Undergraduate courses offered by SBU are divided into four categories.

In general, the following may be considered guidelines:

1. 1000 level courses are primarily for freshman students. Courses with the number 1951, 1952, 1953, 1954, or 1955 meet the general education requirement for that area.

2. 2000 level courses are primarily for sophomore students and those students with essential prerequisites or backgrounds.

3. 3000 level courses are primarily for junior students and those students with essential prerequisites or backgrounds.

4. 4000 level courses are primarily for senior students and those students with essential prerequisites or backgrounds.

**ACCOUNTING**

**ACC 2013. Principles of Financial Accounting - 3 hours (Fall, Spring)**
An introduction to the concepts and principles underlying accounting and financial information as used in operating a business. Basic fundamentals of financial accounting from both a preparer’s and a user’s perspective will be presented. The impact of business events on an entity’s financial position will be emphasized through an understanding of an organization’s operating, investing, and financial activities. Prerequisite: 24 credit hours completed.

**ACC 2043. Principles of Managerial Accounting - 3 hours (Fall, Spring)**
A study of managerial accounting that focuses on the role of accounting in the improvement of management practices and pays specific attention to: cost accumulation, cost behavior, accounting analysis, budgeting, management decision-making and control, time-value-of-money and capital budgeting. Prerequisite: ACC 2013.

**ACC 295(1-4). Special Topics in Accounting - 1-4 hours (On demand)**
Topics will vary with each offering; therefore, the course may be repeated for credit. Note: Depending on the topic, there may be an additional fee.

**ACC 3023. Managerial Cost Accounting - 3 hours (Fall)**
Emphasizes cost accumulation by specific order, process, and overhead cost methods as managerial tools in planning, monitoring, and controlling organization activities. Additional focus is on the improvement of management practices through understanding the behavior of costs, budgeting, and accounting analysis. Prerequisite: ACC 2043.

**ACC 3024. Intermediate Accounting I - 4 hours (Fall)**
Comprehensive study of current accounting principles and their application to the measurement and the reporting of assets and liabilities with emphasis on their effect on income and expense recognition. The concept of time-value-of-money as it relates to accounting is introduced. Prerequisite: ACC 2043.

**ACC 3033. Accounting Information Systems - 3 hours (Spring)**
Study of manual and computerized accounting information systems, business processes and their documentation, and the resulting transaction cycles to process accounting information of businesses and organizations. The course will emphasize the identification of risks in the accounting information system and the development and documentation of proper internal controls for the system in order to mitigate and control identified risks. Prerequisite: ACC 2043.

**ACC 3034. Intermediate Accounting II - 4 hours (Spring)**
Continuation of ACC 3024 with emphasis on the liability and the stockholders’ equity sections of the balance sheet. Includes a study of financial statement analysis, the cash flow statement, and specific accounting issues such as investments, revenue recognition, income tax accounting, pensions/post-retirement benefits, leases, accounting changes and errors, earnings per share and segment reporting. Prerequisite: ACC 3024.

**ACC 3063. Tax Accounting I - 3 hours (Fall)**
Course deals with federal tax laws. Primary emphasis placed upon research of federal tax treatment and tax planning of business transactions in the preparation of individual tax returns. Prerequisite: ACC 2043.

**ACC 3073. Tax Accounting II - 3 hours (Spring)**
Continuation of ACC 3063. Course deals with federal tax laws as they pertain to partnerships, corporations, gifts,
estates and trusts. Special emphasis on research of tax treatment and tax planning of capital changes, securities, foreign income and specially taxed entities. Prerequisite: ACC 3063.

ACC 3111. Financial Information Applications & Analysis Using Excel – 1 hour (Winterfest)
A study of data organization, management, and analysis as they relate to accounting systems. This class focuses on the use of the Excel software applications to facilitate and improve financial and managerial accounting systems, and the use of the information therein to assist the organization in achieving its objectives. Prerequisite: ACC 2043 and 3.0 GPA in all ACC classes.

ACC 3133. Financial Information Applications & Analysis – 3 hours (Winterfest)
A study of data organization, management, and analysis as they relate to accounting systems. This class focuses on basic forensic accounting principles, the use of software applications such as Excel, ACL, and other G/L software to facilitate and improve financial and managerial accounting systems, and the use of the information therein to assist the organization in achieving its objectives. Prerequisite: ACC 3024.

ACC 3211. Financial Information Applications & Analysis Using ACL (Auditing) Software– 1 hour (Winterfest)
A study of data organization, management, and analysis as they relate to accounting systems. This class focuses on basic forensic accounting principles, the use of ACL and similar software to facilitate and improve financial and managerial accounting systems, and the use of the information therein to assist the organization in achieving its objectives. Prerequisite: ACC 3024.

