs. This program will provide the unique opportunity for men and women committed to Jesus Christ and seeking the advancement of His Kingdom to gain knowledge and skills for the effective accomplishment of that goal.

### **Program Outcomes**

The Master of Business Administration program provides students with the learning platform to develop the essential knowledge, skills and competencies to be competent business practitioners through conceptual and application-oriented learning. Additionally, the program equips students with the ability to articulate and integrate the pervasive and critical elements of sound Biblical and ethical principles and a contemporary global business perspective into managerial decision-making.

### **Program Description**

The MBA program courses are offered in five 9-week terms each calendar year. Classes are offered on Monday, Tuesday, Wednesday and Thursday evenings. Classes typically begin at 6:00 p.m. and end at 10:00 p.m. The goal of this format is to allow working adults an opportunity to attend classes one night each week and complete the 36-hour program in approximately two and one half years. The program scheduling also allows students to finish in one year if they take more than one course per term. Students who are required to take the three leveling classes will be able to complete the program in approximately three years if they take courses one at a time.

### **Leveling Course (3 Credit Hours)**

A leveling course (Business Law) is required for students who do not have an undergraduate business degree (BSBA) from an accredited college or university. Students lacking the Common Professional Component of business study (as defined by the ACBSP) will be required to satisfy the component content prior to receiving regular status in the MBA program. Students required to take the Business Law leveling course can take BUS 311 offered by Geneva College in the undergraduate program, or any undergraduate Business Law course offered by an accredited college or university.

### **Core requirements (30 credit hours)**

BUS 505: Corporate Finance	3
BUS 510: Financial Management	3
BUS 515: Financial and Managerial Accounting	3
BUS 520: Management Thought and Application	3

BUS 530: Management Information Systems/Decision Support Systems	3
BUS 540: Marketing Management	3
BUS 550: Human Resource Systems/Organizational Behavior	3
BUS 560: Biblical Management and Ethics	3
BUS 570: Managerial Economics	3
BUS 590: Strategic Business Policy	3

In addition to the above, students must select one of the following MBA Options/Concentrations:

**General MBA (36 credit hours plus leveling, if necessary)**

All of the above core courses plus any two electives from the following:

BUS 511 Investment Theory & Applications	3
BUS 516 Valuation & Corporate Investments	3
BUS 541 Buyer Behavior	3
BUS 545 Advanced Marketing	3
BUS 580 Research Methodology	3
BUS 581 Project Management	3
BUS 585 Operations Management I	3
BUS 586 Operations Management II	3

**Applied Management Concentration (42 credit hours plus leveling, if necessary)**

All of the above core courses, two electives from the list above, plus 1 credit of Internship per registered term.

**Finance Concentration (36 credit hours plus leveling, if necessary)**

All of the above core courses, plus:

BUS 511 Investment Theory & Applications	3
BUS 516 Valuation & Corporate Investments	3

**Applied Finance Concentration (42 credit hours plus leveling, if necessary)**

All of the above core courses and Finance Concentration courses, plus 1 credit of Internship per registered term.

**Marketing Concentration (39 credit hours plus leveling, if necessary)**

All of the above core courses, plus:

BUS 541 Buyer Behavior	3
BUS 545 Advanced Marketing	3
BUS 580 Research Methodology	3

**Applied Marketing Concentration (42 credit hours plus leveling, if necessary)**

All of the above core and Marketing Concentration courses, plus 1 credit of Internship per registered term.

**Operations Management Concentration (45 credit hours plus leveling, if necessary)**

All of the above core courses, plus:

BUS 580 Research Methodology	3
BUS 581 Project Management	3
BUS 585 Operations Management I	3
BUS 586 Operations Management II	3
EGR 423 Quality Engineering	
or EGR 371 Operations Research or others approved by MBA Director	3

**Applied Operations Management Concentration (51 credit hours plus leveling, if necessary)**

All of the above core and Operations Management Concentration courses, plus 1 credit of Internship per registered term.

## **Course Descriptions (30 credit hours)**

Core courses differ from courses in the undergraduate program in that the graduate program will significantly focus on the managerial perspective rather than an introduction to the principles of the different business functions. As such, the core courses will build on the information provided by the undergraduate courses. This managerial perspective will be aimed at ensuring that students are able to think critically, analyze situations, and apply sound business techniques, knowledge and Biblical wisdom. Comparative analysis will go beyond standard financial analysis, seeking to evaluate the effect of emphasis upon self and power often found in contemporary organizations relative to a biblical perspective on human behavior, character, and appreciation of diversity, valuing all of God's creation.

There are 10 courses that comprise the core knowledge portion of the master of business administration program. These courses expand upon the common professional component of the field as required by the ACBSP.

### **Core Courses**

**BUS 505 Corporate Finance (3)** The study of key financial concepts including capital budgeting, cost of capital, risk, and return, cash flow analysis, and an understanding of financial statements. Prerequisite: BUS 515.

**BUS 510 Financial Management (3)** Examines the nature and significance of managing the finances of the firm; biblical financial principles; significance of financial ratios and interpretation of financial statement items for managerial decision making, ethical issues regarding financial decisions. Prerequisites: BUS 505 recommended; BUS 515 or permission of the instructor.

**BUS 515 Financial and Managerial Accounting (3)** The study of accounting for the manager; emphasis on financial reporting, financial performance evaluation, ethical issues, and cost accounting.

**BUS 520 Management Thought and Application (3)** This course examines the history of management thought, a biblical perspective on management, and contemporary application. Examines the factors that influence individual work performance, organizational effectiveness and applied techniques for improving organizational performance.

**BUS 530 Management Information Systems/Decision Support Systems (3)** The integration and application of computing resources by the firm to aid strategic and ethical decision making and competitiveness; principles of managing production and operation of facilities and automated decision making technologies.

**BUS 540 Marketing Management (3)** Examines the marketing mix and its role to strategically position the firm; course uses a consumer product-based simulation to practice management decision-making and competitive behavior.

**BUS 550 Human Resource Systems/Organizational Behavior (3)** The design and implementation of strategic human resource systems from a general management perspective. Content includes organizational assessment, biblical integration of HR systems, development of HR strategy, organizational theory, legal compliance, contemporary trends, HR issues, and the relationship of HR systems to organizational performance.

**BUS 560 Biblical Management and Ethics (3)** Within the context of Scripture, principles are identified, discussed, and applied to business problems and situations including businesses' obligations to society and individuals' responsibility to organizations.

**BUS 570 Managerial Economics (3)** Economic issues and economic analysis as applied to managerial decision-making. Evaluating the impact of international trade theory, taxation, and resource allocation upon the business organization.

**BUS 590 Strategic Business Policy (3)** Strategic management and business policy issues facing the general manager; a comprehensive application of the various managerial applications derived from the core classes. Cultivation and utilization of skills in analysis, diagnosis, and development. Prerequisite: This course may only be taken after the completion of 21 credit hours of MBA courses including BUS 510, BUS 515, and BUS 540, or with the permission of the MBA program coordinator.

### **Elective Courses**

**BUS 511 Investment Theory & Applications (3)** Various topics in the uses and pricing of derivative securities, including options forwards, futures, and swaps. Also addressed are applications of return factor models, both for assessing portfolio

risk and in modeling the required expected return on an individual security. Every other year (Even years). Prerequisite: BUS 505.

**BUS 516 Valuation & Corporate Investments (3)** Valuation plays a key role in many areas of Finance-public and private offerings, mergers, and acquisitions, LBOs, intellectual capital, and portfolio management. This course is about the valuation of real assets and capital expenditure decisions by corporations. Basic valuation tools, relative valuation models, and real option models are addressed. Every other year (Odd years). Prerequisites: BUS 515, BUS 505, BUS 510 recommended.

**BUS 541 Buyer Behavior (3)** This course focuses on the role of buyers in the marketing process. Buyer behavior in the consumer marketplace as well as the organizational buying process is examined. The study of buying behaviors enhances understanding of what marketing strategies are likely to be effective, how humans operate in the marketplace, and what kind of affective, cognitive, and social mechanisms enter into the purchasing decision. A sampling of specific topics addressed includes the role of attitudes, learning and memory, and lifestyles and culture in the buying decision. (Every other year (Even years).

**BUS 545 Advanced Marketing and Promotions (3)** This course is an advanced study of marketing systems in the American economy. Included is the identification of the activities involved in the flow of goods among manufacturers, brokers, wholesalers, retailers, and consumers. Specifically, the elements of the Marketing Mix and their role in strategically positioning the firm is closely examined. Also, the nature of demand, costs and pricing, business models, channel theory, product theory, and sales promotion are presented. Every other year (Odd years).

**BUS 580 Research Methodology (3)** Utilization of research tools and quantitative techniques used in business with application to current policy and decision-making. Multivariate statistics and quantitative analysis tools will be applied.

**BUS 581 Project Management (3)** Teach student to master the most proven methods in project management as well as new techniques emerging from current industry and today's most recent research. Introduce manual techniques perfected during the past 50 years and progressive automated techniques, all consistent with the latest PMBOK® Guide and integrated with Microsoft® Project. Students first practice manual techniques to ensure that they fully grasp the principles behind the methods before learning to use MicrosoftProject® to complete tasks. Students will build strong portfolios to showcase their skills as they create specific deliverables for real-world projects, working by themselves or as part of a group. To ensure that students understand the established standards in project management today and to prepare them to become Certified Project Management Professionals (PMP®) if they choose, all course content is consistent with the knowledge areas and processes of the latest fourth edition of the PMBOK® Guide.

**BUS 585 Operations Management I (3)** Operations Management I is the first course of two designed to convey an overview of the basics of firm operations for product and service-oriented businesses. Production and operations vocabulary is emphasized as well as the qualitative and quantitative aspects of (1) the Design of Goods and Services, (2) Process and Capacity Design, (3) Forecasting, (4) Inventory, (5) Quality Control and Statistical Process Control, (6) Aggregate Planning and Scheduling, and (7) Facilities Maintenance & Reliability. In addition, all of the above areas of operations are examined from human resources, materials, capital, and equipment perspectives. Every other year (Even years).

**BUS 586 Operations Management II (3)** Operations Management II is the second of two courses designed to convey an overview of the basics of firm operations for product and service-oriented businesses. Production and operations vocabulary is emphasized as well as qualitative and quantitative aspects of (1) Material Requirements Planning (MRP), (2) Supply Chain Management, (3) Location Selection, (4) Layout Design, (5) Job Design, and (6) Operations Strategy. In addition, all of the above areas of operations are examined from human resources, materials, capital, and equipment perspectives. Every other year (Odd years).

**BUS 591 Special Topics (3)** Elective courses will be offered during the various academic terms based on the needs of students and on faculty availability. Topics may include employment law, international business, investments, legal issues in business, and total quality management.

**BUS 593 Internship (1)** A work-study type project either on or off campus, designed to expose the student to an actual workplace experience. A student must spend 45 hours at the workplace site for one credit hour credit. Internships are credit/no credit only.

# Master of Science in Cardiovascular Science

## Mission

The Master of Science in Cardiovascular Science will provide comprehensive training in the clinical areas of Invasive Cardiology and Electrophysiology. This will produce broadly trained cardiac health professionals who have a well integrated understanding of the cardiovascular system. Graduates of the program will provide a high level of assistance and expertise to laboratory cardiologists in a variety of hospital settings. The educational process will be committed to training and educating competent servant leaders who embrace cardiovascular technology to provide safe, quality, and compassionate patient care.

## Program Outcomes

### *Overall goal*

To prepare excellent professionals in the cognitive (knowledge), psychomotor (skills) and affective (behavioral) learning domains for the practice of invasive cardiology and electrophysiology in the allied health field of cardiovascular technology.

### *Curricular Outcomes*

The student will exhibit competent general knowledge required for the practice of invasive cardiology and electrophysiology.

The student will demonstrate a high level of clinical skill in the areas of invasive cardiology and electrophysiology.

The student will demonstrate appropriate and professional behavioral skills in the health care setting.

The student will seek to become professionally involved.

### *Program Training Site*

All clinical and didactic instruction is provided at our clinical affiliate hospital INOVA Fairfax in Falls Church, VA. The Program is certified by the State of Virginia (SCHEV).

