



FRESHMAN COURSE DESCRIPTIONS

ACCT 201. PRINCIPLES OF ACCOUNTING I. This introductory course focuses on the preparation and use of accounting information in the financial reporting environment. Emphasis is placed on the understanding and application of steps involved in the accounting cycle as well as on the recognition, measurement, and reporting issues associated with various financial statement accounts for sole proprietorships and partnerships using the accrual basis of accounting. The course also exposes the student to career opportunities in the accounting profession.

ART 103. CERAMICS I HANDBUILDING. This is an introductory studio class designed to expose students to a variety of ceramic processes used to produce sculpture and vessel. The goal is to broaden students' understanding of clay as a viable medium for personal visual expression. An additional fee is charged for this course.

ART 104. CERAMICS I WHEEL. This is an introductory studio class designed to expose students to the potter's wheel and throwing techniques used to produce hand-thrown vessels. The goal is to broaden students' understanding of clay as a viable medium for personal visual expression as they create unique, finished clay. An additional fee is charged for this course.

ASTR 206. INTRODUCTION TO SKY MOTIONS AND PLANETS. An introduction to modern astronomy with an emphasis on the motions of the sun, moon, and stars in the sky; the solar system; and extrasolar planets. Includes observations with the campus observatory and an observational project. Open to all students.

BIOL 101. GENERAL BIOLOGY I. The first course in a year-long introduction to the unifying principles of biology. This semester includes discussion of the chemistry of life, cells structure, energy, genetics, and physiology. Three lectures and one lab per week.

CHEM 105. CHEMISTRY FOR ENGINEERS. An introductory survey in the fundamental principles of chemistry, including chemical reactions and equations; behavior of gases; chemical thermodynamics; basics of electrochemistry; crystal structure; and nuclear, organic, and environmental chemical fundamentals. Three lectures and one lab per week.

CHEM 111. GENERAL CHEMISTRY I. The first semester of a year-long introduction to the fundamental principles of chemistry, including stoichiometry, nomenclature, basic reactions (solubility, acid-base and oxidation reduction), gas laws, Laws of Thermodynamics (enthalpy, entropy, Gibb's free energy and equilibrium constant), electronic structure, bonding, molecular structure, properties of pure liquids and solids, and solutions. Three lectures per week. No credit will be given to students who have already received credit for Chemistry 105.

CHEM 113. GENERAL CHEMISTRY I LAB. This course will develop laboratory skills in measurement, use of volumetric glassware and titration. Students will learn to use visible spectrometers, calorimeters, and data probes to record results on their computers. They will be exposed first-hand to concepts in Chemistry 111 including solubility, acid-base neutralization, gas laws and colligative properties. Pre- or Co-requisite: Chemistry 111.

CMIN 122. INTRODUCTION TO CHRISTIAN MINISTRIES. This course will introduce the student to the principles of Christian Ministry in contemporary society. Particular attention will be placed on biblical foundations of Christian education, Youth Ministry, para-church ministries, the local church, history of Christian education, and the educator as the agent of change.

CMIN 258. COMMUNICATING THE GOSPEL. This course is designed to train students in the concepts and skills necessary to effectively communicate from the scripture. This phase of the Christian Ministry curriculum will focus on general communication skills, sermon design, preaching technique, with special emphasis on teaching and preaching the Word of

God. This course satisfies the Writing Intensive (WI) and Speaking Intensive (SI) requirements for the Christian Ministries major.

COMM 104. PUBLIC SPEAKING AND RHETORIC. Introduces students to the preparation and presentation of material for a variety of public speaking situations. This performance-oriented class offers instruction in the theory of rhetoric, material development, and delivery techniques. Students will review the historical importance of oral communication and the role it plays in society. This course fulfills the Speaking Intensive (SI) requirement for Communication Studies majors.

COMM 110. PRINCIPLES OF MEDIA. This course offers an introduction of the historical and conceptual foundations of media, including oral, print, photographic, broadcast, cinematic, and digital cultural forms and practices. Drawing upon a comparative approach, students will examine the nature of mediated communication, the functions of media, and the history of transformations in media and the institutions that help define media's place in society.

COMM 135. WRITING FOR THE MEDIA. Provides an introduction to the substance, structure, and style of multiple forms of non-narrative mass media including print, broadcast, film, and the Internet.

COMM 235. JOURNALISM. Reviews a variety of print and broadcast media, exploring editorial style and slant. Fundamental newsgathering and news writing skills will be studied and practiced. Students will gather information from campus, community, and research sources in order to develop hard news, feature, and in-depth stories. Ethical and legal issues will be explored as well as the role of print media in shaping current events.

COMP 141. COMPUTER PROGRAMMING I. This course provides the student with an understanding of hardware and software concepts, structured program design, and programming using Java in an integrated development environment. Topics include Boolean expressions, iteration, standard library classes and methods, arrays, searching and sorting, multidimensional arrays, strings, dynamic memory allocation, programmer-defined classes and methods, and deep copying. This course, along with Math 161 and 488, fulfills the Information Literacy (IL) requirement for the Mathematics major.