ACC 3311. Financial Information Applications & Analysis – Quickbooks & G/L Software- 1 hour (Winterfest)
A study of data organization, management, and analysis as they relate to accounting systems. This class focuses on the use of Quickbooks or other G/L software to facilitate and improve financial and managerial accounting systems, and the use of the information therein to assist the organization in achieving its objectives. Prerequisite: ACC 3024.

ACC 4013. Advanced Accounting - 3 hours (Fall)
Study of financial accounting principles as applied to partnerships, consolidations, foreign exchange and selected specialized areas of accounting practice. Prerequisite: ACC 3034.

ACC 4021. CMA Review: Financial Planning, Performance and Control - 1 hour (Fall, Spring, Summer, Winterfest)
A self-study review of general business issues in the areas of business economics, global business, internal controls, quantitative methods and financial statement analysis. Fee: $10.

ACC 4031. CMA Review: Financial Decision Making - 1 hour (Fall, Spring, Summer, Winterfest)
A self-study review of management accounting methods, including budget preparation, cost management, information management, performance measurement and external financial reporting. Fee: $10

ACC 4044. Auditing - 4 hours (Spring)
Emphasis on the objectives of audits, duties and obligations of the auditor, principles and procedures utilized in conducting a financial statement audit. Prerequisite: ACC 3034.

ACC 4053. Accounting for Government and Not-For-Profit Entities - 3 hours (Spring)
Study of the accounting principles applicable to federal, state and local government units and other not-for-profit organizations; emphasis on the use of funds in recording and analyzing unit operations. Prerequisite: ACC 3024.

ACC 4061. CPA Review: Auditing and Attestation - 1 hour (Fall, Spring, Summer, Winterfest)
A self-study review of current financial statement auditing and attestation principles, objectives, and procedures. Prerequisite: 23 hours of accounting. Fee $10.

ACC 4071. CPA Review: Financial Accounting and Reporting - 1 hour (Fall, Spring, Summer, Winterfest)
A self-study review of current financial accounting standards and procedures to account for and report financial transactions and events of organizations. Prerequisite: 23 hours of accounting. Fee $10.

ACC 4081. CPA Review: Regulation - 1 hour (Fall, Spring, Summer, Winterfest)
A self-study review of regulatory issues such as federal taxation, business law, and ethics as it relates to the accounting profession. Prerequisite: 23 hours of accounting. Fee $10.

ACC 4091. CPA Review: Business Environment and Concepts - 1 hour (Fall, Spring, Summer, Winterfest)
A self-study review of general business issues and concepts needed to understand the business reasons for, and accounting implications of, business transactions. Prerequisite: 23 hours of accounting. Fee $10.

ACC 4113. Managerial Accounting – 3 hours (Fall)
The application of accounting principles and techniques to managerial planning and controlling activities. Areas emphasized will include behavior of cost, budgeting, accounting analysis, and improving managerial tools used in decision making. Prerequisite: ACC 2043/5013, Application and acceptance to the MBA program is necessary prior to enrolling in this course. Fee $150.
ACC 495(1-4). Intensive Studies in Accounting - 1-4 hours (On demand)
Topics vary with each offering; therefore, the course may be repeated for credit.

ACC 498(1-3) Internship in Accounting - 1-3 hours (Fall, Spring, Summer, Winterfest)
Academically planned and supervised work experience in areas of the student's major within business or other organizations, approved by the faculty advisor and department chair as an enhancement to the student's educational preparation at SBU. Written reports will be required of the student and performance reports from the employer. A maximum of six semester hours of internships may be applied to the major. Prerequisites: 60 hours completed.

ACC 499(1-3). Independent Study in Accounting - 1-3 hours (On Demand)
Independent study of some problem or area not covered in organized courses under the direction of a department member in whose field of specialization the problem area lies. Prerequisites: 3.00 GPA in major field, and 60 hours completed.

ART
ART/FAR 1013. Introduction to Art – 3 hours (Fall, Spring)
An introduction to art from all historical periods to help the non-art and art major develop an understanding of the role of art in the life of man and the value of art to the individual. Required for art majors. Course fee $60.

ART 1103. Design - 3 hours (Fall)
An introduction to basic two-dimensional visual design through the use of traditional materials and tools to investigate line, shape, value, texture and color with an emphasis on spatial relationships.