## Program Description

The MS program will consist of six semesters of clinical and didactic instruction.

The *first year of study* will cover the foundations of invasive cardiology and consists of didactic and clinical exposure to diagnostic and interventional cardiac catheterizations. The first year will be divided into three semesters. Clinical rotations occur in the second and third semesters.

The *second year of study* also consists of three semesters and covers electrophysiology procedures including diagnostic and interventional techniques. Other courses cover health care management, statistics, and ethics and as well clinical expertise in electrophysiology techniques and practices. Students will also complete a clinical research project during their second year.

## Course Descriptions

CVS 505 Introduction to the Medical Environment (1) Orientation to the hospital, medical terminology, medical library, medical records, basis of medical ethics. Fall semester.

CVS 510, 511, 512 Cardiovascular Anatomy and Physiology I,II, III (3,3,3) Emphasis on normal and pathological coronary anatomy, ventricular function and congenital heart disease. The student will be able to distinguish various pathologic conditions and understand the effect on the cardiovascular system. The student will be able to collaborate with other health care professionals and integrate this knowledge to patient care. Fall semester.

CVS 515 Monitoring Instrumentation and Techniques (2) Basic electronics and physics of monitoring systems, pressure transducers, fluid dynamics. Catheter insertion techniques, hemodynamic profiles. Fall semester.

CVS 520, 521 Cardiac Catheterization Laboratory: Practices and Procedures I,II (3,3) Principles of x-ray imaging, radiation safety, catheterization techniques and equipment., hemodynamic calculations. The student will develop skills to integrate this knowledge to the clinical rotations and care of patients. Fall semester.

CVS 525 Gas Exchange and Fluid Balance (3) An integrated look at the lung and kidneys in pH homeostasis, electrolyte balance and gas transport. The student will be able to review clinical laboratory information and analyze the status of a patient and understand the implications of the data. Fall semester.

CVS 530 Electrophysiology and Electrocardiography (2) Emphasis on arrhythmias and infarction patterns. The student will become familiar with brady and tachy arrhythmias as well as myocardial infarction interpretation. Fall semester.

CVS 535, 536 Clinical Laboratory Information and Instrumentation I, II (1,1) Statistical and quality control methods, interpretation of medical literature, blood gas, electrolyte and coagulation measurement in the cardiac cath. Lab. The student will learn to integrate these quality control and clinical laboratory methods within the clinical practice. Fall semester.

CVS 550, 551 Cardiovascular Pharmacology I, II (1,1) Principles of administration and hemodynamic and electrophysiologic effects of cardiovascular drugs and other medications. This seminar will cover the relationship of pharmacology to caring for patients and allow the student to apply safe methods of medication administration. Fall semester.

CVS 555 Basic and Advanced Cardiac Life Support (1) Preparation for certification by the American Heart Association for Basic Life Support and Advanced Cardiac Life Support. At the end of this course the student will be able to assess and treat various adult life support conditions. The student will take the nationally recognized AHA courses to complete the course successfully. Spring semester.

CVS 532 Medical and Surgical Treatment of Cardiac Disease (2) Overview of therapeutic measures for treatment of cardiac disease. Summer semester.

CVS 540 Clinical Practice Applications (1) Practical introduction to products and equipment for cardiac catheterization procedures. Hands-on practice to assist development of basic clinical skills. HIPAA and infection control presentations. Fall semester.

CVS 541 Clinical Practice (8) Spring semester.

CVS 542 Clinical Practice (12)

Clinicals            Cardiac Catheterization Monitoring Practice  
                         Cardiac Catheterization Scrub Practice  
                         Cardiac Catheterization Circulate Practice

Rotating clinical practice under the guidance of preceptors. Clinical skills are learned by observation and practice. Students are exposed to a variety of procedures and expected to function independently once skill sets are developed. Clinical skills sets are supported by academic instruction. Summer semester.

CVS 610 Cardiac Pacing and Defibrillation Techniques (3) To gain better understanding of cardiac electrophysiology. The class will incorporate basic science addressing molecular and structural causes of arrhythmias. The student will develop an appreciation for the complexity of diagnosing a patient with arrhythmia symptoms. Fall semester.

CVS 613 Mechanisms, Diagnosis and Management (3) The detailed anatomy and physiology of the cardiac conducting systems which provide a foundation for the understanding of common pathologies. Spring semester.

CVS 615 Electrophysiology Laboratory: Practices and Procedures (3) To systematically understand the stages of electrophysiology procedures and equipment. To understand the arrhythmic substrate, arrhythmia induction, techniques of differential diagnosis, and application of mapping and ablative techniques. Fall semester.

CVS 640, 641, 642 EP Clinical Rotations (8,8,12) Rotating clinical practice under the guidance of preceptors. Clinical skills are learned by observation and practice. Students are exposed to a variety of procedures and expected to function independently once skill sets are developed. Clinical skills sets are supported by academic instruction. (640-Fall, 641-Spring, 642-Summer semesters)

CVS 620 Advanced Electrophysiology Technology (3) Continuous new developments in cardiac resynchronization therapy require the clinician to be knowledgeable related to technologies and modalities of implantable devices. This class will help the student develop a more extensive knowledge of implantable devices. Spring semester.

CVS 622 Epidemiology and Biostatistics (3) The ability to understand the conceptual and practical aspects of biostatistics and epidemiology in health care is critical in understanding research and analyzing population data about disease. This survey course will improve the ability of the student to understand and apply these concepts. Fall semester.

CVS 624 Financial Implications in Healthcare (3) This course will discuss various principles in accounting, interest, and methods for valuation, cost ratio benefits analysis, Performa development, and business development. This course will discuss healthcare reimbursement, revenue streams, and capitation. Spring semester.

CVS 626 Principles of Health Care Management (3) This course will discuss the various principles of management and associated issues as they relate to the modern health care professional. The course will explore topics such as concepts of organizational management, decision making, strategic planning, SWOT analysis, resource management and allocation, conflict, and the concept of power. Spring semester.

CVS 630 Cardiac Pacing, ICD, Ablation, Technology Seminar (2) To develop understanding and perspective related to treating cardiac arrhythmias. This class will help the student synthesize the information related to therapy modalities and indications for those therapies. Emphasis will be on the appropriate use of technologies. These technologies will be intertwined with various therapies for treatment of cardiac arrhythmias, and the student will develop a holistic view of patient care within these parameters. Summer semester.

CVS 650 Ethical Issues in Health Care (3) The student will examine the ethical issues that confront healthcare providers and patients. The medical, scientific, moral, and socioeconomic bases of these issues and the decision making processes that providers and patients engage in are analyzed. Topics will include informed and voluntary consent, the role of institutional review boards, euthanasia, and the allocation of scarce resources. Summer semester.

CVS 690 Research Project (3) The student will collaboratively select a project or develop original research that addresses current trends in cardiovascular and electrophysiology technologies. This project may be a literature review or original research. The student will develop critical analysis techniques to evaluate research by using scientific models. The student will learn about advantages and disadvantages of quantitative and qualitative research methods. The project will then be presented in writing and oral presentation. Summer semester.

## **Master of Science in Organizational Leadership**

### **Program Description**

The Geneva College Master of Science in Organizational Leadership (MSOL) program is a pedagogically innovative graduate program that provides a practical blend of theory and field-based application. This program is housed in the department of leadership studies.

At the core of the MSOL program is the belief that the concept of leadership must be reconceptualized and applied in unique and innovative ways in order to meet the requirements of today's rapidly changing and complex organizations. This approach is interdisciplinary in nature, drawing upon the social sciences and organizational studies to develop the program's theoretical framework. In addition, the content flows directly out of Geneva's mission statement that is centered on developing servant-leaders. By delivering a biblically based program focusing on this concept, students have the potential to impact leadership in a variety of organizations throughout the region.

The MSOL program is designed to meet the unique academic and professional needs of working adults. This concept of adult education utilizes a cohort model in which 10 to 15 students begin the program together and take each course as a group according to the curriculum outline that is described in this catalog. Students can complete their master's degree in two years, meeting one night each week at convenient class locations throughout the greater Pittsburgh area.

### **Vision of the Department of Leadership Studies (DLS)**

Transformed lives ready to serve organizations as servant leaders.

### **Mission of the DLS**

To provide working adults the opportunity to become more effective leaders through faith-based leadership education, practice, and service.

### **Program Explanation**

The MSOL curriculum is interdisciplinary and biblically integrated in nature, and is delivered using a cohort structure at various locations within the Greater Pittsburgh area. In each cohort, faculty and students create an interactive learning community in which participants utilize theory to inform practice and practice to inform theory. As a result, students construct their own integrated model of organizational leadership, the capstone of the MSOL curriculum. Importantly, the



MSOL Program is an implementation of Geneva’s mission statement, in particular, the goal to “equip students for faithful and fruitful service to God and neighbor.”

## Program Outcomes

Graduates of the Master’s of Science in Organizational Leadership degree will be equipped to assume leadership roles in organizations. To do so, our graduates will:

1. Develop a critical understanding of organizational leadership principles and concepts.
2. Apply organizational leadership principles and concepts in leadership roles.
3. Verbalize personal and professional development changes.
4. Identify biblical principles of leadership.

## Program Highlights

The structure and delivery of the curriculum for the MSOL program is based on an innovative model of adult education emphasizing the following components:

- Two-year accelerated program
- Four-hour class sessions meeting one evening per week
- 12 to 17 adults per group or cohort who remain together and take the same classes in sequence for the entire program
- A facilitative, interactive classroom learning environment, drawing on the experience and knowledge of students and emphasizing the field-application of leadership and organizational theory
- Qualified, experienced, and caring faculty committed to supporting students towards the successful completion of the MSOL program; 80 percent have earned doctorates
- Textbooks and instructional material delivered to the classroom
- Only one registration
- Full-time student status allowing qualified students to apply for financial aid loan programs.
- Each cohort is assigned a faculty member as a mentor to follow the cohort and each student through the entire program

## Curriculum

36 credit hour total

### Term I—12 Credits Total

MOL 505: The History and Theory of Leadership	3
MOL 510: Leadership and Communication	3
MOL 550: Professional Development	3
MOL 515: Leadership and Ethics	3

### Term II—12 Credits Total

MOL 525: Leadership and Motivation	3
MOL 520: Research Methods	3
MOL 535: Leadership and Decision Making	3
MOL 540: Principles of Organizational Finance	3

### Term III—12 Credits Total

MOL 530 Leadership and Organizational Change	3
MOL 545: Leadership and Strategy	3
MOL 555: Integrated Leadership Project	6

## Course Descriptions

MOL 505 The History and Theory of Leadership (3) In this survey course, students explore both historical and contemporary leadership theories and models. Particular emphasis is placed on evaluating leadership theories from a Biblical perspective and the ways in which these theories can be applied in their own organizations. Students are also introduced to the concepts of worldview, culture, and paradigms and the effect that such concepts have on leadership practices.

MOL 510 Leadership and Communication (3) This course is designed to build and enhance the types of specialized organizational and interpersonal communication skills that are necessary to support effective leadership. The ability to use these skills to create commitment to organizational vision, goals, and workplace culture is a specific course focus. In addition, students examine various communication models, conflict resolution strategies, and the effect of diversity on communication.

MOL 515 Leadership and Ethics (3) The moral dimension of leadership is a primary consideration in this course as students explore the Biblical and philosophical foundations of ethics in relation to organizational behavior and leadership. Particular emphasis is given to examining the relational process between leader and follower and the critical roles played by ethics in helping to shape that relationship.

MOL 520 Research Methods (3) This course is designed to acquaint students with various research methodologies and to enable students to construct and develop data collection plans and data gathering instruments that can be used in ongoing workplace practice. The course emphasizes the use of qualitative methods in the context of conducting and interpreting research. Upon course completion, students will have gained the ability to identify issues in organizations that benefit from qualitative research analysis; develop an organizational culture description; and apply research skills in organizational settings.

MOL 525 Leadership and Motivation (3) This course investigates motivational and organizational psychology theories as a means of creating servant leadership models. In addition, strategies are investigated that organizational leaders employ to create environments conducive to high levels of self-motivation and growth among individuals in organizational settings. Specific Biblical applications are compared and contrasted with current theory.