COMP 155. INTRODUCTION TO COMPUTER SCIENCE. This course provides an introduction to the field of Computer Science. Topics include data representation, gates and circuits, algorithm design, programming languages, abstract data types, operating systems, information systems, artificial intelligence, networks, and the World Wide Web. The course is intended to prepare students for further study in the field and is also appropriate for non-major students who wish to become familiar with computer science.

ECON 101. PRINCIPLES OF ECONOMICS (MICRO) I. An examination of the fundamental principles of human action and the laws of the market economy. Focus will be on exchange, prices, production, costs, entrepreneurship, and government intervention.

ECON 102. PRINCIPLES OF ECONOMICS (MACRO) II. An examination of the fundamental principles of human action and the laws of the market economy. Focus will be on money, inflation, credit, interest, capital, economic progress, and business cycles.

ECON 120. FOUNDATIONS OF ECONOMICS. An investigation of the theological, philosophical and epistemological foundations of economics. The nature of man and the created world, laws of action and interaction, and the good society will be explored.

EDUC 202. FOUNDATIONS OF TEACHING. A study of the pedagogical framework of education with emphasis on the legal and organizational issues related to American institutions of education. This includes an analysis of the current reform movements and the impact upon the role of the professional educator.

EDUC 204. TECHNOLOGIES OF INSTRUCTION. An introduction to educational media with an emphasis on applications of computer technology in education; general models for computer usage in education and educational institutions; and case studies of specific projects in terms of approach, effectiveness, and implications for the future. Emphasis will be on the application of educational media and technology within the K-12 school curriculum. For education majors only.

EDUC 281. EARLY CHILDHOOD FIELD EXPERIENCE (FIRST LEVEL). This one-credit field experience is an internship course designed to permit beginning level early education students to engage in a semester-long field experience in the Early Education Center. This course is required for Early Childhood certification. Freshman or sophomore level course.

ENGL 201. ENGLISH LITERATURE SURVEY AND LITERARY STUDIES I. The first semester of the two-semester survey of English literature focuses on the major authors and representative works of each period from the early Middle Ages (*Beowulf*) to the 18th century. It also introduces students to major interpretive/critical schools of thought, as well as such foundational literary practices as close reading, analysis, and scansion. This course also fulfills the Writing Intensive (WI) and Information Literacy (IL) requirements for the English major. As such, it is the foundational course for the English major and should be taken in the first semester of the program.

ENGL 205. WORLD LITERATURE SURVEY: ASIA. A survey of representative authors and works of Asia, with a special focus on the literature of China, India, and Japan. The 205-206 survey is designed to include works of cultures and regions not covered by the English and American literature surveys or the classical and European literature in the required Humanities 202: Civilization & Literature. Students may take either or both courses, in either sequence.

ENGL 250. WORLD DRAMA. An introduction to the great playwrights and representative plays of world drama from the Greeks to the present. Students study elements of plot, characterization, and idea in each of the plays studied. The course also focuses on the theatrical and historical context of each play and playwright.

ENGR 156. INTRODUCTION TO ENGINEERING. Introduces students to the engineering profession and the design process. Course lectures and assignments include the design process; problem definition and solution; oral and written communications; group dynamics; public responsibility; current global engineering challenges; and engineering ethics. A group design project is required. For mechanical engineering students, this course is taken concurrently with Mechanical Engineering 120.

ENTR 101. ENTREPRENEURIAL MIND: CREATIVITY AND INNOVATION. This course introduces the student to entrepreneurial thought and the process for innovation and idea generation. Students begin to develop their own entrepreneurial mindset and the business skills essential to the entrepreneurial experience. Students are introduced to the basics of business and challenged to think creatively about forming businesses or designing products to solve customer problems and address unmet needs in the commercial and social arenas. Through experiential learning, case studies, business writing assignments, and creative thinking exercises, students will develop a disciplined thought process for starting and running their own enterprise. This course satisfies the Speaking-Intensive requirement for Entrepreneurship majors. Corequisite: Entrepreneurship 102 for Entrepreneurship majors. All other majors may take the course as an elective without the corequisite.

ENTR 102. TECHNOLOGY FOR THE ENTREPRENEUR. Students learn to use technology commonly used by entrepreneurs in the following areas: presentations, networking, blogging, social media, design, basic websites, eCommerce, and prototyping. This course satisfies the Information Literacy requirement for Entrepreneurship majors. Entrepreneurship majors take this concurrently with Entrepreneurship 101.

EXER 101. INTRODUCTION TO EXERCISE SCIENCE. This course introduces students to the field of Exercise Science, requirements for professional certification, graduate school requirements, and career options in both health fitness and clinical fields. Lecture topics will include the mission and vision of the American College of Sports Medicine (ACSM), the Commission on Accreditation for Exercise Science, and the Department of Exercise Science. Students will become familiar with the ACSM JTAs (Job Task Analysis) which will be covered across the Exercise Science curriculum. Students will begin to create individual portfolios to show how the JTAs and department objectives are met across the curriculum.

EXER 134. INTRODUCTION TO NUTRITION. An introduction to the importance of diet for present and future good health. Carbohydrates, fats, proteins, vitamins, and minerals, and their interactions will also be addressed. In addition, the course explores topics such as label-reading, popular diets, dietary analysis, and other issues of current interest in the field of nutrition, including sport and exercise nutrition, supplements, and life-cycle nutrition.