ART 1203. Drawing I - 3 hours (Fall, Spring)
An introduction to traditional drawing through an understanding of basic principles of composition, proportion and perspective. Emphasis on representational drawing, drawing methods and drawing tools and materials.

ART 2003. Photography I - 3 hours (Fall, Spring)
An introduction to the use of camera technique and photograph processing. Emphasis on creative photographic composition, editing, critique and presentation of printed work. Lab fee $75.

ART 2013. Ceramics I - 3 hours (Fall)
An introduction to basic clay production techniques including hand-building, wheel-throwing and basic glazing applications. Lab fee $75.

ART 2023. Sculpture I - 3 hours (Spring)
An introduction to basic three-dimensional design, principles, concepts and production techniques. Lab fee $75. Prerequisite: ART 1103.

ART 2033. Painting I - 3 hours (Fall, Spring)
An introduction to basic water-based painting on canvas with an emphasis on representational, painterly composition. Lab fee: $75. Prerequisites: ART 1103, 1203.

ART 2203. Drawing II - 3 hours (Fall, Spring)
An intermediate drawing course through creative use of, and experimentation with, a variety of drawing media. Prerequisite: ART 1203.

ART 2703. Introduction to Graphic Design - 3 hours (Fall, Spring)
Introduction-level course to be concerned primarily with basic issues and topics in graphic design. The course will introduce vector-based, paint-based, and layout-capable software applications through studio lecture, in-class exercises, and a variety of project assignments. Lab fee $75. Prerequisite: ART 1103.

ART 2803. Art History I - 3 hours (Fall)
Illustrated study of architecture, painting, sculpture and applied arts from prehistoric times to the Italian Renaissance.

ART 2813. Art History II - 3 hours (Spring)
Illustrated study of architecture, painting, sculpture and applied arts from 14th through 20th century.

ART 3003 Life Drawing - 3 hours (Fall)
An advanced drawing course with a concentration on the representation of the human figure. Lab fee $75. Prerequisites: ART 1103 and 1203.

ART 3013. Ceramics II - 3 hours (Fall)
An intermediate study of ceramic techniques with emphasis on wheel-throwing, glaze-testing and surface treatment. Lab fee $75. Prerequisite: ART 2013.

ART 3023. Sculpture II - 3 hours (Spring)
Development of techniques in a variety of three-dimensional projects. Emphasis on artistic creativity. Lab fee $75. Prerequisite: ART 2023.
ART 3033. Painting II - 3 hours (Fall)
An intermediate exploration of painting with an emphasis on creative approaches to imagery, content and technique. Lab fee: $75. Prerequisite: ART 2033.

ART 3043. Graphic Design Production - 3 hours (Spring)
Graphic design course to be concerned primarily with pre-press issues and topics, graphic design production and finishing methods, publication matters, and basic time-based media development. Lab fee $75. Prerequisite: ART 2703.

ART 3103. Printmaking - 3 hours (Fall, Spring)
A course concerned primarily with commercial printing and/or traditional printmaking issues and topics. Lab fee $75. Prerequisite: ART 2703.

ART 3203. Advanced Drawing Studio I - 3 hours (Fall, Spring)
An advanced, traditional drawing course with an emphasis on artistic creativity. Prerequisite: ART 2203.

ART 3213. Advanced Drawing Studio II - 3 hours (Fall, Spring)
An advanced, traditional drawing course with an emphasis on artistic creativity. Prerequisite: ART 3203.

ART 3323. Photography II - 3 hours (Fall)
An intermediate exploration of photography with an emphasis on commercial approaches to imagery, content and technique. Lab fee $75. Prerequisite: ART 2003.

ART 3403. Advanced Ceramics Studio I - 3 hours (On demand)
An advanced study of ceramics with an emphasis on advanced ceramic techniques, glaze calculation and artistic creativity. Lab fee $75. Prerequisite: ART 3013.

ART 3413. Advanced Ceramics Studio II - 3 hours (On demand)
An advanced study of ceramics with an emphasis on advanced ceramic techniques, glaze calculation and artistic creativity. Lab fee $75. Prerequisite: ART 3403.

ART 3503. Advanced Sculpture Studio I - 3 hours (On demand)
Advanced problems in three-dimensional media. Emphasis on creativity. Lab fee $75. Prerequisite: ART 3023.

ART 3513. Advanced Sculpture Studio II - 3 hours (On demand)
Continuation of ART 3503. Lab fee $75.

ART 3603. Advanced Painting Studio I - 3 hours (On demand)
Advanced studies in studio problems. Time and topic arranged by student and instructor. Lab fee: $75. Prerequisite: ART 3033.