MOL 530 Leadership and Organizational Change (3) Through a study of related theories and models, this course lays the foundation for an in-depth understanding of the dynamics of positive organizational change. In addition to investigating present and future trends in organizational change, students are shown how change can be implemented with Biblical, servant-leadership perspectives and how such change models can be sustained for the long term. As part of the course assignments, students gain experience by designing a change model and applying it to their own organizations.

MOL 535 Leadership and Decision Making (3) Decision-making theories, models, research, and techniques are explored in detail. Students will be able to apply these principles to various organizational settings. A heightened awareness of the place ethics and a Biblical worldview play in effective decision-making is a specific course focus. A decision-making model, aimed at addressing a specific organizational situation, is developed by each student to enhance his or her leadership skills.

MOL 540 Principles of Organizational Finance (3) Students are provided with a working knowledge of essential concepts that are used in understanding the financial picture of organizations. The application of those concepts for effective organizational leadership and decision-making is a key emphasis. In addition, students examine the importance that stewardship and ethics play in financial decision-making.

MOL 545 Leadership and Strategy (3) This course concentrates on the tools necessary for effective strategic leadership in today's organization. Throughout this course, current concepts such as reengineering, continuous improvement, benchmarking, alignment, organizational culture, and competitive advantage are applied in the traditional context of strategic planning. Strong emphasis is placed on the key tasks of strategic analysis, strategy formulation, and strategy implementation. Also, students examine biblical principles of vision, mission, and strategy. The analysis of organizational cases, using strategic planning tools, is a focus of course methodology.

MOL 550 Professional Development (3) This course is designed to provide students with an opportunity for self-assessment, reflection, and goal setting. Students discover how self-assessment can be used to develop their own professional goals as well as encourage professional growth among other individuals in their organizations. In addition, the concepts of vocation, calling, and gift identification are explored from both the professional development and Biblical literature perspectives.

MOL 555 Integrated Leadership Project (6) The ILP is a 6-credit academic endeavor that is developed over the course of the MSOL program experience, similar to a portfolio process. The ILP is a record, an expression of the student's individual conception of organizational leadership that describes how and why theories and concepts from each course contributes to a

developing perspective. It includes chapters related to each of the courses, an annotated bibliography on organizational leadership and a concluding chapter that summarizes the student's personal philosophy of organizational leadership.

## Master of Science in Leadership Studies

### Program Description

Designed for working professionals, the Leadership Studies program is modeled after Geneva's Adult Degree Programs. Students can complete their Master's in Leadership Studies degree in two years fully online. The Leadership Studies program includes a choice of three areas of specialization: Financial Leadership, Ministry Leadership, and Project Management and Leadership.

### Core Requirements (27 credit hours)

#### Term I- 12 credit hours

MLS 505 History and Theory of Leadership	3
MLS 510 Leadership and Communication	3
MLS 550 Professional Development	3
MLS 515 Leadership and Ethics	3

#### Term II- 9 credit hours

MLS 525 Leadership and Motivation	3
MLS 520 Research Methods	3
MLS 535 Leadership and Decision Making	3

#### Term III- 6 credit hours

MLS 545 Leadership and Strategy	3
MLS 555 Integrated Leadership Project	3

### Specialization Tracks:

#### Financial Operations

MLS 540 Leadership and Finance	3
MLS 561 Accounting Principles	3
MLS 562 Principles of Micro/Macroeconomics	3

#### Ministry Leadership

MLS 570 Mission, Vision, and Strategic Planning	3
MLS 571 Preventing Ministry Failure	3
MLS 572 Developing Leaders and Managing Resources in Ministry Leadership	3

#### Project Management and Leadership

MLS 580 Principles of Project Management	3
MLS 581 Managing Risk	3
MLS 582 Project Quality Assurance, Assessment & Evaluation	3

### Course Descriptions

MLS 505 History and Theory of Leadership (3) This course provides an overview of both the development and content of major leadership models and theories as applied in organizational contexts. Many issues regarding leadership and organizations will be explored such as the concepts of organizational culture, paradigm and worldviews, including both biblical and secular perspectives.

MLS 510 Leadership and Communication (3) This course explores the central role that communication plays in effective organizational leadership. In particular, leadership communication is critical to developing or changing organizational culture, which are key functions of leadership.

MLS 515 Leadership and Ethics (3) This course explores the relationship between leadership and ethics. Beyond just an examination of ethical systems and ethical issues, this course attempts to understand the ways in which ethics is central to the very act and process of leadership.

MLS 520 Research Methods (3) This course is designed to acquaint students with various research methodologies and to enable students to design and develop data collection plans and data gathering instruments that can be used in ongoing workplace practice. The course emphasizes the use of qualitative methods in the context of conducting and interpreting research.

MLS 525 Leadership and Motivation (3) This course emphasizes understanding the relationship between effective leadership and work motivation, with an emphasis on “engagement”. The course includes several theories of motivation, which will help in understanding some of the practices that exist in work organizations. The course also explores assumptions about human nature that form the basis for motivational theories and practices.

MLS 530 Leadership and Organizational Change (3) Through a study of related theories and models, this course lays the foundation for an in-depth understanding of the dynamics of positive organizational change. In addition to investigating present and future trends in organizational change, students are shown how change can be implemented with Biblical, servant-leadership perspectives and how such change models can be sustained for the long term. As part of the course assignments, students gain experience by designing a change model and applying it to their own organizations.

MLS 535 Leadership and Decision Making (3) This course explores and analyzes decision-making theories, models, research, and techniques for the purpose of applying them to current organizational trends and issues that require the efficient utilization of effective leadership and decision-making skills.

MLS 540 Leadership and Finance (3) Students are provided with a working knowledge of essential concepts that are used in understanding the financial picture of organizations. The application of those concepts for effective organizational leadership and decision-making is a key emphasis. In addition, students examine the importance that stewardship and ethics play in financial decision-making.

MLS 545 Leadership and Strategy (3) Course description unavailable at the time of catalog printing.

MLS 550 Professional Development (3) The Professional Development course is designed to provide students with an opportunity for self-assessment, reflection, and goal setting as encouraged by noted leadership authors and theorists.

MLS 555 Integrated Leadership Project (3) As a rapidly increasing amount of information becomes available from a variety of sources, the task of locating, evaluating, and applying information has become more complex. This course provides students with practical opportunities to develop skills in interacting with information in this environment. A ladder of assignments guides students through the process of building an annotated bibliography of sources. The searching and evaluative critical thinking skills that students develop will continue to serve them in their careers and in their lives as a whole as they seek to make informed decisions.

MLS 560 Leadership and Finance (3) This course provides an overview of the relationship between financial concepts and leadership. Many issues regarding economics, finance and leadership will be explored and will become practical and functional tools for examining the organization.

MLS 561 Accounting Principles (3) Accounting is the language of business. Accounting operates as a system to collect and communicate information about an organization and its performance. The numbers of accounting should reflect the organization’s operations and decisions, as well as, communicate results and information to users based upon their needs. Business persons, management and investors must be able to understand how the organization’s activities are reflected in the financial statements and how to access and use the accounting information. Users of financial statement information also need to understand the impact of Generally Accepted Accounting Principles (GAAP) and the important business elements, which are not directly reported in the financial statements.

MLS 562 Principles of Micro/Macroeconomics (3) This course examines consumption and production at the household, firm and industry level; explains methods of economic analysis and price formulation; and examines the various market structures and behavior of pure competition, monopoly, oligopoly, and monopolistic consumption. Additional course material explains the characteristics and operations of the national economy including the measurement of national employment, production and income, the role of money and banking, and international trade. Students also learn methods of economic analysis, the role of government, and economic policy.

MLS 570 Mission, Vision, and Strategic Planning (3) This course prepares the student for strategic planning in various ministry settings. It will also help students understand the Biblical concepts of Vision, Mission, Strategy, Style, and Values and focus on the ability to develop and apply these concepts to their own ministry setting.

MLS 571 Preventing Ministry Failure (3) This class will help the student better prepare themselves for the rigors of ministry, avoid common pitfalls, and prevent potential problems. It will deal with such significant issues as setting realistic expectations, creating professional and personal boundaries, and properly handling finances, stress, and time management. The course will also address how to promote healthy relationships with ministry boards, staff, and one's own family.

MLS 572 Developing Leaders and Managing Resources in Ministry Leadership (3) This course includes strategies for developing leaders, team building, and team dynamics. Time-management skills, managing financial resources, and promotion, service, and maintenance functions are discussed. In addition, ethical and legal issues are discussed, and students are challenged to lead ministries based on sound biblical, ethical and legal standards.

MLS 580 Principles of Project Management (3) This Project Management course examines project management in theory and practice and the roles and responsibilities of the project manager. The course offers a practical approach to managing projects, focusing on organizing, planning, and controlling the efforts of the project. Students will gain a strong working knowledge of the basics of project management and be able to immediately use that knowledge to effectively manage work projects. At the end of the course students will be able to identify and manage the product scope, build a work breakdown structure, create a project plan, create the project budget, define and allocate resources, manage the project development, identify and manage risks, and understand the project procurement process. Special attention will be paid to the role that planning and managing a project reflects a proper Christian worldview.

MLS 581 Managing Risk (3) Human society has been organizing their efforts as projects for hundreds of years. Projects usually require someone to manage the project with the responsibilities to ensure the project is successful. During this class students will examine the techniques and skills needed to manage projects of all different types. Students will understand the concept of project risk management, project task estimation and schedule planning documents. Students will understand potential cultural issues when working with project members from other cultures, or different backgrounds and learn to resolve project management related problems using the skills of negotiation, mediation, or interpersonal communication from a Christian perspective.

MLS 582 Project Quality, Assurance, Assessment and Evaluation (3) Effective project management utilizes information and measurements to create a logical process that minimizes risk, aligns resources, and maximizes accountability. In light of this, the course will seek to optimize the education experience by focusing on how to measure and collect useful information that will assist a project manager in the creation, development, implementation, and evaluation of an efficient project management environment.

# CAMPUS LIFE AT GENEVA

## Academic Advising

Faculty advisers are assigned to all new students during their fall semester at the college. Once a student declares a major, the role of adviser is usually assumed by a faculty member in the student's major department. Though primarily a mentor responsible for counseling with advisees about academic matters and approving course selection at registration time, an adviser may offer information and encouragement relating to summer employment or study, graduate school programs, and occupational or career opportunities. Students are urged to maintain personal as well as professional acquaintance with their advisers.

## Learning and Transition Class

This class is a one-credit hour academic core requirement for all students during the fall semester of their freshman year. Each focus group, consisting of approximately 15 new students, one faculty adviser, and two upper class mentors, meets for an hour each week throughout the fall semester. The focus groups are designated according to academic disciplines, with specifically designated groups for students who have not declared a major at matriculation. This Learning and Transition Class is a graduation requirement for all incoming freshmen and is offered as an option for transfer students.

Transfer students who have earned 12 or more semester credit hours at another college are not usually involved in the summer preview sessions or required to participate in the ongoing learning and transition class, but do participate in a transfer orientation program prior to the beginning of their fall semester on campus.

## Residence Life

Residence Life seeks to provide all resident students opportunities for spiritual and individual growth, maturity, and leadership. This is provided in a safe atmosphere that allows for cooperative community learning and living. These communities are led by professional residence directors and a building team of upper class student leaders including resident assistants.

Students are housed by gender in traditional style residence halls having two students per room, apartment style residences housing four to six students per apartment, or small houses adjacent to the campus. With few exceptions, housing requirements, which are published yearly in the Student Handbook, require students to either live with their parents or guardian or on campus. A wide variety of meal plans are available to all students and are a requirement for resident students.

## Chapel

As part of the educational mission of Geneva College, a weekly devotional time for the college community is conducted on Wednesdays from 10:15-11:00 a.m. This devotional time provides opportunity for the campus to gather together to praise God, hear His Word, and seek His favor and direction. Attendance is mandatory for students and the entire campus community is encouraged to participate.

Students are required to attend 11 chapels and/or convocations each semester. There are 14 chapel opportunities and one academic convocation opportunity each semester. Students may track their attendance on line.

If a student fails to attend the minimum 11 chapels/convocation, they will be fined \$50.00 for each missed chapel/convocation. The fine will be placed on a student's account at the end of the semester.