EXER 253. ANATOMY & PHYSIOLOGY I. This course will introduce the student to human anatomy and physiology with emphasis on the various body systems and how they integrate with one another. The effect of exercise on each system will

be explored and clinical examples will be discussed. Laboratory exercises will include simulations using physical and computer models, as well as introductory tissue dissections. Two lectures and one lab per week. Prerequisite: Exercise Science 101 or BIOL 341.

FREN 101. ELEMENTARY FRENCH I. The first of a two-semester elementary sequence that moves students towards functional proficiency in the four skill areas (reading, writing, listening, speaking) while increasing their cultural literacy of the French-speaking world. Intended for students with little or no prior exposure to the French language, this course emphasizes successful communication in real-life situations and a basic understanding of the main elements of French grammar. Students who have previously studied French must take the placement exam before enrolling in French 101.

FREN 201. INTERMEDIATE FRENCH I. The first of a two-semester intermediate sequence that moves students towards functional proficiency in the four skill areas (reading, writing, listening, speaking) while increasing their cultural literacy of the French-speaking world. Students progress from formulas and single sentence utterances to paragraph-length discourse. Prerequisite: French 102 or placement exam.

FREN 301. UNDERSTANDING FRANCE AND THE FRENCH. Students gain insight into modern day France and her people through an understanding of her recent history, institutions, conventions, and cultural products. A variety of sources (articles, films, essays, etc.) will facilitate discussion of key aspects of French society. Prerequisite: French 202 or placement exam.

FREN 307. FRENCH COMPOSITION AND STYLE. The purpose of this course is to refine students' writing ability in French. Through a variety of assignments arranged around specific genres (e.g. a movie review, a persuasive essay, a job cover letter, etc.), students will hone their ability to communicate clearly and with greater sophistication. To prepare for writing their own compositions, students will read texts in the target genres in order to identify effective argumentation, style, and tone. In addition to covering more advanced skills, the course will review key grammatical structures according to the needs of the class. This course fulfills the Writing Intensive (WI) requirement for the French major. Prerequisite: French 202 or placement exam.

HEBR 101. INTRODUCTION TO BIBLICAL HEBREW I. A study of the grammar and syntax of the Hebrew Bible.

HIST 141. WORLD GEOGRAPHY. An exploration of the physical and human geography of the globe.

HIST 143. WORLD HISTORY I. A survey of the basic history of world societies from the earliest recorded development of human civilizations to the late medieval period. As an Information Literacy (IL) course, it emphasizes designing historical research questions; finding, evaluating, and using primary and secondary sources; citing sources properly; and writing a cogent paper.

HIST 204. HISTORICAL AND PHILOSOPHICAL FOUNDATIONS OF EDUCATION. A survey of the historical and philosophical foundations of education from antiquity to the present day. It includes an analysis of political, sociological, and financial issues related to American education with emphasis upon understanding the contributions of Western Civilization and the impact of American institutions on systems of education.

HIST 253. UNITED STATES HISTORY SURVEY. An introductory survey of American history from its colonial origins to the present. This course will examine significant political, social, geographic, economic, religious, and cultural developments. Prerequisite: Middle Level Education majors only.

HIST 283. HISTORY OF THE UNITED STATES TO 1865. An introductory survey of American history from its colonial origins until the end of the Civil War. The course examines political, social, economic, religious, and cultural developments.

HUMA 102. CIVILIZATION AND THE BIBLICAL REVELATION. A study of Christian revelation and how it influenced the course of Western civilization. It focuses on key texts that are foundational for theology, cosmology, epistemology, human nature, society, and ethics. This course contains the second component of the across-the-curriculum Information Literacy (IL) requirement. The year-long course sequence of Religion 211 and 212 may substitute for this course. Similar courses taken at other institutions will transfer as elective credit and may not be used to fulfill this requirement.

LATN 101. ELEMENTARY LATIN I. This is the beginning course of the elementary Classical Latin sequence. It assumes no previous knowledge of Latin. Students cover the fundamentals of Latin grammar and syntax while building a basic vocabulary. They will begin to read Latin in sentences and edited short selections.

MARK 204. PRINCIPLES OF MARKETING. An introduction to the terms and concepts used in marketing. Study focuses on all aspects of the marketing process, including market analysis and information, consumer and business buying behavior, marketing strategy, the marketing mix, and legal and ethical issues. Discussion covers global, digital, and sustainability implications. The goal is to understand key basic marketing concepts and be able to practically apply knowledge to marketing decisions. Discussion also incorporates the application of Christian values in the workplace.

MATH 110. COLLEGE ALGEBRA. Designed to help prepare students for success specifically in Business Calculus as well as in Pre-Calculus, this course offers a thorough treatment of linear and quadratic equations and inequalities, rational and radical equations, and functions and their graphs. A basic understanding of high school algebra is presumed. **This course does not satisfy the Quantitative/Logical Reasoning requirement.**

MATH 111. PRE-CALCULUS. Designed to help prepare students for success in Physics 121 or Calculus I, this course offers a thorough treatment of function theory, analytic geometry, exponential and logarithmic functions, and trigonometry. A basic understanding of high school algebra and analytic geometry is presumed.