ART 3613. Advanced Painting Studio II - 3 hours (On demand)
Continuation of ART 3603. Lab fee: $75.

ART 3703. Graphic Design Concepts - 3 hours (Fall)
Intermediate-level graphic design course to be concerned primarily with related inter-media projects ranging from traditional print designs, to simple packaging, and basic visual presentation development. Lab fee $75. Prerequisite: ART 3043.

ART 3713. Graphic Design Portfolio I - 3 hours (Fall)
Advanced team-oriented graphic design course to be concerned primarily with professional issues and topics in visual communication design. Work development for the course will necessarily build upon both conceptual and pragmatic understandings developed in Graphic Design Studio Production and Graphic Design Concepts. All projects assigned will involve design studio-business issues and topics. Continuation of ART 3703. Lab fee $75.

ART 3723. Digital Imaging Concepts - 3 hours (Spring)
Concentrated study of image-based visual communication concepts and studio techniques. Lab fee $75. Prerequisite: ART 2703.

ART 3813. Fibers - 3 hours (Spring)
An introduction to the knowledge of various fibers and their use. Course fee $75. Prerequisite: ART 1103.

ART 4001. Senior Seminar (capstone/senior show) – 1 hour (Fall, Spring)
This course is designed to facilitate preparation and presentation of the Senior Show. It should be taken in the last semester of coursework for both General Art and Commercial Art majors. Art Education majors cannot take this course the semester of student teaching; generally, it should be taken the semester before student teaching. A portion of this class will also be used to facilitate student preparation and departmental assessment of the Senior Portfolio Review prior to the Senior Show or Exit Exhibition. Course fee $35.

ART 4003. Computer Application/Commercial Art (Fall, Spring)
Selected problems for the advanced graphic design student. This course may be repeated for a total of 12 credit hours and may be used as art core and/or general electives. Lab fee $75. Prerequisite: ART 3043.
ART 4203. Advanced Drawing Studio III - 3 hours (On demand)
Continuation of ART 3213.

ART 4213. Advanced Drawing Studio IV - 3 hours (On demand)
Continuation of ART 4203.

ART 4303. Photography Senior Project - 3 hours (Spring)
Advanced-level imaging course developed to display advanced student achievement. Work developed for the course will build upon previous coursework in digital imaging. The course will consist of two major parts: Each student will propose and develop an approved, in-depth professional quality visual communication concept. In addition, each student will develop and provide a profession-oriented portfolio for exit review. Lab fee $75. Required for completion of Digital Imaging concentration in Commercial Art.

ART 4313. Photography Portfolio - 3 hours (Fall)
Advanced-level digital imaging course to be concerned primarily with professional issues and topics in visual communication design. Work developed for the course will necessarily build upon both conceptual and practical understandings developed in previous coursework. All projects assigned will involve studio-business issues and topics. Emphasis on individual portfolio development. Lab fee $75. Required for completion of Digital Imaging concentration in Commercial Art.

ART 4403. Advanced Ceramics Studio III - 3 hours (On demand)
Continuation of ART 3413. Lab fee $75.

ART 4503. Advanced Sculpture Studio III - 3 hours (On demand)
Continuation of ART 3513. Lab fee $75.

ART 4603. Advanced Painting Studio III - 3 hours (Fall, Spring)
Continuation of ART 3613. Lab fee: $75.

ART 4613. Advanced Painting Studio IV - 3 hours (Fall, Spring)
Continuation of ART 4603. Lab fee: $75.

ART 4703. Graphic Design Senior Project - 3 hours (Fall)
Advanced-level graphic design studio course developed to display advanced student achievement. Work developed for the course will build upon both conceptual and pragmatic understandings developed in Graphic Design Studio Production, Graphic Design Concepts, and Graphic Design Portfolio. The course will consist of two major parts: Each student will propose and develop an approved, in-depth professional quality visual communication concept. In addition, each student will develop and provide a profession-oriented portfolio for exit review. Lab fee $75. Required for completion of Graphic Design concentration in Commercial Art.

ART 4713. Graphic Design Portfolio II - 3 hours (Spring)
Advanced graphic design course to be concerned primarily with professional issues and topics in visual communication design. Work developed for the course will necessarily build upon both conceptual and practical understandings developed in Graphic Design Studio Production, Graphic Design Concepts, and Graphic Design Portfolio I. All projects assigned will involve design studio-business issues and topics. Continuation of ART 3713. Emphasis on individual portfolio development. Lab fee $75.