If students would like to have the fine(s) set aside, they will have one opportunity to attend a group meeting. In addition to attending the group meeting, students will be required to (a) listen to the chapel talk(s) and (b) write an acceptable two page single spaced reflection paper for each chapel they have missed.

- Due to scheduling issues, the meeting will only be held on Reading Day. There will be no additional meeting opportunities and no makeup meetings.
- Students will have 10 calendar days from the day of the meeting to submit their reflection papers.
- The paper(s) are due at the close of business on the tenth day.
- If the paper(s) are deemed acceptable the student's fine will be set aside.
- If a paper is deemed unacceptable, the fine will be imposed for that chapel.

Any dispute over Chapel attendance older than four weeks old will not be considered.

## Privacy Issues (FERPA)

The Family Educational Rights and Privacy Act (or FERPA) affords students certain rights with respect to their educational records and personal information. The following section specifies Geneva's policies in relation to FERPA.

### Educational Records

- 1) A student has the right to inspect and review his/her education records within 45 days from the date the College receives a request for access.
- 2) A student should submit a written request that identifies the record(s) he/she wishes to inspect to the Registrar, head of academic department, or other appropriate official. The College official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the College official to whom the request was submitted, that official will advise the student of the correct official to whom the request should be addressed.
- 3) A student has the right to request the amendment of the education record that the student believes is inaccurate or misleading. A student should write to the College official responsible for the record, clearly identifying the part of the record that they want to have changed, and specify why it is inaccurate or misleading.
- 4) If the College decides not to amend the record as requested by the student, the College will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for the amendment. Additional information regarding the hearing procedures will be provided to the student if the right of hearing is granted.
- 5) A student has the right to consent to the disclosure of personally identifiable information contained in the student's educational records, except to the extent that FERPA authorizes disclosure without consent.
- 6) One exception that permits disclosure without consent is disclosure to school officials with legitimate educational interests, i.e. if the official needs to review an education record in order to fulfill his or her professional responsibility. A school official is a person employed by the College in an administrative, supervisory, academic, research or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the College has contracted (such as an attorney, auditor or collection agent); a person serving on the Board of Trustees or Board of Corporators; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in the performance of his or her tasks.
- 7) Upon request, the College may disclose education records without consent to officials of another school in which a student seeks to be enrolled.
- 8) College to comply with the requirements of FERPA. The office that administers FERPA is:  
Family Policy Compliance Office  
U.S. Department of Education  
400 Maryland Avenue, S.W.  
Washington, DC 20202-4605
- 9) The College may also disclose personal information when a student's health/safety are in jeopardy of if/when a student poses a significant threat to self or others.

### Parental Rights

In order to respect the role of parents, all new students will be asked to sign permission for their educational records to be shared with parents upon request. All inquiries will be made through the Office for Student Development and a written record of such requests will be maintained. Respecting fully the need for students to take responsibility for their own actions, a designated College official will inform the student when and by whom such a request for information has been made.

If a student is a dependent for tax purposes, neither the age of the student nor the parent's status as a custodial parent is relevant. If a student is claimed as a dependent by either parent for tax purposes, then either parent may have access to the child's educational records without the student's consent. A student may petition in writing to the Dean of Students that information not be disclosed to a specific individual.

For alcohol/controlled substance violations, the College is permitted to disclose information regarding the violation to the parents of any student under the age of 21. If the student is a dependent for tax purposes, the College may disclose the information to the parents without the student's consent regardless of age.

## Math Proficiency

Math proficiency is determined by SAT or ACT score. Proficiency is demonstrated by a math SAT score of 470 or above or math ACT score of 19 or above. For students who matriculate at Geneva College without the supporting documentation provided by either an SAT or ACT math score, demonstration of math proficiency will not be assumed and may be accomplished by the same methods used for those who must demonstrate math proficiency due to low scores. Math proficiency status for international students will be determined by the Department of Chemistry, Mathematics, and Physics on a case-by-case basis.

Students entering Geneva College without math proficiency must successfully complete one of the following:

- 1) Repeat the SAT earning the minimum math score or above
- 2) Take MAT 095 Algebra
- 3) Transfer a math course from another acceptable college or university  
(Note that the course must be part of the algebra-calculus sequence and only courses equivalent to Geneva's MAT 101 or higher are accepted for transfer credit.)
- 4) Pass the math proficiency challenge exam

The math proficiency challenge exam will be offered by the Department of Chemistry, Mathematics and Physics as follows:

- During each summer preview (new students)
- During fall orientation (new students)
- During spring orientation (new students)
- On the first Monday of the fall semester (new transfers and returning students)
- On the first Monday of the spring semester (new transfers and returning students).

The fee for the challenge exam is \$25 and it is not refundable. It is payable at the door of the testing site. Advance registration guarantees a place during the testing session. For exam scheduling information, call the department office at 724-847-6710.

## Credit by Examination

Geneva College will award a maximum of 24 credits for any Credit by Exam options. Students should be aware the AP examinations, CLEP examinations, International Baccalaureate examinations, and college courses taken prior to or after enrolling at Geneva College may be duplicative. In these cases, Geneva will award credit for only one.

### Advanced Placement

Geneva College may grant college credit for satisfactory completion of a college-level course in a secondary school or for particular scores on an advanced placement examination of the college Entrance Examination Board. Placement and college credit are determined by the Registrar and the chairperson of the appropriate academic department. AP score reports should be sent to the Geneva College admissions office.

### Geneva College Credit by Examination

Prior to or during the first 12 months of attendance at Geneva, a student may receive course credit or exemption by passing a comprehensive examination if and only if such an examination has been approved to be offered by the department chair. The eligible courses are determined by the department in which they are offered and the examination may be taken only once for each course. The examination fee is \$75. If credit is desired, there is an additional fee of \$50 per credit. Credit and a letter grade must be obtained if the course is in the student's major or in the core requirements. The grade for electives may be any letter grade or credit-no credit as determined by the instructor. Upon receiving the receipt for payment and a memo from the instructor recording the grade, the credit hours are entered on the transcript.

### College Level Examination Program (CLEP)

Geneva College awards credit for some CLEP tests. Contact the Registrar's office for further information.

### International Baccalaureate

Credit may be awarded to students who have taken higher-level courses in the International Baccalaureate Program and who have scored at least a 5 (on a 7-point scale) on the higher-level course examinations. Such credit generally is awarded



on a course-by-course basis as recommended by the appropriate Geneva College department. No credit will be awarded for the standard level exams. International Baccalaureate transcripts should be submitted to the Office of the Registrar.

### **General Certificate of Education Advanced Level (GCE A Level)**

Credit may be awarded for students who score a B or higher on a GCE A level exam. These are offered in the United Kingdom and some commonwealth countries. Official transcripts should be submitted to the Registrar's Office.

### **Foreign Language Deficiencies**

Any student who did not have two years of the same of foreign language in high school is considered to have a foreign language deficiency. Students who did not have two years of the same foreign language in high school must meet their foreign language deficiency by:

1. completing both 101 and 102 of the same language. This can be done by taking both 101 and 102 in Spanish, Greek, Hebrew or Independent Study at Geneva, or by transferring in 101 and 102 from another college  
OR
2. completing a one-semester study abroad experience in a non-English speaking country which includes one 3-credit (or more) foreign language course at any level, in any language commonly spoken in the host country (i.e. Italian 101 in Rome, Arabic 101 in Jerusalem, Spanish 102 in Seville, etc.). Required grade for the language course: C or higher.

### **Probationary Admission**

If the college desires to admit a student but has some concern about the student's academic success based on some aspect of his/her previous academic record, it will admit the student on what is called "academic probation". Academic Probation carries with it particular restrictions and requirements that are intended to encourage satisfactory academic performance. EDU 095 (described on page 109), which promotes fundamental reading and study skills, is required. Students are also required to develop a learning contract which will be monitored by ACCESS Office staff. More information about academic probation is found above.

\*The final high school transcript will be considered complete and closed as of the date of the high school graduation, indicated on the transcript. No additional high school transcript will be accepted after the final transcript is received. The graduation date is the date identified on the final transcript.

### **Evaluation of Credit Hours**

Once admitted to Geneva College, an official evaluation of credit hours earned at other institutions will be sent to the student. Upon enrollment at Geneva, any additional certified grades will be evaluated and updated by the Registrar. An unofficial evaluation of credit hours may be done at any point, even prior to application for admission. To inquire further about this, contact the admissions office. At the time of acceptance for admission, the transfer student receives an evaluation of credit hours which have been earned. Whenever additional grades are certified, the evaluation is updated by the Registrar.

### **Policies For Students Who Transfer to Geneva from Other Institutions**

The class standing of any transfer student will be based on the number of credits accepted in transfer. Courses judged by the college Registrar to be equivalent to Geneva courses will be distributed to meet general and major requirements (subject to the limitations noted below). Courses which are judged not to be equivalent to Geneva courses will be accepted as electives (subject to the limitations below).

All credits transferred to Geneva that are certified on official transcripts are listed on the Geneva transcript. Geneva will only use transfer students' grades and GPA from transfer credits: (1) to determine the initial admission decision, (2) to determine eligibility for financial aid for the first year at Geneva, and (3) to determine athletic eligibility in the first semester at Geneva. It should also be noted, however, that the Pennsylvania Department of Education (Chapter 354) requires that any and all courses taken by Education majors must be included in the student's career GPA for certification purposes. Course equivalencies are determined by the Registrar with input, as necessary, by the appropriate Department Chair.

In addition to the policies described in the two preceding paragraphs, each of the following requirements govern the extent to which courses transferred from other institutions will be counted toward a Geneva degree:

- Ordinarily only credits earned at regionally accredited institutions or, in the case of international transfers, nationally approved institutions will be accepted as transfer credit.
- Only courses for which a grade of C- or better has been given will be accepted in transfer. Please note, however, that courses with grades below C- will be included in the calculation of GPA for the three purposes described above (admission, financial aid, and athletic eligibility).
- A minimum of 48 credit hours overall, and at least 12 of the last 30 credit hours, must be earned from Geneva.
- A minimum of one-third of the required credit hours in the major or minor must be earned at Geneva.
- Courses transferred from another institution will be counted in the same semester that the credit-granting institution that granted the credit designated the course.
- A minimum of one-third of the required credit hours in the core must be earned at Geneva. These courses must include Great Issues in Politics (POL 352), Foundations of Christian Thought (BIB 300) and at least one 3-credit hour Humanities course.
- For associate degrees a maximum of 24 credits may be transferred.

Requests for exceptions to any of the above policies must be made in writing to the academic dean. Usually, the academic dean will consult with the appropriate department chair, the faculty adviser (when appropriate), and the Registrar before granting any exception request.

### **Policies for Current Geneva Students Who Wish to Transfer Course Credit to Geneva**

Geneva students are permitted to enroll in courses at other institutions and transfer the credits and grades for these courses to Geneva. However, all of these transfer courses must be approved in advance by the college Registrar with assistance from a student's faculty adviser. Department chairs also may require students to repeat certain courses in the major if the age of, or if a student's performance in, the transfer course do not adequately support adequate achievement in the major. Course equivalencies are determined by the Registrar with input, as necessary, by the appropriate Department Chair. In addition to the policies described in the preceding paragraph, each of the following requirements govern the extent to which courses that Geneva students take at other institutions will be counted toward a Geneva degree:

- Ordinarily only credits earned at regionally accredited institutions or, in the case of international transfers, nationally approved institutions will be accepted as transfer credit.
- Only courses for which a grade of C- or better has been given will be accepted in transfer. Both the grade and the credit will be transferred to Geneva. In addition, the Pennsylvania Department of Education (Chapter 354) requires that any and all courses taken by Education majors must be included in the student's career GPA for certification purposes.
- A minimum of 48 credit hours overall, and at least 12 of the last 30 credit hours, must be earned from Geneva.
- A minimum of one-third of the required credit hours in the major or minor must be earned at Geneva.
- Courses transferred from another institution will be counted in the same semester that the credit-granting institution that granted the credit designated the course.
- In order to replace a grade for a course previously completed at Geneva, any 200-level course or above must be repeated at a four-year institution.
- A minimum of one-third of the required credit hours in the core must be earned at Geneva. These courses must include Great Issues in Politics (POL 352), Foundations of Christian Thought (BIB 300) and the Humanities sequence of HUM 103, 203 and 303.
- For associate degrees, a maximum of 24 credits may be transferred.