MATH 118. FINITE MATHEMATICS. An introduction to a variety of topics from finite mathematics such as sets, counting, basic probability and statistics, linear systems, matrix algebra, and linear programming (graphical solutions). Time permitting, additional topics such as linear programming with the simplex method, Markov chains, and game theory will be considered.

MATH 141. BUSINESS CALCULUS. The differential and integral calculus of elementary functions with applications in business and economics. Students may not receive credit for both Mathematics 141 and 161. Mathematics 161, not 141, is the prerequisite for 162.

MATH 151. SURVEY OF MATHEMATICS I. This course (along with Math 152) is a conceptual exploration of mathematical topics related to elementary and middle school mathematics, and is part of a two-course, six-hour mathematics requirement specifically designed for elementary education and early childhood majors. Content studied includes critical thinking and problem solving, logic, sets, relations and functions, numeration systems and whole-number computation, integers, and elementary number theory. Restricted to Elementary, Special Education with Elementary, Middle Level, and Music Education majors only.

MATH 161. CALCULUS I. A first course in calculus that assumes no prior study of the subject. Topics include limits and continuity, differentiation, curve sketching, the fundamental theorem of calculus, definite and indefinite integrals, and applications. This course fulfills in part the Information Literacy (IL) requirement for the Mathematics major. Prerequisite: High school mathematics including algebra, analytic geometry, and trigonometry. Students may not receive credit for both Mathematics 141 and 161.

MATH 162. CALCULUS II. A continuation of Math 161 covering the topics: exponential, logarithmic and inverse trigonometric functions, techniques of integration, parametric equations, sequences, infinite series, and Taylor series. This course fulfills in part the Information Literacy (IL) requirement for the Mathematics major. Prerequisite: Mathematics 161 or permission of instructor.

MATH 201. STATISTICAL METHODS. An introduction to the basic methods and techniques of statistical inference including descriptive measures, probability distributions, tests of hypotheses, interval estimation, and analysis of variance. Students may only receive credit for one of Mathematics 201, Management 201, or Psychology 201.

MATH 261. CALCULUS III. The final course in the three-semester calculus sequence covering: polar coordinates, vectors and the geometry of three-dimensional space, vector functions, partial derivatives, multiple integrals and vector calculus. This course fulfills in part the Information Literacy (IL) requirement for the Mathematics major. Prerequisite: Mathematics 162.

MECE 107. ENGINEERING GRAPHICS. A study of the principles of engineering drawing, including detailed part drawings. Students will learn to read and create detailed technical drawings. Topics include orthographic and pictorial views, section views, and auxiliary views. Dimensioning and tolerancing in accordance with ANSI Y14.5, including geometric dimensioning and tolerancing is emphasized.

MECE 109. INTRO TO SOLID MODELING. An introduction to basic CAD modeling. Students will be introduced to mechanical engineering terminology and mechanical components such as screws, gears, shafts, etc. An introduction to CAD solid modeling with Creo, including basic part and assembly models is also included. A small design project will introduce CAD design tools, including additive manufacturing.

MECE 120. NUMERICAL COMPUTING FOR MECHANICAL ENGINEERS. This course introduces students to applied numerical computation, with an emphasis on solving typical mechanical engineering problems. Sequential logic programming is taught using MATLAB. Topics include array and scalar operators, program control elements, graphic and text I/O, internal and user-defined functions. Students are introduced to numerical methods such as root finding, solutions to systems of linear equations, linear regression, and numerical integration and differentiation. Corequisites: Mathematics 161 and Physics 101.

MNGT 110. EXCEL. Nearly all businesses require new hires to be proficient in business uses of Excel. Students will learn how to use Excel in a variety of business fields. This course culminates in a final exam that, if successful, will result in students achieving Microsoft certification in Excel.

MNGT 201. BUSINESS STATISTICS. A course designed to familiarize the student with basic statistical techniques used in the management decision-making process, including probability distributions, descriptive statistics, confidence intervals, hypothesis testing, and parametric and nonparametric hypothesis testing. Students may only receive credit for one of Management 201, Mathematics 201, or Psychology 201.

MNGT 203. PRINCIPLES OF MANAGEMENT. An introduction to the theory and practice of management. Students are introduced to management history, ethics, global issues, and other challenges. The four basic managerial functions of planning, organizing, leading, and controlling are explored in detail. Throughout, attention is given to a Christian perspective on these topics.

MNGT 211. BUSINESS COMPUTER APPLICATIONS. This course provides business majors with instruction and practical exercises using Microsoft Office to solve business problems. It integrates applications of Microsoft Office into the business environment in such a way that students learn to use the software to prepare reports, design oral presentations, collaborate with one another, and utilize spreadsheets to organize information and summarize data. Business, accounting, financial and scientific problems and applications are emphasized. This course must be taken in the freshman or sophomore year.

MUSI 100. BAND. *Fall Semester:* The college marching band begins its year with band camp one week before classes begin in the fall. The band performs at home football games, selected away football games, and high school band festivals. ***Spring Semester:*** The symphonic band performs all styles of concert literature and presents two concerts during the semester. Auditions are held during the first week of each semester.