ART 495(1-4). Intensive Studies in Art - 1-4 hours
Selected problems for the advanced student in one topic. Lab fee of $75 required for topics in ceramics, sculpture, photography, printmaking, painting, and graphic design.

ART 4963. Practicum in Commercial Art - 3 hours (On demand)
Prerequisite: 30 hours completed.

ART 4983. Internship in Commercial Art - 3 hours (On demand)
On the job training in a professional setting. Prerequisite: ART 3713 and 72 hours completed.

ART 499(1-3). Independent Studies - 1-3 hours (Fall, Spring)
Advanced studies or creative art projects with specific topics approved by department chair. Lab fee of $75 required for topics in ceramics, sculpture, photography, printmaking, painting, and graphic design.

Methods of Teaching Art, K-12 (Fall)
(See EDU 4512)

ATHLETIC TRAINING

ATH 2013. Intro to Sports Medicine - 3 hours (Fall)
A course designed to help students develop perspectives in the field of sports medicine. Students will examine the different areas of study within the field, kinds of programs, qualifications needed to enter the field, career opportunities, and issues facing exercise science professionals. Course fee $62.
ATH 3003. Functional Anatomy: Above Diaphragm – 3 hours (Fall)
Prepares the student for the concepts, terminology, and basic structure of the human body. Dissection of the body will use the electronic media to determine the muscular structure of origin, insertion, innervations and how it connects to functional movement. Emphasis on providing fundamental knowledge of the structure/function of the musculoskeletal system, peripheral nervous system, ligamentous, joint capsular, and vascular supply to the trunk, head, neck, and upper body.

ATH 3013. Athletic Training Techniques I - 3 hours (Fall)
Prepares student for basic care and prevention of athletic injuries to include the identification of common physical disorders, sports trauma, typical injury management, taping, bracing and medical documentation. Course fee $62. Prerequisite: ATH 3124.

ATH 3021. Clinical I - 1 hour (Fall)
Student will learn and integrate athletic training principles and skills in a practical environment typically done on the campus of SBU with intercollegiate athletics. Course fee $62.

ATH 3043 Functional Anatomy: Below Diaphragm – 3 hours (Spring)
Prepares the student to the concepts, terminology, and basic structure of the human body. Dissection of the body will use the electronic media to determine the muscular structure of origin, insertion, innervations and how it connects to functional movement. Emphasis on providing fundamental knowledge of the structure/function of the musculoskeletal system, peripheral nervous system, ligamentous, joint capsular, and vascular supply to the trunk, and lower body.

ATH 3093 Emergency Medicine – 3 hours
Prepares the student in the basics of emergency care focused on sports injuries. It is a comprehensive course for the athletic trainer who must initially evaluate and stabilize an athlete in a trauma situation. The course teaches rapid assessment, resuscitation, packaging and transportation of injured athletes. Prerequisite: ATH 2013.

ATH 3103. Sports Performance - 3 hours (Spring)
Prepares the student to effectively manage the health care of the athlete by recognizing and implementing appropriate strategies to enhance sports performance based on sound physiological principles including the use of drugs in sports performance, nutritional aspects, strength and resistive training, and anaerobic/aerobic training. Prerequisite: ATH 3013.

ATH 3114. Orthopedic Evaluation: Above Diaphragm - 4 hours (Spring)
Prepares the student to properly identify, examine and assess athletic injuries to the head, spine, upper extremity, and thorax. This course has a laboratory component with three lectures and one laboratory each week. Lab fee $62. Prerequisite: ATH 3033.

ATH 3121. Clinical II - 1 hour (Spring)
Student will learn and integrate athletic training principles and skills in a practical environment typically done on the campus of SBU with intercollegiate athletics. This is an expansion of ATH 3021 Clinical I with increased roles and responsibilities. Prerequisite: ATH 3021.

ATH 3124. Orthopedic Evaluation: Below Diaphragm - 4 hours (Fall)
Prepares the student to properly identify, examine and assess athletic injuries to the lumbar spine & lower extremity. This course has a laboratory component with three lectures and one laboratory each week. Lab fee $62. Prerequisite: ATH 3114.

ATH 3133. Pharmacology - 3 hours (Fall)
Prepares the student to understand the physiology of pharmaceuticals, indications, contraindications and diverse side effects of common pharmaceuticals utilized within the athletic realm. Prerequisite: ATH 3013.

ATH 4021. Clinical III - 1 hours (Fall)
Student will learn and integrate athletic training principles and skills in a practical environment typically done on the campus of SBU with intercollegiate athletics. This is an expansion of ATH 3121 Clinical II with increased roles and responsibilities. Course fee $62. Prerequisite: ATH 3121.