Requests for exceptions to any of the above policies must be made in writing to the academic dean. Usually, the academic dean will consult with the appropriate department chair, the faculty adviser (when appropriate), and the Registrar before granting any exception request.

### **International Students**

Students applying for admission from outside of the United States will need to follow a different set of guidelines as follows:

- 1) Complete the application for admission in its entirety and submit it to the admissions office with the \$25 (U.S.) application fee. Unless otherwise instructed, the fee must accompany the application to be considered complete. A bank or money order should be made payable to Geneva College.
- 2) Submit a letter of financial backing to the college. This should be a document from your sponsor (or yourself, if you are providing your own support) certifying that sufficient financial resources are available to cover

ALL of your educational expenses while you are in the U.S.A. Please include bank statements or other supporting documentation that substantiates the ability to meet *all* of your financial obligations.

- 3) Submit official transcripts from *all* of your previous institutions. Include secondary school and college transcripts, graduation certificates, or certified results of the standard examination for entry into higher education in your own country, if applicable. These transcripts must be officially translated into English and must be sent directly from the schools from which the courses were taken. A minimum of six passes at the ordinary level of the General Certificate of Education (GCE) is required for admission.
- 4) Submit an academic recommendation from at least one person (non-relative) who is most familiar with your academic achievement.
- 5) Submit result of the Test of English as a Foreign Language (TOEFL), or results of other internationally recognized tests of English (e.g. IELTS or the Michigan Test) if English is not your native language.

Once *all* of the above documentation has been received in the Geneva College Admissions Office, an admission decision will be made. Once admitted to Geneva College, a letter indicating your admission and the I-20 will be sent to you. To secure your place as a student at Geneva, you must submit a \$1,000 (U.S.) deposit, which will be credited to your semester's cost. Registration and housing will not be processed until your deposit has been received in the admissions office. This deposit is refundable only until May 1, after which no refund will be given should you decide not to enroll.

Once admitted to Geneva College, an official evaluation of credit hours earned at other institutions will be sent to the student. Upon enrollment at Geneva, any additional certified grades will be evaluated and updated by the Registrar. An unofficial evaluation of credit hours may be done at any point, even prior to application for admission. To inquire further about this, contact the admissions office.

### **International Articulation Agreements**

Geneva College currently has a formal articulation agreement with Christ's College, Taipei, Taiwan. Typically graduates of Christ's College with a BA in English and recommendation of the faculty can achieve a Geneva BA degree with a major in communication in 15 months. Completion time is dependent, however, on the student's English skills and the ability to complete the prescribed curriculum.

### **English Language Acquisition Institute (ELAI)**

The English Language Acquisition Institute (ELAI) offers intermediate and advanced level courses for degree-seeking students who need support with their English skills. Availability of these courses depends on need within our international student population.

The intermediate division is the English for academic purposes (EAP) level. This allows students who are at the intermediate level to enroll in one regular Geneva College class (or a maximum of three credit hours) in addition to nine credit hours of ESL courses designed to develop academic skills such as essay writing, lecture note taking, reading, and discussion of academic topics. New students admitted to the EAP must have a score from 480 to 499 on the TOEFL test (157 to 170 on the computerized TOEFL test). There is a flat tuition fee plus incidental fees at this level.

The advanced division is the bridge program, for students who are almost ready to take a minimum of 12 regular college credit hours but still need some additional work on English skills. New students admitted to the bridge program must have a score from 500 to 549 on the TOEFL test (173 to 213 on the new computer-based TOEFL test) and have satisfied other requirements to be admitted as freshmen or transfer students. Students at this level take one to three ESL courses and two to four regular college classes. Students are charged according to the regular college tuition schedule at this level.

ESL courses (English for academic purposes) include:

- |         |   |
|---------|---|
| ESL 310 | Academic Oral Communication (2 credit hours, 3 classroom hours) |
| ESL 320 | Academic Writing (2 credit hours, 3 classroom hours)            |
| ESL 330 | Academic Reading (2 credit hours, 3 classroom hours)            |

ESL courses (bridge program)

- |         |   |
|---------|---|
| ESL 410 | Academic Oral Communication (2 credit hours, 3 classroom hours) |
| ESL 420 | Academic Writing (2 credit hours, 3 classroom hours)            |
| ESL 430 | Academic Reading (2 credit hours, 3 classroom hours)            |

Course descriptions for these ESL courses can be found on page 117.

### **Health Insurance Coverage**

All international students must pay for group medical insurance or provide proof of similar insurance coverage from their home countries.

### **Readmission**

Students who discontinue course work for any reason must apply for a readmission 60 days prior to the semester in which they wish to enroll. The form is available from the Registrar's office or on Geneva's website.

### **Transient Students**

Students in good academic standing at other accredited institutions are approved for registration upon presentation of Geneva's transient student certificate bearing the appropriate signature and seal from their college or university. This arrangement is particularly useful for study in Geneva's summer program. Transient students accept full responsibility for securing their institution's approval of the courses they take at Geneva, and the transient status must be renewed each semester or summer.

### **Teacher Certification Candidates**

Candidates who have their bachelor's degree but wish teacher certification must furnish one official transcript of all college work to the department of education and must meet with the Education Department Certification Officer to establish a program that will result in the education department being able to recommend the individual for certification in Pennsylvania (see page 53). High school transcript and SAT scores are not necessary, but the education department requires that applications for student teaching be made at least one semester in advance. Course work accepted for the purpose of achieving teacher certification will have to be of such recency and quality as to be relevant to current state certification standards.

### **Post-Baccalaureate**

After having completed a baccalaureate degree, college graduates may wish to take additional courses to earn a second bachelor's degree, to complete teacher certification, or to learn new skills. Upon presentation to the Registrar of an official transcript showing a conferred baccalaureate degree, a student may enroll in any Geneva course or program of studies at the regular fee. In addition, Geneva offers six graduate degree programs.

# FINANCIAL INFORMATION

## Rates and Fees

Full-time tuition includes a full-semester load of course instruction, the use of the library, computer labs, and the physical education facilities of the college, and admission to all athletic competitions. A schedule of at least 12 credit hours and not more than 20 is considered to be a full-semester load and is subject to regular per-semester tuition. Tuition charges for less than 12 credit hours or more than 20 credit hours, and for summer school students, are at a per credit hour. Full tuition is charged for repeated courses.

## Deposits

New students confirm their acceptance with a \$100 deposit applicable to their tuition but not refundable. Resident students also pay a room deposit of \$150.

All charges are subject to change each academic year.

## 2015-2016 Schedule of Fees

### Undergraduate Program

(per semester)

Tuition, semester (12 to 20 credit hours).....	\$12,725
Each hour beyond 20 credit hours schedule .....	\$860
Room & Board, per semester .....	\$4,815

\*Full 21 meal plan—Both a fourteen-meal plan and a block plan option is available to upperclassmen.

## Department Fees

(per semester)

Several courses in the education and science departments have student fees. All courses that require work with a school district and payment to a certified cooperating teacher have a fee. Contact the education and science departments for complete information.

CDS 450 .....	\$180
Private Music Lessons—1 credit hours .....	\$285
Private Music Lessons—2 credit hours .....	\$570
Private Music Lessons—3 credit hours .....	\$855
Late Registration Fee .....	\$25

## Summer Sessions

Geneva offers two sessions of summer school- May@Geneva and Summer II. During May@Geneva, all major college facilities remain open, though some on limited schedules. Housing is available for May term (see rates below), and is also available on a week-to-week basis after May.

Students may take from 3-7 credits during May in any combination of 1, 3, and 4-credit classes. Registration for May@Geneva opens during the fall advising period for the preceding spring semester, and remains open until the first day of classes.

Summer II classes meet on variable schedules starting after May@Geneva, the details of which are available in the online listing of classes.

## 2015-16 Schedule of Fees

(Note: The following fees apply to courses scheduled during May 2015 and other Summer 2015 terms. Fees for May 2016 follow the 2016-2017 fee schedule.)

Tuition for all summer school classes, per semester credit hour .....	\$333 per credit hour
Room and board fee, May@Geneva .....	\$395
Room fee, per week after May@Geneva .....	\$60
Administrative fee (applies to each student enrolled in May@Geneva) .....	\$75

Course Fees: Fees charged for any course during the fall or spring semester will also be applied during the summer terms.

Graduate tuition and DCP cohort charges are listed below.

### Billing for May@Geneva

- Full payment is due 10 days before the first day of class.
- Room and Board is billed as one lump sum for May term. There is no separation of room & board. There are no week-by-week charges.

### Refund Policy

#### *Administrative Fee*

- 100% refund if dropped prior to or on the first day of classes
- No refunds after the first day of classes

#### *Tuition, Room, and Board* (no separation of room and board for refund purposes)

- 100% refund if dropped with Registrar by the first day of classes at 4 p.m.
- 50% refund if dropped with Registrar by the first Friday of classes.
- No refund if dropped after 4 p.m. on the first Friday of May term

Exception: POL 352 has a different refund policy due to its extended schedule.

- 100% refund if dropped with Registrar by the first day of classes at 4 p.m.
- 50% refund if dropped with Registrar by the second Tuesday at 4 p.m.
- No refund if dropped after 4 p.m. on the second Tuesday of May term

### Financial Aid

Geneva grants and scholarship are not available in the summer. Some federal grants and loans may be available. Interested families should contact the Financial Aid office to discuss the benefits and options.

### Graduate Tuition

MBA (per credit hour).....	\$695
Special Education and Reading (per credit hour).....	\$640
MSOL/MSLS (per credit hour) .....	\$625
Counseling/Masters of Higher Education (per credit hour).....	\$655

### ADP Cohort Charge

Classroom Cohort (per term 12 credits) .....	\$7,332
On-line Cohort (per term 12 credits) .....	\$6,600

### Other

Cardiovascular Technology (annually) .....	\$27,970
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## Refund Schedule

Refunds for tuition and room charges are given to students who withdraw completely from all courses before the completion of four weeks of a traditional 15-week undergraduate semester according the following schedule:

**When withdrawal from all courses occurs:    then tuition and room are refunded at:**

... before classes begin	100%
... before the end of the 1 <sup>st</sup> week of classes	80%
... before the end of the 2 <sup>nd</sup> week of classes	60%
... before the end of the 3 <sup>rd</sup> week of classes	40%
... before the end of the 4 <sup>th</sup> week of classes	20%
... after the 4 <sup>th</sup> week of classes	0%

- The effective date of withdrawal is based on when the Registrar's office has been properly notified. Traditional undergraduate students withdrawing from the fall or spring semester may notify the Student Development office instead.
- Board charges are prorated for the remaining part of the term.
- Refunding for non-Geneva aid will happen at a different rate from charges above. Check with the business office and/or the financial aid office for details.
- Refunds for students who withdraw from classes taken in non-traditional schedules (e.g., summer, cohort, off-campus) will be based on the general principle derived from the above table. That is, in general, no refunds will be given after 25% of the class has elapsed. Contact the business office for details.
- Separate policies apply to room and board issues for student interns away from campus.

### Medical Withdrawal

A medical withdrawal is intended for use only in situations in which a student is medically or psychologically incapacitated such that he/she cannot continue as a college student. All medical withdrawals must be substantiated by a letter from a doctor and subsequently approved by the dean of student development. Return in a subsequent semester requires the approval of the dean of student development as well.

Medical withdrawal will apply to cases in which students actually have to withdraw from all their courses during any given semester. It will not apply to circumstances where a student wishes to take an incomplete with the intention of completing courses. It will not apply where a student withdraws from one or more courses for medical reasons.

Refunds are available for the current semester on a pro-rated (number of weeks) basis for tuition, room and board, given an effective date at the discretion of the dean of student development and appropriate academic dean.

### Adult Degree Programs- Core and Elective Courses (formerly Bridge)

#### Withdrawal and Tuition Refund Policy

Students enrolled at Geneva College through Adult Degree Programs may withdraw before the course start date and receive a 100% refund. From and including the course start date through the 7<sup>th</sup> calendar day after the course start date, students may withdraw and receive a 60% refund. No refund is provided for withdrawal on or after the 8<sup>th</sup> calendar day after the course start date.