MUSI 101. CONCERT CHOIR. Concert choir members prepare, study, and present choral literature. The choir performs two concerts each semester, as well as for special campus services when applicable. Auditions are held during the first week of each semester.

MUSI 102. ORCHESTRA. The college orchestra performs a repertoire of classical as well as modern music. The orchestra performs one concert during the fall semester and two during the spring semester. Seating auditions are held the first week of fall semester, with new member auditions during the first week of spring semester.

MUSI 103. MUSIC THEORY I. The first in a sequence of four music theory courses. This course covers fundamentals of music as well as beginning musical analysis, counterpoint, and four-part writing. Prerequisite: Music major, music minor, or with the permission of the instructor.

MUSI 105. AURAL SKILLS I. An aural skills and sight singing class including melodic dictation, interval recognition, and chord identification.

MUSI 108. PERCUSSION METHODS. Class instruction in percussion instruments with emphasis on development of the instrumental program in the schools. Prerequisite: Music major and minors only, or with the permission of the instructor.

MUSI 114. GROVE CITY COLLEGE WIND ENSEMBLE. The Wind Ensemble is a select group of instrumental music students. This 45-member ensemble performs music of an academic nature including contemporary, classical, and standard wind literature. Enrollment is open to students of all majors by audition. Auditions are held during the first week of spring semester.

MUSI 115. GROVE CITY COLLEGE CHAMBER ORCHESTRA. The Chamber Orchestra is a select group of string players and other select wind and percussion students who must audition to join. This ensemble performs more challenging works from the string and chamber repertoires. The group presents music in each orchestra concert and other selected performances during the academic year. Auditions are held during the first week of fall semester.

MUSI 116. GROVE CITY COLLEGE TOURING CHOIR. The Touring Choir is comprised of selected vocalists who are committed to striving for excellence in the choral art. The choir sings for campus events, area churches, and takes a ten-day tour during a spring semester break. Auditions are held during the first week of fall semester.

MUSI 117. GROVE CITY COLLEGE JAZZ ENSEMBLE. The Jazz Ensemble is an advanced instrumental performing group. This group performs Swing, Bebop, Latin, Fusion, and other modern styles of jazz literature. Improvisational and advanced comping skills are highly desirable for membership in this ensemble. The Jazz Ensemble performs two college concerts per year in addition to several off-campus events. Musicians are selected by an open audition process during the 1st and 2nd week of the fall semester.

MUSI 118. GROVE CITY COLLEGE STAGE BAND. The Stage Band is an instrumental performing group that plays less demanding literature that develops jazz style, articulation, and phrasing. While improvisation skills are not required for this group, they are encouraged and developed. Musicians are selected by an open audition process during the 1st and 2nd week of the fall semester. The Stage Band typically performs two college concerts per year.

MUSI 119. GROVE CITY COLLEGE SINGERS. The Grove City College Singers is comprised of auditioned female vocalists who are interested in singing a variety of sacred and secular vocal literature. In addition to two formal concerts during the academic year, the ensemble sings at a variety of campus venues, including alumni events, and a chapel service during the fall semester. Auditions are held during the first week of fall semester.

MUSI 123. PIANO CLASS I. The first in a sequence of piano classes, this course is intended for students with no background in piano playing. Skills developed in this course include: reading pitch and rhythm; repertoire in five-finger positions in various keys; white-key major and minor scales in two octaves, hands separately; introduction of changes of position (thumb crossing, finger substitution, extension, contraction, leap); I and V 6/5 chords in all major keys.

MUSI 124. PIANO CLASS II. The second in a sequence of piano courses, this course is intended for students who have the basic skills developed in Music 123 Piano Class I. The course includes: repertoire with easy changes of position; black-key major and minor scales in two octaves, hands separately; chord progressions I-V in all major and minor keys; harmonization using I and V 6/5; and sight-reading in five-finger positions. Prerequisite: Music 123 or equivalent background in piano. See instructor for placement.

MUSI 125. PIANO CLASS III. The third in a sequence of piano courses, this course is intended for students who have acquired the basic skills developed in Music 124 Piano Class II. The course includes: intermediate level repertoire by standard composers; all major scales, two octaves, hands together; chord progressions I-IV-V-I in major and minor keys; harmonization using I, IV 6/4, and V 6/5 chords in major and minor keys; and sight-reading easy pieces with minimal changes of position; and transposing of simple melodies. Prerequisite: Music 124 or equivalent background in piano. See instructor for placement.

MUSI 126. PIANO CLASS IV. The fourth in a sequence of piano courses, this course is intended for students who have attained the skills covered in Music 125 Piano Class III. The course includes: standard repertoire at the intermediate and advanced-intermediate levels; all major scales, two octaves, hands together; chord progressions I-IV-ii-V7-I in major and minor keys; harmonization using I, IV 6/4, and V 6/5 in various accompaniment patterns; sight-reading early intermediate repertoire; introduction of hymn playing, reading open score (SATB), and playing easy accompaniments. Prerequisite: Music 125 or equivalent background in piano. See instructor for placement.