ATH 4034. Treatment and Rehabilitation - 4 hours (Spring)
Prepares the student to select, implement and manage the most effective rehabilitative procedures for a given athletic injury to restore lost function to the athlete so that the individual may return safely to the desired field of competition. The psychosocial aspects of injury will be presented. This course has a laboratory component with three lectures and one laboratory each week. Lab fee $62. Prerequisite: ATH 3124.

ATH 4121. Clinical IV - 1 hour (Spring)
Student will learn and integrate athletic training principles and skills in a practical environment typically done on the campus of SBU with intercollegiate athletics. This is an expansion of ATH 4021 Clinical III with increased roles and responsibilities. An emphasis will be placed on the rehabilitation and modalities domains. Prerequisite: ATH 4021.
ATH 4223. Functional Movement - 3 hours (Spring)
Prepares the student in the development of skills in assessment procedures and therapeutic intervention addressing functional movement, gait, posture and common pathologies that exist in human motion and function within the context of athletic performance. Prerequisites: ATH 4034

ATH 4833. Evidence Based Practice - 3 hours (Fall)
Prepares the student with the knowledge, skills and abilities necessary to make independent judgments about the validity, results, and application of clinical research and to implement evidence-based clinical practice in their careers. This course will focus on the concepts of evidence-based practice with emphasis on forming answerable clinical questions and effective literature search strategies. Prerequisites: ATH 4034

BIBLE

BIB 1013. Old Testament History - 3 hours (Fall, Spring)
A study of the history of Israel in the Old Testament with attention given to historical background, literary features, theological teaching, and contemporary relevance.

BIB 1023. New Testament History - 3 hours (Fall, Spring)
A study of the life of Jesus and the founding of the church in the New Testament with attention given to historical background, literary features, theological teaching, and contemporary relevance.

BIB/HON 1213. Honors Old Testament History – 3 hours (Fall)
A survey of the literature, history, and theology of the Old Testament with a concern for discerning its contemporary relevance. Prerequisite: Enrollment in the Dutile Honors Program or a minimum ACT of 28 or its SAT equivalent.

BIB/HON 1223. Honors New Testament History – 3 hours (Spring)
A study of the life of Jesus and the founding of the church in the New Testament with attention given to historical background, literary features, theological teaching, and contemporary relevance. Prerequisite: Enrollment in the Dutile Honors Program or a minimum composite ACT of 28 or its SAT equivalent.

BIB 2093. Methods of Biblical Interpretation - 3 hours (Fall, Spring)
Introduction to the task of interpreting the Bible in its literary and historical context and applying its teaching to modern life. Particular attention is given to principles concerning the qualifications and presuppositions of the interpreter, the nature of prose and poetic literature, and the character of the various genres found in both testaments. Prerequisites: BIB 1013/1213 and BIB 1023/1223.

BIB 295(1-3). Special Topics in Bible - 1-3 hours
Exegetical studies of key biblical passages (the course may be taken more than once). Prerequisite: BIB 1013 or 1023 or concurrent enrollment.

BIB 3023. The Jewish Backgrounds of the New Testament - 3 hours (On demand)
An advanced study of Judaism during the intertestamental period, with special attention given to the political, literary, cultural and theological developments that affect the New Testament and its interpretation. Prerequisites: BIB 1013/1213, BIB 1023/1223.

BIB 3033. Old Testament Hymnic and Wisdom Literature - 3 hours (Spring, even years)
Historical and exegetical study of the hymnic and wisdom literature in the Old Testament: Job, Psalm, Proverbs, Ecclesiastes and Song of Solomon. Prerequisite: BIB 1013/1213.

BIB 3043. Pentateuch - 3 hours (Spring, odd years)
Study of the first five books of the Bible with special attention given to introductory problems related to the Pentateuch. Prerequisite: BIB 1013/1213.

BIB 3053. Early Pauline Epistles - 3 hours (Fall, odd years)
Historical and exegetical study of Paul's epistles to the Thessalonians, Corinthians and Galatians. Prerequisite: BIB 1023/1223.

BIB 3063. Later Pauline Epistles - 3 hours (Fall, even years)
Historical and exegetical study of Romans, Paul's prison and pastoral epistles. Prerequisite: BIB 1023/1223.

BIB 3083. Hebrews and General Epistles - 3 hours (Spring, even years)
Historical and exegetical study of Hebrews and the general epistles. Prerequisite: BIB 1023/1223.

BIB 4003. Archaeology and the Bible - 3 hours (Spring, even years)
An introduction to the methods and results of archaeology in relation to the Bible. Prerequisites: BIB 1013/1213 and 1023/1223.