After a student registers for a course or program, he or she remains registered. Charges will continue to accrue until the ADP office receives written notice of withdrawal from the student. Written notice may be sent to the ADP Office at [adultdegree@geneva.edu](mailto:adultdegree@geneva.edu).

### Grad Programs Refund Policies:

In all cases, the official course start date and course end date per the Registrar's office are used in calculations. Students should be aware that the course start date does not always correspond directly with the first day that the class meets.

#### Masters in Special Ed/Masters in Reading

- Before the course start date, 100% refund.
- From the course start date through 20% of the course elapsing, 50% refund.

- After 20% of the course has elapsed, no refund.

### **MSOL and MSLS**

- Before the course start date, 100% refund.
- From the course start date up to and including 7 calendar days after the course start date, 50% refund.
- On and after the 8<sup>th</sup> calendar day after the course start date, 0% refund.

### **Graduate Counseling**

- Before the course start date, 100% refund.
- From the course start date through 22% of the course elapsing, 50% refund.
- After 22% of the course has elapsed, no refund.

### **Masters in Higher Education**

- Please contact the Higher Education department for information on their refund policies.

### **MBA**

- Before the course start date, 100% refund.
- Up to and including 7 calendar days after the course start date up to and including 14 calendar days after the course start date, 40% refund.
- On and after the 15<sup>th</sup> calendar day after the course start date, 0% refund.

## **Payments**

All checks should be made payable to Geneva College and should include the student's identification number. All tuition and housing charges for the semester are due by August 10 for the fall semester and by January 2 for the spring semester. All charges, net of financial aid, are to be paid prior to the due dates.

Tuition payment plans are available to traditional undergraduate students only. Contact the Business Office for information on these payment plan arrangements, or go to [www.geneva.edu/student-accounts/tuition\\_payment\\_center](http://www.geneva.edu/student-accounts/tuition_payment_center).

All international student payments should be received at Geneva College via wire transfer or money orders only. All international student accounts must be paid in full by the semester due dates. No international students are permitted to enroll in any payment plan arrangements where payments are made over the course of the first and/or second semester.

## **Scholarships and Financial Aid**

### **Eligibility**

Geneva College offers financial aid from a variety of sources including grants, scholarships, state funds, loans and work study. Full information can be obtained from the Financial Aid Office. Continuation of financial aid from year to year depends on the student's making "satisfactory progress" toward a degree and meeting filing deadlines. Each institution is required by federal law to establish a set of minimum standards. In order for a student to receive any type of aid through Geneva, he or she must maintain satisfactory progress as follows:

Full-time students must complete a minimum of 24 credit hours of academic credit annually to remain eligible for aid consideration. All part-time students must complete 75 percent of all credit hours attempted. If in a specific term less than 75 percent are completed, then 75 percent of cumulative attempts must be completed. In order to receive any financial aid funds, all students must have a minimum cumulative GPA of 1.7 at the beginning of the sophomore year and a 2.0 before receiving financial aid for the junior and subsequent years. Students must complete their program of study in no more than six years. However, many types of financial aid are available for four years only.

Credit hours completed will only be those with grades of A through D- and grade CR for credit-no credit courses. No other grades will be considered as credit hours completed, including F, AU, IN, NC, and the grades A through D for any repeated courses where the original grade was not an F.

In the spring of each year, those students eligible to re-enroll by the college's academic standards (page 14) will be reviewed by the Financial Aid Office to assure satisfactory progress for the next academic year. Those who have failed to



meet the minimum standards will be placed on financial aid suspension. This can be appealed by writing to the Financial Aid Office.

Geneva College offers various scholarships, grants, loans, and student employment. The financial aid offered by Geneva falls into these categories:

- Academic Scholarships based upon SAT/ACT scores and high school GPA
- Grants based upon financial need determined by the Free Application for Federal Student Aid from (FAFSA) results
- Grants based upon membership in certain denominations, parents occupation or high school attended
- Federal Grants
- State Grants from participating states
- Federal student loans
- Part-time employment on campus

**Attention Federal Financial Aid recipients: Be advised that courses not needed for your program(s) of study are not eligible for federal financial aid. Please consult with your advisor if your Advising Worksheet on my.geneva.edu indicates that you are enrolled in Additional Coursework.**

Please check the Geneva College web site for up to date information and details.

### **Federal Aid Refund Policy**

The Financial Aid Office is required by federal statute to recalculate federal financial aid eligibility for students who withdraw, drop out, are dismissed, or take a leave of absence prior to completing 60% of a payment period or term. The federal Title IV financial aid programs must be recalculated in these situations.

If a student leaves the institution prior to completing 60% of a payment period or term, the financial aid office recalculates eligibility for Title IV funds. Recalculation is based on the percentage of earned aid using the following Federal Return of Title IV funds formula:

Percentage of payment period or term completed = the number of days completed up to the withdrawal date divided by the total days in the payment period or term. (Any break of five days or more is not counted as part of the days in the term.) This percentage is also the percentage of earned aid.

Funds are returned to the appropriate federal program based on the percentage of unearned aid using the following formula: Aid to be returned = (100% of the aid that could be disbursed minus the percentage of earned aid) multiplied by the total amount of aid that could have been disbursed during the payment period or term.

If a student earned less aid than was disbursed, the institution would be required to return a portion of the funds and the student would be required to return a portion of the funds. Keep in mind that when Title IV funds are returned, the student borrower may owe a debit balance to the institution.

If a student earned more aid than was disbursed to him/her, the institution would owe the student a post-withdrawal disbursement which must be paid within 120 days of the student's withdrawal.

Refunds are allocated in the following order:

- Unsubsidized Federal Stafford Loans
- Subsidized Federal Stafford Loans
- Unsubsidized Direct Stafford Loans (other than PLUS loans)
- Subsidized Direct Stafford Loans
- Federal Perkins Loans
- Federal Parent (PLUS) Loans
- Direct PLUS Loans
- Federal Pell Grants for which a return of funds is required
- ACG & SMART for which a return of funds is required
- Federal Supplemental Opportunity Grants for which a return of funds is required
- Other assistance under this Title for which a return of funds is required (e.g., LEAP)

**Geneva Funds Refund Policy**

Geneva aid is refunded based upon the amount of time the student has been enrolled and is prorated accordingly. For example, if the student has attended for 45% of the semester, then 45% of the aid remains credited to the student account and 55% will be removed.

ANY INFORMATION PRINTED IN THE MOST RECENTLY PUBLISHED FINANCIAL AID BROCHURE SUPERCEDES THE INFORMATION PROVIDED IN THIS CATALOG.

## Definition of Terms

**Audit**—Attendance in a class without formal participation is allowed by registering for the class as an audit. The cost is half of the regulation hourly tuition and no credit is earned nor is a grade given.

**Core requirement**—A course or courses that must be completed by all students receiving a degree. The core requirements are numbered and described on page 10.

**Corequisite**— A course that is required to be taken concurrently with another course.

**Course**—A program of study involving regular classes or laboratories.

**Credit**—Recognition given for study completed, usually expressed in credit hours.

**Credit hours**—Units of credit based upon the number of credit hours in class per week for a semester. The number of credit hours required for a degree is explained on page 24.

**Credit point**—Number value assigned to the grade a student receives in each course. See page 16.

**Grade point average (GPA)** —Total credit points divided by total credit hours graded. The GPA is a measure of the student's level of achievement that helps to determine individual progress and eligibility for special honors or privileges. See references on page 16.

**Electives**—Courses chosen by a student to complete total credit hours required for a degree but not needed to meet either core or major requirements.

**Interdisciplinary**—Involving two or more departments. The term is applied to a course combining subject matter or instruction from more than one department, or to a major that includes courses from more than one department.

**Intensive course**—A course offered in a special format that condenses a semester's work into a short period, often just a week, with full-time and concentrated work.

**Major**—A primary field of study. Each student must complete requirements in one such field. See page 24.

**Minor**—A secondary field of study, not required for graduation. See page 25.

**Options**—A group of courses from which one or more must be chosen to meet some requirement.

**Prerequisite**—Another course that must be completed or any condition that must be fulfilled before enrollment in a course.

**Semester**—A four-month term, usually extending from the last week of August through the third week of December, or from the second week of January through the first week of May. The college's calendar for the next year is published at the beginning of this catalog.

# COLLEGE PERSONNEL

## Board of Corporators

The Charter of the College provides for the incorporation of the school to be controlled by a Board of Corporators consisting of 12 members of the Reformed Presbyterian Church of North America for a term of four years. The Board elects its own officers.

### Officers:

Mr. Steven C. McMahan, Chair  
Mr. Matthew Filbert, Vice Chair  
Rev. Phil Pockras, Secretary  
Mr. James Tweed, Treasurer

### *Class of 2015*

Rev. Don Piper, Brier, WA  
Rev. Philip Pockras, Belle Center, OH  
Dr. Calvin L. Troup, Allison Park, PA

### *Class of 2016*

Rev. Bruce Backensto, Beaver Falls, PA  
Mr. Matthew Filbert, Beaver Falls, PA  
Mr. David J. Schaefer, Beaver, PA  
Dr. Bonnie Weir, Bronxville, NY

### *Class of 2017*

Mr. Peter E. Howe, North Syracuse, NY  
Mrs. Shana Milroy, Colorado Springs, CO  
Mr. James Tweed, Winchester, KS

### *Class of 2018*

Mr. Philip Duguid, Meriden, KS  
Mr. Steven McMahan, Clay Center, KS

### *Class of 2019*

Rev. Don Piper, Brier, WA  
Rev. Philip Pockras, Belle Center, OH  
Dr. Calvin L. Troup, Allison Park, PA

## Board of Trustees

The affairs and business of the College are managed by the Board of Trustees which consists of 21 members chosen by the Board of Corporators.

### Officers:

Mrs. Joye Huston, Chairman  
Rev. Don Piper, Vice Chairman  
Rev. Bruce Backensto, Secretary

### *Term expires 2016*

Rev. Bruce R. Backensto, Pastor, Retired, First Reformed Presbyterian Church, Beaver Falls, PA  
Mrs. Katherine L. Dennis, Director of Development, University of Kentucky Healthcare, Winchester, KY  
Mr. Matthew T. Filbert, Director of Reformed Presbyterian Missions, Beaver Falls, PA

### *Term expires 2017*

Mr. Andrew M. Bernard, Jr., Investment Advisor, WTAS LLC, Ambler, PA  
Mr. John P. Edgar, Esquire, Sherrard, German and Kelly, P.C., Pittsburgh, PA  
Mrs. Joye H. Huston, Retired CEO (Registered Nurse), FW Huston Medical Center, Winchester, KS  
Dr. David C. Innes, Professor of Politics, The King's College, Huntington, NY

### *Term expires 2018*

Mr. Kenneth W. Creasman, Executive Coach, Mgmt. Consultant, Temecula, CA  
Mr. Philip Duguid, Duguid Construction, Meriden, KS  
Mr. James D. Roy, President and CEO, retired, Federal Home Loan Bank of Pittsburgh, Mars, PA

Dr. Bonnie Weir, Principal Engineer, Avago Technologies, Bronxville, NY

*Term expires 2019*

Dr. Melville W. Adams, Consultant, Huntsville, AL

Mr. David Carleton, CIO, Heritage Valley Health System, Darlington, PA

Rev. Donald W. Piper, Pastor, retired, Seattle RPNA Church, Brier, WA

Dr. Siarhei Spirydovich, Radiation Oncology, Indiana University Cancer Center, West Lafayette, IN

Dr. Calvin L. Troup, Associate Professor of Communication, Duquesne University, Allison Park, PA

## **Administration**

The year in parentheses following the name of each person is the date of first appointment in the college.

William J. Edgar (2015) Interim President; BA Swarthmore College; MEd and PhD, University of Pennsylvania.

Kenneth A. Smith (2004), President Emeritus (2015); BA, BSBA, Geneva College; MPIA, University of Pittsburgh; PhD, University of Maryland.