MUSI 131. ORGAN CLASS. This course is for music as well as non-music majors interested in the organ and its literature. The course also studies the history and design of the organ as well as acoustics and liturgical architecture.

MUSI 135. GUITAR CLASS I. This is an introductory course designed to provide the student with a means of self-expression through playing the guitar.

MUSI 137. GUITAR CLASS II. This course is for the student who has a basic knowledge of the guitar. This course includes teaching correct methods for learning flamenco techniques, aural and visual analysis, and performance harmonizing.

MUSI 141. BEGINNING VOICE CLASS. This course teaches vocal production and song presentation. Individuals demonstrate and perform for class members.

MUSI 151-152. PRIVATE PIANO LESSON. This course consists of one-half hour for one credit (151) or one full hour for two credits (152) of individual instruction at the piano. The level of repertoire will depend upon the technical and musical abilities of the student.

MUSI 155-156. PRIVATE ORGAN LESSON. This course consists of one-half hour for one credit (155) or one full hour for two credits (156) of individual instruction at the organ. The student will study literature appropriate to the organ and also work on technical development.

MUSI 161-162. PRIVATE VOICE LESSON. This course consists of one-half hour for one credit (161) or one full hour for two credits (162) of private instruction in voice. Vocal production, language training, and performance skills for the individual singer are taught.

MUSI 163-164. PRIVATE STRING LESSON - CELLO. This course consists of one-half hour for one credit (163) or one full hour for two credits (164) of individual instruction on the cello. Students will improve technical skill as well as become familiar with string literature for the cello.

MUSI 165-166. PRIVATE STRING LESSON - VIOLIN/VIOLA. This course consists of one-half hour for one credit (165) or one full hour for two credits (166) of individual instruction on the violin or viola. Students will improve technical skill as well as become familiar with string literature for the violin or viola.

MUSI 167-168. PRIVATE BRASS LESSON - FRENCH HORN. This course consists of one-half hour for one credit (167) or one full hour for two credits (168) of individual instruction on French horn. Included in the instruction are techniques for developing embouchure; fingerings and their alternates; and solo repertoire for the French horn.

MUSI 169-170. PRIVATE BRASS LESSON - TROMBONE. This course consists of one-half hour for one credit (169) or one full hour for two credits (170) of individual instruction on the trombone. Special emphasis is placed on slide positions, embouchure, trigger fingerings, and appropriate repertoire.

MUSI 171-172. PRIVATE BRASS LESSON - TRUMPET. This course consists of one-half hour for one credit (171) or one full hour for two credits (172) of individual instruction on the trumpet. The student will become familiar with solo repertoire as well as fingerings and their alternates, tone quality, embouchure, and breathing techniques.

MUSI 173-174. PRIVATE BRASS LESSON - BARITONE/TUBA. This course consists of one-half hour for one credit (173) or one full hour for two credits (174) of individual instruction for the student to develop proficiency on one of the lower brass instruments: baritone/euphonium or tuba. Playing techniques; fingerings and their alternates; tone quality; embouchure; and a variety of appropriate literature for the instrument will be presented.

MUSI 175-176. PRIVATE BASSOON LESSON. This course consists of one-half hour for one credit (175) or one full hour for two credits (176) of individual instruction on the bassoon. The student will become familiar with fingerings, embouchure, reed making, and bassoon literature.

MUSI 177-178. PRIVATE CLARINET LESSON. This course consists of one-half hour for one credit (177) or one full hour for two credits (178) of individual instruction on the clarinet. The student will gain mastery of the basic techniques of performance including literature, intonation, hand position, articulation, fingerings, and embouchure.

MUSI 179-180. PRIVATE OBOE/ENGLISH HORN LESSON. This course consists of one-half hour for one credit (179) or one full hour for two credits (180) of individual instruction on the oboe or English horn. The student will become familiar with fingerings, embouchure, reed making and literature.

MUSI 181-182. PRIVATE PERCUSSION LESSON. This course consists of one-half hour for one credit (181) or one full hour for two credits (182) of individual instruction on all of the percussion instruments. The course teaches playing techniques, fundamentals of each instrument, and literature.

MUSI 183-184. PRIVATE FLUTE LESSON. This course consists of one-half hour for one credit (183) or one full hour for two credits (184) of individual instruction for the student who is interested in developing knowledge of flute literature; technique; tone quality and vibrato; fingerings; and embouchure.

MUSI 185-186. PRIVATE GUITAR LESSON. This course consists of one-half hour for one credit (185) or one full hour for two credits (186) of individual instruction for the student wishing to concentrate on techniques and fundamentals of guitar playing. Instruction is given on chords, harmonic structure, scales, and literature.

MUSI 187-188. PRIVATE HARP LESSON. This course consists of one-half hour for one credit (187) or one full hour for two credits (188) of individual instruction at the harp. Must have prior harp or piano experience.

MUSI 189-190. PRIVATE STRING LESSON - BASS. This course consists of one-half hour for one credit (189) or one full hour for two credits (190) of individual instruction on the string bass. Students will improve technical skill as well as become familiar with string literature for the bass.

MUSI 191-192. PRIVATE SAXOPHONE LESSON. This course consists of one-half hour for one credit (191) or one full hour for two credits (192) of individual instruction on the saxophone. The student will gain mastery of the basic techniques of performance including literature, intonation, hand position, articulation, fingerings, and embouchure.