BIB 4023. Life and Teachings of Christ - 3 hours (Spring, odd years)
Study of life and teaching of Christ as presented in the four gospels. Prerequisites: BIB 1023/1223 and 64 hours completed
BIB 4043. Old Testament Prophetic Books - 3 hours (Fall, odd years)  
Study of selected Prophetic Books of the Old Testament with attention given to exposition of their content, discernment of their theological significance, and discussion of scholarly issues. Prerequisites: BIB 1013/1223 and 64 hours completed.

BIB 4053. Old Testament Historical Books - 3 hours (Fall, even years)  
Study of the Historical Books of the Old Testament with attention given to exposition of their content, discernment of their theological significance, and discussion of scholarly issues. Prerequisites: BIB 1013/1213 and 64 hours completed.

BIB 4063. Intercultural Theologizing - 3 hours (Semester Abroad)  
A study of how cultural and social convictions influence religious expressions, how the biblical message engages all cultures, and how the student’s overseas context requires cross-cultural application of the gospel.

BIB/THE 4073. New Testament Theology – 3 hours  
An introduction to the discipline of biblical theology as it is undertaken in relation to the New Testament. Included is a discussion of methods, attendant methodological and hermeneutical problems, and possible results in a survey of the theology of the New Testament. Can also be taken for theology credit. Prerequisite: BIB 2093.

BIB 4083. The Parables of Jesus – 3 hours (On demand)  
A critical exegetical study of the parables of Jesus, with special attention given to the history of parables research, the nature of a parable as a literary form, the historical and cultural background of the parables of Jesus, and exploration of their contemporary meaning and relevance. Prerequisite: BIB 2093.

BIB 495(1-4). Intensive Studies in Bible - 1-4 hours  
Investigation of selected books of the Bible and/or biblical themes. Areas of study will vary from year to year (the course can be taken more than once.) Prerequisites: BIB 1013/1213 and 1023/1223 and 64 hours completed.

BIOLOGY

BIO 1004. Principles of Biology - 4 hours (Fall, Winterfest, Spring, Summer)  
An introductory, multifaceted survey of biology including: cell theory, genetics, evolutionary theory, survey of living organisms, ecology, and human biology. Three lectures and one laboratory each week. Lab fee $56.

BIO 1111. Biology Colloquium - 1 hour (Fall, Spring)  
Presentation and discussion of biological topics, current events, and opportunities in the field. One lecture each week. Course fee $22.

BIO 1115. Honors Biology - 5 hours (On demand)  
An honors-level course presenting the basic facts and principles of biology. Topics covered will include cell structure and function, genetics, plant structure, physiology and animal anatomy and physiology. Four lectures, one lab each week. Lab fee $60. Prerequisite: ACT score of 25 in Science Reasoning.

BIO 2134. General Zoology - 4 hours (Spring)  
An introduction to the principles of classification of animals. Animal life will be examined with respect to cell organization, genetics, evolution, anatomy/physiology, and interaction of animals with their environment. Three lectures; one laboratory each week. Lab fee $56. Prerequisite: BIO 1004.

BIO 2204. Human Anatomy and Physiology I - 4 hours (Fall)  
An introduction to the study of form and function of the human body. This course is the first in a two-semester sequence. Particular attention will be given to the study of cells, tissues, and metabolism, as well as the skeletal, muscular, respiratory and digestive systems. Three lectures, one laboratory each week. Lab fee $56. Prerequisite: BIO 1004 or ACT of 24 in Science Reasoning.

BIO 2213. Introduction to Microbiology - 3 hours (On Demand)  
An introduction study of general principles and microbiology, with an emphasis on the morphology, physiology and taxonomy of microorganisms. Special emphasis on disease producing bacteria, viruses and fungi. Topics in applied microbiology, immunology, sterilization and disinfection are introduced. Two lectures, one laboratory each week. Lab fee $30. Prerequisites: BIO 1004 or BIO 2204 and CHE 1004 or CHE 1104 or CHE 1115. NOTE: A student who takes BIO 2213 and 3314 will receive credit only for BIO 3314.

BIO 2214. Environmental Biology - 4 hours (Fall, odd years)  
An objective contemporary study of the environment and man's effect upon it. A holistic approach is taken in studying relevant problems relating to population growth, pollution and the preservation of natural ecosystems.