John H. White (1961), President Emeritus (retired 2004); BA, Geneva College; diploma, Reformed Presbyterian Theological Seminary; MA, University of Pittsburgh; DMin, Pittsburgh Theological Seminary.

## **Academic Affairs**

Karla Threadgill Byrd (1997), Executive Director, Center for Urban Biblical Ministries; BS, California University of Pennsylvania; MAT, University of Pittsburgh.

Jennifer L. Carter (2013), Registrar; BS, University of Valley Forge; MA, Geneva College, PhD (Cand.) , Azusa Pacific University.

John D. Gallo (2007), Dean of Graduate, Adult, and Online Programs and Assistant Professor; BA, MS, Geneva College; MBA, Northcentral University.

Melinda R. Stephens (1998), Chief Academic Officer , Dean of Undergraduate Programs and Professor of Chemistry; BS, Geneva College; PhD, University of Pittsburgh.

## **Student Development**

Brian Jensen (2014), Dean of Student Development; BS, North Central University; MA, Geneva College.

Neil Best (2011), Director of Residence Life; BA, Northwestern College; MA, Trinity Western University.

Donald J. Sullivan (1975), Vice President Emeritus of Student Development (retired, 1999); BSEd, Slippery Rock State College; master's equivalence, Duquesne University and Brown University.

Joy M. Jewell (1975), Dean Emerita of Student Development (retired 2008); BA, Geneva College; MA, The Pennsylvania State University, University of Pittsburgh, additional course work at Pennsylvania State University.

## **Athletics**

Van Zanic (1998), Athletic Director; BA, Geneva College.

## **Business Management**

Larry K. Griffith (2009), Executive Vice President; BA, Geneva College.

## **Associate Vice President and Controller**

Stephen Ross (2009), Associate Vice President and Controller; BS, Cedarville University.

## **Associate Vice President of Information Technology and Chief Information Officer**

Scott Barnes (2015), Associate Vice President of Information Technology and Chief Information Officer; BS, Robert Morris University.

## **Associate Vice President for Operations and Human Resources**

Tim Baird (2004), Associate Vice President for Operations and Human Resources; BSBA, Geneva College; MBS, Saint Joseph's University.

## **Vice President for Advancement**

Jeff Jones (2010), Vice President for Advancement; BS, Southeast Missouri State University; MDiv, Golden Gate Baptist Theological Seminary; PhD, Azusa Pacific University.

## **Chaplain**

Rutledge Etheridge (2013), Chaplain; BA, Cedarville University; MDiv, Reformed Presbyterian Theological Seminary.

## **Enrollment Services**

Steven Bell (1995), Director of Financial Aid; BS, Allegheny College; MA, Indiana University of Pennsylvania.

David Layton (1988), Associate Vice President of Enrollment Services; BS, MA, Geneva College.

## **Faculty**

### **Emeritus Faculty**

*The second year in parentheses is the year of retirement.*

David W. Badger (1969), Professor Emeritus of Chemistry (2004); BS, Geneva College; MS, PhD, University of Michigan.

Constance T. Braun (1967), Professor Emerita of Education (2001); BSEd, Geneva College; MLS, University of Pittsburgh; MEd, Westminster College.

Norman M. Carson (1957), Professor Emeritus of English (1991); BA, Geneva College; MA, State University of Iowa; Reformed Presbyterian Theological Seminary; University of Pennsylvania; University of Chicago; PhD, Boston University.

Mary E. Cleland (1962), Assistant Professor and Assistant Librarian Emerita (1995); BA, Geneva College; Columbia University; MSLS, Case Western Reserve University.

Louise Copeland (2009), Associate Professor Emerita of Music (2014); BS, Geneva College; MM, University of Cincinnati.

Robert M. Copeland (1981), Professor Emeritus of Music (2012); BS, Geneva College; MMus, PhD, University of Cincinnati; Westminster Choir College.

Peter W. Croisant (1983), Assistant Professor Emeritus of Communication (2013); BA, Michigan State University; MA, CBN University.

Elizabeth A. Douglas (1966), Professor Emerita of Fine Arts and Coordinator of the Humanities Survey courses (1996); BFA, Carnegie-Mellon College; MA, University of Pennsylvania.

Harry E. Farra (1962), Professor Emeritus of Communication (2001); BA, Northwestern College; MDiv, Bethel Theological Seminary; MA, University of Minnesota; PhD, The Pennsylvania State University; University of Pittsburgh.

S.S. Hanna (1982), Professor Emeritus of English (2013); BA, University of Wisconsin; MA, PhD, Indiana University.

Kenneth E. Hartman (1968), Professor Emeritus of Chemistry and Director of Pre-medical and Allied Health Program (2005); BS, Geneva College; PhD, University of Pennsylvania.

David A. Harvey (1972), Professor Emeritus of Psychology, Counseling and Human Services (2010); BAE, University of Florida; MEd, Florida Atlantic University; PhD, University of Pittsburgh.

Joseph Hill (1949), Associate Professor Emeritus of Biblical Studies and Greek (1986); BA, Geneva College; Reformed Presbyterian Theological Seminary; University of Denver; Calvin College; University of Michigan; ThM, Pittsburgh Theological Seminary.

Paul L. Holland (1970), Professor Emeritus of Psychology (1999); BA, Geneva College; MDiv, Fuller Theological Seminary; MEd, PhD, University of Illinois; Dubuque Theological Seminary; DMin, Pittsburgh Theological Seminary.

Robert Hough (1988), Dean Emeritus of Adult and Continuing Education (2001); BA, Calvin College; MA, Presbyterian School of Christian Education; PhD, Michigan State University.

George J. Jennings (1971), Associate Professor Emeritus of Anthropology and Sociology (1981); BA, University of Minnesota; BD, Northwestern Evangelical Seminary; MA, University of Minnesota.

Romaine Jesky-Smith (1977), Professor Emerita of Education, (2015); BSEd, Geneva College; MEd, Westminster College; PhD, University of Pittsburgh.

Nancy Johnson (2004), Professor of Education; BA, Wheaton College; MEd, University of Virginia; PhD, Pennsylvania State University.

David A. Jordan (1983), Associate Professor Emeritus of Business (2007); BS, John Brown University; ME, Old Dominion University; MBA, Gold Gate University; Certified Systems Integrator (CSI).

Robert E. Liljestrand (1983), Associate Professor Emeritus of Civil Engineering, (2014); BSCE, MSCE, Purdue University, PE.

John Mitchell (1962), Associate Professor Emeritus of Business Administration (1995); BSBA, Geneva College; MBA, University of Pittsburgh; The Pennsylvania State University; CPA.

Gerald D. Moran (1974), Professor Emeritus of Library and College Librarian (2007); AB in Ed, Fairmont State College; MLS, George Peabody College for Teachers of Vanderbilt University; PhD, University of Pittsburgh.

Ronald Moslener (1992), Professor Emeritus of Psychology, Counseling and Human Services (2012); BA, University of Pittsburgh; MDiv, Pittsburgh Theological Seminary; DMin, Fuller Theological Seminary.

Ann Paton (1958), Professor Emerita of English (1994); BA, Geneva College; MLitt, University of Pittsburgh; PhD, University of Colorado; Princeton University; University of Minnesota; University of Virginia; Trinity Episcopal School of Ministry.

Ralph N. Phillips (1995), Associate Professor Emeritus Department of Adult and Continuing Education (2015); BS, Geneva College; MDiv, Westminster Theological Seminary; MA, University of Pittsburgh; MA, Geneva College, PhD, University of Pittsburgh.

Stanley P. Reyle (1976), Professor Emeritus of Mechanical Engineering (1996); ME, MS, Stevens Institute of Technology; PhD, Polytechnic Institute of New York.

Verley G. Sangster (1994), President Emeritus Center for Urban Theological Studies (2006); MA, Fuller Theological Seminary; DDiv, Colorado Christian University.

John Bock Schaefer (1962), Associate Professor Emeritus of Physics (2012); SB, Massachusetts Institute of Technology; MS, Carnegie-Mellon University; University of South Carolina.

Dean Smith (1990), Professor Emeritus of Biblical Studies (2013); BA, Geneva College; MDiv, Reformed Presbyterian Seminary; DMin, Reformed Theological Seminary, Orlando.

Richard L. South (1961), Professor Emeritus of Physics (1999); BS, Geneva College; MS, PhD, Case Western Reserve University.

James H. Sterrett (1975), Professor Emeritus of History (1999); BA, Grove City College; MA, PhD, Kent State University; Trinity Episcopal School for Ministry.

Eugene C. Sullivan (1976), Assistant Professor Emeritus of Physical Education (1999); B.S., Slippery Rock University; MAT, University of North Carolina.

Philip J. Van Bruggen (1992), Professor Emeritus of Psychology, Counseling, and Human Services (2008); BA, University of Oregon; MA, PhD, University of Iowa.

Marilyn C. Van Dyke (1955), Assistant Professor Emerita and Cataloging Librarian (2005); BA, Geneva College; MLS, Carnegie Library School.

John H. White (1961), President and Professor of Bible Emeritus (2004); BA, Geneva College; diploma, Reformed Presbyterian Theological Seminary; MA, University of Pittsburgh; DMin, Pittsburgh Theological Seminary.

Ann Wollman (1975), Registrar Emerita (2002); BA Augsburg College, MA, University of Wisconsin.

David H. Wollman (1971), Professor Emeritus of History (2002); AB, Northeastern University; MA, PhD., University of Wisconsin; London University.

### **Current Faculty**

Adel G. Aiken (1985), Professor of Education; Chair, Department of Education; and Director, MEd in Reading program; BSEd, Geneva College; MEd, Westminster College; EdD, University of Pittsburgh.

Ralph Ancil (2004), Professor of Economics; BS, Grand Valley State University; MS, Michigan State University; PhD, Michigan State University.

Rodney Austin (2005), Associate Professor of Chemistry; BS, Mount Vernon Nazarene College; PhD, University of Cincinnati.

William Barlow (2010), Associate Professor of Engineering; BSEE, The Pennsylvania State University; MSEE, University of Pittsburgh.

Elizabeth Belcastro (2010), Assistant Professor of Education; BA, Fairmont State College; MA, West Virginia University; EdD, University of Pittsburgh.

Doug Bradbury (2008), Assistant Professor of Biblical Studies; BA, MA, Geneva College.

Jeffrey Cole (2003), Professor of History and Coordinator of the Geneva College Semester in Rome Program; BS, Lynchburg College; MEd, Lynchburg College; PhD, Bowling Green State University.

Anthony Comer (2011), Associate Professor of Engineering; BS, Purdue University; MS, PhD, University of Kentucky.

Matthew J. Correll (2013), Instructor of Adult Degree Completion; BA, Bryan College; MA, Geneva College; MA Reformed Presbyterian Theological Seminary.

Daniel J. Cross (2015), Associate Professor of Physics; BS and BA, Cedarville University; MS and PhD, Drexel University.

Lowell A. Cummings (2012), Associate Professor of Physics; BS, University of New Mexico; MS, Bowling Green State University; PhD, New Mexico State University.

Byron Curtis (1991), Professor of Biblical Studies; BA, Geneva College; MDiv, Reformed Theological Seminary; PhD, Westminster Theological Seminary.

Jack Delivuk (1990), Professor of Library and Systems Librarian; BS, Geneva College; MDiv, Reformed Presbyterian Theological Seminary; MSLS, Clarion University; STM, ThD, Concordia Seminary.



Eugene DeMarco (1993), Instructor of Business and Head Football Coach; BA, Geneva College; MBA, West Virginia University.

James K. Dittmar (1989), Professor of Leadership Studies and Director, Department of Leadership Studies; BA, Geneva College; MEd, Slippery Rock University, PhD, University of Pittsburgh.

John G. Doncevic (2007), Associate Professor of Library and Library Director; BS, Geneva College; MLIS, University of Pittsburgh; MTS, Reformed Presbyterian Theological Seminary; JD, Widener University.

Sean Doyle (2008), Associate Professor of History and Humanities; BA, Toccoa Falls College; MA, Gordon-Conwell Theological Seminary; PhD, University of Edinburgh.

Gary Dunda (2010), Instructor of Physical Education and Head Men's Soccer Coach; BA, Messiah College; MA, Emporia State University.