MUSI 198. MUSIC RECITAL ATTENDANCE FOR MUSIC MINORS. Students fulfill this requirement by attending four recitals each semester they are enrolled as music minors. Students minoring in music must register for this course each semester.

MUSI 199. MUSIC RECITAL ATTENDANCE FOR MUSIC MAJORS. Students fulfill this requirement by attending a predetermined number of faculty, senior and student recitals each semester. Music majors, other than those in Music Education, must register for this course each semester. Music Education majors must register for this course each semester, except for the student teaching semester. The student's academic advisor will monitor compliance with this requirement.

PHIL 191. INTRODUCTION TO ETHICS. An introductory study of philosophical issues related to the moral life, such as: What should we love? How should we treat each other, and why? What does it mean to be a good person, and how might we become better people? and What is human life about, ultimately? Attention will be given to the insights of principle figures in the history of ethics from the ancient period to the present.

PHIL 231. ANCIENT PHILOSOPHY. A survey of Western philosophy from the early Greeks through the beginning of the Christian era. Special attention will be given to the philosophies of Plato and Aristotle. Primary sources are used.

PHYE 100. HEALTHFUL LIVING. This course introduces students to fundamental concepts associated with healthful living throughout the lifespan in modern society. The course will focus upon the promotion of health and wellness within individuals, families, and communities through an understanding of healthful living, development of healthy lifestyles, and

avoiding or overcoming harmful habits. Current research and best practices will be presented to further students' knowledge and help them to shape their own strategies for a healthy and fit future.

PHYS 101. GENERAL PHYSICS I-ENGINEERING. A calculus-based study of mechanics including kinematics, Newton's laws of motion, work, energy, linear momentum, rotational motion, angular momentum, gravity, equilibrium, fluids, oscillations, traveling and standing waves. Three lectures and one lab per week. Students may not receive credit for both Physics 101 and 121. Corequisite: Mathematics 161.

PHYS 121. COLLEGE PHYSICS I. A study of mechanics at the pre-calculus level with applications to the life sciences. Topics include kinematics, Newton's laws, work, energy, momentum, angular motion, fluids, oscillations, and gravity. Three lectures and one lab per week. Students may not receive credit for both Physics 101 and 121.

PHYS 135. HORIZONS IN PHYSICS. Discussion of current topics in physics. Since scientific journals will provide much of the content for this course, students will learn how to acquire and interpret articles from scholarly publications. In addition, students will be required to attend presentations by physicists actively engaged in research, as well as field trips to academic and industrial laboratories in the area. This course is open to all students but, in the event that the class becomes full, preference is given to physics majors.

POLS 101. FOUNDATIONS OF POLITICAL SCIENCE. A review of the principal methods of studying politics, the enduring issues of politics, and main institutions of selected governments in the world today.

POLS 104. INTERNATIONAL POLITICS. An analysis of the growth of national states and the factors that determine their behavior in international affairs. Particular attention is given to problems of collective security, balance of power, foreign policy, and political economy.

POLS 201. COMPARATIVE POLITICS. A selective study of major governments of the industrialized and non-industrialized world. Emphasis placed on the tools of comparative analysis and their application to various nations in the developed and developing world.

POLS 204. AMERICAN NATIONAL GOVERNMENT. A survey of national political institutions including Congress, the Supreme Court, the presidency, public bureaucracy, and a review of selected topics in public policy.

PSYC 101. FOUNDATIONS OF PSYCHOLOGICAL SCIENCE. This course is designed to introduce the student to the field of psychology, which is defined as the scientific study of behavior and mental processes. Like other sciences, psychology seeks to explain, predict, and control the events it studies. Students will be exposed to the important theories, methods, and landmark findings that have helped to shape psychology as a field of inquiry. An integral focus of the course will be a consideration of how psychology can contribute to the synthesis of a consistent Christian worldview.

PSYC 102. EDUCATIONAL PSYCHOLOGY. A consideration of those aspects of psychology which form the basis for educational methods and their application in the school curriculum, including student characteristics, group and individual differences, cognitive and personality development, learning theory, measurement, and evaluation. This course satisfies the Information Literacy (IL) requirement for all education majors.

PSYC 208. SOCIAL PSYCHOLOGY. The scientific study of the way individuals think, feel, and behave under the actual, imagined, or implied presence of others. Our study of social psychology will investigate the relationship between attitudes and behavior, attribution theory, cultural influences, conformity, prejudice, aggression, attraction, altruism, conflict, etc. We will concentrate on applying social psychology to real world experiences and will include in-depth analysis of original literature.

RELI 211. OLD TESTAMENT LITERATURE AND HISTORY. An introduction to the literature, content, and history of the Old Testament. Special attention is given to the historical background, composition, and theological message of the Old Testament. The course further acquaints students with the basic methods of Old Testament studies and the present state of Old Testament research.

RELI 217. CHRISTIAN DOCTRINE. An introduction to the methods of systematic theology in terms of narrative, covenant and creed, and an examination of the central doctrines of historic Christianity, including Revelation and Scripture, the being and attributes of God, Humanity, the Person and Work of Christ, the Person and Work of the Holy Spirit, the Christian Life, the Church and the Sacraments, and the Last Things.

RELI 218. INTERPRETING THE BIBLE. An introduction to the skills necessary for understanding a Biblical passage's meaning in each Bible genre. Skills addressed will range from establishing the text, comparing translations and observing the text, to rules for proper interpretation, to applying the text to Christians today accurately. Advanced skills will also be taught, including mastering a Bible book, legitimately finding Christ in (even Old Testament) Biblical texts, typology, and dealing with difficult texts.

RELI 221. THE LIFE OF CHRIST. This course aims to give the student a good understanding of the person, work, and teachings of Christ as presented in the Gospels. It also seeks to introduce the student to some of the important literature on the subject.

RELI 238. NEW TESTAMENT BIBLICAL BOOKS. This course will examine the genre, themes, theology, and practical application of one New Testament book. The New Testament book studied will differ each semester.

ROBO 101. INTRO TO ROBOTICS. A hands-on introduction to the science and engineering involved in mobile robots. Fundamentals of robot hardware and software are explored and reinforced with weekly hands-on projects culminating in a final project competition. Prerequisites: Freshman standing; Algebra I course in high school.

SOCI 101. FOUNDATIONS OF APPLIED SOCIOLOGY. An introductory study of the major and enduring theoretical ideas, concepts, methods, and debates that have shaped and informed the discipline of sociology from its inception to the current day. Topics include the origins of the discipline, the social conditions under which humans may thrive, social order, religion, and inequality. Attention is also paid to the ways in which the Christian tradition perceives and, in some cases, may challenge contemporary social conditions. Recommended to precede all other sociology courses.

SOCI 201. SOCIAL PROBLEMS. An analysis of American social problems such as family, sexuality, drugs, crime, health, poverty, race, and global problems such as population, the environment, religion, war and terrorism.

SOCI 251. COURTSHIP AND MARRIAGE. A general introduction to marriage and the family that emphasizes practical living. Topics include dating, courtship, engagement, marriage, romantic love, and marital adjustment across the lifespan. Also included are discussions of singleness, parenting, and divorce.

SOCW 101. FOUNDATIONS OF SOCIAL WORK. This foundational course introduces students to the rich and diverse discipline of social work and its widespread societal contributions. Students will learn the fundamentals of generalist social work; the ethics, tenets, and history of the profession; and gain an overview of the social delivery system in America. To facilitate the ability to discuss critical points of convergence and divergence, examination of predominant social work values, philosophical assumptions, and theories will occur throughout the course. Discussions of the diverse populations and settings served by social workers will be integrated into the course. The course will additionally explore both the methods widely utilized in social work research and be exposed to contemporary research examples. Students will be encouraged to examine their own values and aspirations with respect to the profession. Careful examination of the ways that a Christian worldview intersects with the values of social work and means of integrating the two realms form integral aspects of the course.

SPAN 101. ELEMENTARY SPANISH I. This course is intended for students with no previous study of Spanish or those who have had minimal exposure to the language. An introduction to Spanish, stressing the spoken language and giving practice in grammar, reading, writing, and developing an awareness of culture. Students who have previously studied Spanish must take the placement exam before enrolling in Spanish 101.

SPAN 201. INTERMEDIATE SPANISH I. This course is appropriate for students who have completed Spanish 101 and 102. A review of elementary Spanish and an intensive study of grammar and vocabulary in oral and written practice, readings from selected texts, and the development of cultural awareness. Prerequisite: Spanish 102 or placement exam.

SPAN 301. INTRODUCTION TO LITERATURE. Introduction to techniques of literary analysis and study of representative works by major authors of the Spanish-speaking world. Prerequisite: Spanish 202 or placement exam.

THEA 251. ACTING. Practice in preparing a dramatic role for performance. Exercises will focus on freeing the actor's voice and body for maximum expressiveness. Students will prepare and perform monologues, short scenes, and a single extended scene.

THEA 259. THEATRE PRACTICUM. Students may receive one credit for a minimum of 40 hours of supervised technical theatre work directly related to a main-stage theatre production. Students must keep an ongoing record of the dates and times of their work, and the student's supervisor must sign each entry. These records are due by Study Day of the semester enrolled. This course is repeatable, but no more than three hours may count toward the Theatre minor. It will count as a general elective if taken more than three times. *Semester course, one hour.*

THEA 261. STAGECRAFT. This course covers the technical work of set-design, lighting, sound design, and stage rigging as well as administrative/budgetary management of technical theater. A practical course taught both in the classroom and in hands-on settings. Students will be required to assist in various productions and live performances throughout the semester. Note: for safety reasons, no minors may enroll in this course, and students should be aware that some lifting and handling of power tools is required.

WRIT 101. FOUNDATIONS OF ACADEMIC DISCOURSE. A course introducing students to the fundamentals of college composition. Topics include the writing process, rhetorical strategies, basics of critical reading and thinking, and key forms of writing such as informative, evaluative, argumentative, and synthesis. This course serves as a foundation to prepare students to succeed in other academic writing contexts. This course contains the Information Literacy (IL) requirement.