David A. Essig (1999) Professor of Biology and Program Coordinator, Program in Cardiovascular Technology; BS, Bowling Green State University; MS, Ball State University; PhD, University of Michigan.

Kathryn E. Floyd (2006), Assistant Professor of Library and Cataloger/Assistant Instructor Librarian; BA, Calvin College; MSLS, Clarion University of Pennsylvania.

Robert Frazier (2003), Professor of Philosophy; BA, Gordon College, MA, Gordon-Conwell Theological Seminary, PhD, The State University of New York at Buffalo.

Bradshaw Frey (1984), Professor of Sociology; BA, Geneva College; MDiv, STM, Pittsburgh Theological Seminary; PhD, University of Pittsburgh.

Matthew Fuss (2011), Assistant Professor of Business; BA, MBA, Geneva College; PhD Candidate, Duquesne University.

Kimerly R. Gall (1980), Professor of Physical Education; BA, Cedarville College; MS, University of Dayton; PhD, The Ohio State University.

John D. Gallo (2007), Dean of Graduate, Adult, and Online Programs and Assistant Professor; BA, MS, Geneva College; MBA, Northcentral University.

James S. Gidley (1990), Professor of Civil Engineering and Chair, Department of Engineering and Computer Science; BS, University of Rhode Island; SM, Harvard University; PhD, Harvard University; PE.

Natalie Heisey (2010), Assistant Professor of Education; BS, Edinboro University; MEd, Gannon University; EdD, University of Pittsburgh.

Elaine Hockenberger (1985), Professor of Communication; BA, MS, Bloomsburg State College; PhD, University of Pittsburgh.

Philip M. Holladay (1983), Professor of Mathematics; BS, MS, PhD, North Carolina State University.

Jonathan Impellizzeri (2012), Assistant Professor of Counseling; BA, Lee University; MS, Duquesne University; PhD, Regent University.

Deborah A. Jeannett (1997), Associate Professor of Organizational Leadership; BA, College Misericordia; MEd, EdD, University of Pittsburgh.

Christopher C. Jobs (2015), Professor of Engineering; BS and BSME, Geneva College; MSME and PhD, West Virginia University.

Mildred L. Johnson (2015), Associate Professor of Criminal Justice; BS and MS, Geneva College; DSL, Regent University.

Jennifer J. Joseph (2015), Instructor of Library and Reference Librarian; BS, Geneva College; MLS, University of Pittsburgh.

Mark T. Kennedy (2014), Associate Professor of Engineering; BS, Syracuse University; MS, Auburn University.

Donald B. Kephart (1983), Associate Professor of Music and Chair, Department of Music; BS, Grove City College; The Pennsylvania State University; MMus, Youngstown University.

Matthew L. Kickasola (2012), Assistant Professor of Humanities and Music; BM, Covenant College; MM, Temple University; MA and PhD, Washington University.

Paul W. Kilpatrick (1991), Professor of English; BA, Geneva College; MA, PhD, The Pennsylvania State University.

Shirley J. Kilpatrick (1991), Professor of Humanities; BA, Geneva College; MA, The Pennsylvania State University; DMin, Trinity Episcopal School for Ministry.

David F. Kuhns (1996), Professor of English and Chair, Department of English ; BA, MA, PhD, University of Pittsburgh.

Susan Layton (2004), Assistant Professor of Communications and Chair, Department of Communication; BA, Geneva College; MS, Illinois State University; CCC-SLP.

Sha Luangkesorn (2006), Associate Professor of Piano and Music Theory; BM, Chapman University; MM, DMA, University of Cincinnati.

Carol B. Luce (1989), Professor of Psychology, Counseling and Human Services; Director, MA in Counseling Program; BA, Susquehanna University; MEd, The Pennsylvania State University; PhD, University of Pittsburgh.

Keith Martel (2012), Associate Professor of Higher Education and Director, MA in Higher Education Program; BA and MA, Geneva College; MA and PhD, Duquesne University.

James Matta (2010), Associate Professor of Counseling; BA, MA, Edinboro University; BS, EdD, Duquesne University.

Kerry McMahon (2004), Associate Professor of Chemistry; BS, Geneva College; PhD, University of Connecticut.

Esther Meek (2004), Professor of Philosophy; BA, Cedarville College; MA, Western Kentucky University; PhD, Temple University.

Eric J. Miller (1999), Professor of History; BS, Lancaster Bible College; MA, Trinity International University; PhD, University of Delaware.

Megan Morton (2009), Assistant Professor of English; BA, Saint Xavier University; MA, PhD, Purdue University.

Denise Murphy-Gerber (2008), Associate Professor of Business; BSBA, Clarion University; MS, National-Louis University; PhD, Duquesne University.

Frederick R. Neikirk, Jr. (1992), Professor of Political Science and Chair, Department of History, Political Science, and Sociology; BA, MA, University of Delaware; PhD, University of Illinois.

Joseph E. Peters (1999), Professor of Psychology, Counseling and Human Services; BS, Juniata College; MS, PhD, The Pennsylvania State University.

Mark Porter (1997), Associate Professor, Degree Completion Program; BA, Grove City College; MDiv, Westminster Theological Seminary; EdD, Indiana University of Pennsylvania.

Daniel H. Raver (1980), Associate Professor of Business; BSBA, Geneva College; Robert Morris College; MBA, University of Pittsburgh; CPA.

Robert H. Reid (2014), Professor of Engineering; BS, University of Pittsburgh; MS, Illinois Institute of Technology; Ph.D., Carnegie Mellon University.

Robert Reith (2008), Associate Professor of Business; BA, Grove City College; MBA, University of Pittsburgh; J.D., Duquesne University.

Diana Rice (2005), Professor of Psychology and Chair, Department of Psychology, Counseling, and Human Services; BA, Houghton College; MS, Syracuse University; PhD, Syracuse University.

Gordon Richards (2011), Associate Professor of Business and Chair, Department of Business, Accounting, and Management; AAS, Community College of the Air Force; BS, Park College; MA, Webster University; DS, Robert Morris University.

Amy C. Russin (2007), Associate Professor of Accounting; BSBA and MBA, Geneva College; CPA.

Jeffrey D. Santarsiero (1988), Assistant Professor of Physical Education, Head Coach men's basketball ; BS, Nyack College; MS, United States Sports Academy.

Daryl F. Sas (1988), Professor of Biology and Chair, Department of Biology; BA, Dordt College; Mankato State University; PhD, University of Minnesota.

Jeffrey Schindel (2009), Instructor of Communications; BS, MS Geneva College; doctoral candidate, Duquesne University.

Stephanie Schindel (1995), Assistant Professor of Psychology; BS, Geneva College; MA, Geneva College.

Karen Schmalz (2001), Professor of Special Education; BS, Geneva College; MEd, Shippensburg University; EdD, Regent University.

David W. Shaw (1990), Professor of Mechanical Engineering; BSME, Geneva College; MS, PhD, The Ohio State University; PE.

C. Scott Shidemantle (1997), Professor of Biblical Studies and CMN Program Director; BA, Slippery Rock University; MDiv, Gordon-Conwell Theological Seminary; ThM, Princeton Theological Seminary; PhD, Trinity Evangelical Divinity School.

Wendy Shidemantle (1997), Administrator and Associate Professor of Language Studies; BA, MA, West Virginia University; MA, Cleveland State University.

Shannan Shiderly (2012), Associate Professor of Psychology, Counseling, and Human Services and Director, MA in Counseling Program; BS, Geneva College; MEd, Westminster College; Ph.D., Robert Morris University.

Cathy Sigmund (2000), Professor of Psychology, Counseling, and Human Services; BS, Geneva College; MS, PhD, The Pennsylvania State University.

Andrea Smidt-Sittema (2006), Associate Professor of History; BA, Calvin College; MA, PhD Ohio State University.

David K. Smith (2001), Professor of Music; BMus, Wheaton Conservatory; MMus, DMA, Indiana University School of Music.

Curtis E. Songer (2014), Associate Professor Business; BS, University of Oklahoma; MS and MBA, Carnegie-Mellon University.

John W. Stahl (1985), Professor of Chemistry and Chair, Department of Chemistry, Math and Physics; BS, Geneva College; PhD, The Pennsylvania State University.

John W. Stein (1995), Professor of Mathematics and Astronomy; BS, Case Institute of Technology; PhD, University of Pittsburgh.

Melinda R. Stephens (1998), Chief Academic Officer, Dean of Undergraduate Programs, Professor of Chemistry, and Chair, Department of Core Studies; BS, Geneva College; PhD, University of Pittsburgh.

Alan W. Sumner (1989), Assistant Professor of Physical Education; Head Baseball Coach, Associate Athletic Director for men; BSBA, Geneva College; MS; The United States Sports Academy.

Lynda A. Szabo (1997), Professor of English; BA, Geneva College; MA, PhD, Duquesne University.

Richard L. Talbert (2014), Assistant Professor of Communication; BA, Slippery Rock University; MA and Ph.D., Duquesne University.

Murat Tanyel (2003), Professor of Engineering; BS, Bogazici University of Istanbul; MS, Bucknell University; PhD, Drexel University.

Terry Thomas (1992), Professor of Biblical Studies; BA, Grove City College; MA, Pittsburgh Theological Seminary; PhD, University of Pittsburgh.

Caleb P. Thompson (2014), Instructor of Counseling; BS and MA, Geneva College; PhD Candidate, Duquesne University.

Marjory Tobias (2005), Assistant Professor of Biology; BS, Geneva College; MS, Auburn University.

Mark D. Tronzo (2015), Associate Professor of Engineering and Math; MDiv, Trinity Evangelical Divinity School; MA, Reformed Presbyterian Theological Seminary; MS, Youngstown State University; PhD, University of Pittsburgh.

Yvonne D. Trotter (2005), Professor of Education; BS, Kent State University; MS, University of Dayton; PhD, Kent State University.

Gary VanderPlaats (1995), Associate Professor of Business and Director, Master of Business Administration Program; BA, Dordt College; MBA, The University of Iowa; DBA, Anderson University; CPA, CMA, CCM.

Leila L. Wallace (1989), Assistant Professor of Computer Science; BS, Geneva College; MS, University of Pittsburgh.

Joel S. Ward (2014), Assistant Professor of Communication; BA, Huntington University; MA and Ph.D., Duquesne University.

Jonathan M. Watt (2000), Professor of Biblical Studies and Chair, Department of Biblical Studies, Ministry, and Philosophy; BS, Syracuse University; MDiv, Reformed Presbyterian Theological Seminary; MA, PhD, University of Pittsburgh.

Daniel P. Williams (2013), Assistant Professor of English; BA, University of Southern Maine; MFA, Stonecoast MFA Program; Ph.D., University of Louisiana at Lafayette.

Terri R. Williams (1986), Professor of Psychology; BA, Anderson University; MA, PhD, Michigan State University.

Lori Wynn (2011), Assistant Professor of Physical Education and Head Women's Basketball Coach, BS, Houghton College; MEd, East Stroudsburg University.

Brian Yowler (2005), Associate Professor of Biology and Head Coach of Track and Field and Cross Country; BS, Indiana University of Pennsylvania; PhD, Penn State University College of Medicine.

### **Adjunct Faculty**

Susan L. Brandt (1996), Adjunct Assistant Professor of Education; BS, North Dakota State University; MEd, National Louis University, Germany.

Arletta Cruzan (1995), Adjunct Lecturer of Chemistry; BS, Geneva College.

Carole Fedeles (1988), Adjunct Assistant Professor of Education; BA, Geneva College; MA, University of Pittsburgh

Richard Grassel (1999), Adjunct Assistant Professor of Student Ministry; BA, Geneva College; MA, doctoral candidate, Trinity Episcopal School for Ministry.

Brandilyn Gribble Mathers (2004), Associate Professor of Education; BA, Kenyon College; MEd, The Pennsylvania State University; PhD, University of Pittsburgh

Richard A. Noble (2007), Adjunct Assistant Professor of Communication; BA, Geneva College; M.Div. and D.Min., Gordon-Conwell Theological Seminary.

### **Courtesy Faculty Appointments**

Theresa McCreary (2009), Medical Technology Program Director, Memorial Medical Center, Johnstown, PA.

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