BIO 2223. Invertebrate Zoology - 3 hours (On demand)  
Examination of the morphology, physiology and taxonomy of the invertebrates. Two lectures, one laboratory each week. Lab fee $54.
BIO 2234. General Botany - 4 hours (Fall)
A study of the plant world. Fungi, algae, bryophytes, seedless vascular plants, gymnosperms and angiosperms will be studied with regard to their life history, morphology, physiology and taxonomic relationships. Three lectures, one lab each week. Lab fee $56. Prerequisite: BIO 1004.

BIO/KIN 2243. Nutrition - 3 hours (Fall, Spring)
Nutritional requirements of mankind with emphasis on the roles of nutrients in the body throughout the life cycle. Note: This course may not be included in the curriculum for a biology major.

BIO 295(1-4). Special Topics - 1-4 hours (On demand)
Topics of special interest not available to the student from the traditional course offerings. May be repeated as the topics change. Lab fee will be based on topic.

BIO/CHE 3012. Methods in Scientific Research - 2 hours (Fall, Spring)
A study of the principles and techniques used to develop and construct a scientific proposal. Topics include statistical analysis, experimental design, developing a proposal, determining a budget, and scientific presentations. Two lectures each week. Prerequisites: Biology/chemistry major or minor with 64 hours completed.

BIO 3304. Human Anatomy and Physiology II - 4 hours (Spring)
This course is a continuation of Biology 2204. Areas of study will include: the nervous, endocrine, circulatory, lymphatic, and the urogenital systems. Three lectures, one laboratory each week. Lab fee $56. Prerequisite: BIO 1004 or BIO 2204.

BIO 3314. Microbiology - 4 hours (Fall)
A study of the cultural characteristics, morphology, metabolism, taxonomy and infection of microorganisms, with emphasis on methods of isolation, growth and identification. Three lectures, one laboratory each week. Lab fee $56. Prerequisites: BIO 1004 and CHE 1115.

BIO 3322. Introduction to Immunology - 2 hours (Spring)
Fundamental principles of immunology and serology. The structure and function of the immune system, antigen-antibody interaction, other serological reaction, immunoglobulin formation and immunosuppression. Two lectures each week. Prerequisite: BIO 3314.

BIO 3324. Genetics - 4 hours (Fall)
Consideration of the nature, transmission, variation, and action of the hereditary material in relation to the laws and theories of heredity in both plants and animals. Three lectures, one laboratory each week. Lab fee $106. Prerequisite: BIO 1004.

BIO 3334. Ecology - 4 hours (Spring)
Study of the relations of animals and plants to each other and to their environment. Three lectures, one laboratory each week. Lab fee $56. Prerequisite: BIO 1004. (BIO 2134 and 2234 recommended.)

BIO 3335. Comparative Vertebrate Anatomy - 5 hours (On demand)
Comparative study of organs and organ systems of selected representative vertebrates. Three lectures, two laboratories each week. Lab fee $78. Prerequisite: BIO 1004 and 64 hours completed.

BIO 3344. Vertebrate Physiology - 4 hours (On Demand)
Study of the functional process of vertebrate organs and organ systems and their physiological integration. Three lectures, one laboratory each week. Lab fee $56. Prerequisites: BIO 1004 and 2134 and CHE 1115.

BIO 3354. Plant Taxonomy - 4 hours (Spring, even years)
A study of the principles of classification and nomenclature, a survey of the major vascular plant families and the identification of local plants. Two lectures, two laboratories each week. Lab fee $56. Prerequisite: BIO 2234.

BIO/CHE 3364. Biochemistry - 4 hours (Fall)
A study of the chemistry and metabolism of biologically important compounds. Includes the biochemistry of proteins, lipids and carbohydrates, nucleic acids and the energetics of living organisms. Three lectures and one laboratory each week. Lab fee $106. Prerequisite: CHE 3314. CIS 1103 is strongly recommended.

BIO 3384. Histology - 4 hours (Fall, even years)
A systematic cytological and histological study of animal tissues and organs with an introduction to basic histological procedures. Two lectures, two laboratories each week. Lab fee $56. Prerequisites: BIO 2204 and 3304 or 3335

BIO 3394. Pathogenic Microbiology - 4 hours (Spring, odd years)
The study of pathogenic microorganisms, their mode of transmission, infection and control as they relate to humans. Bacterial, viral, fungal and parasitic diseases will be studied. Three lectures, one lab each week. Lab fee $56. Prerequisite: BIO 3314.

BIO 3454. Plant Physiology - 4 hours (On demand)
Study of the principal physiological processes in plants. Topics include respiration, photosynthesis, biosynthesis of cellular constituents, mineral nutrition, transpiration, translocation, water relations, growth and development,
hormones and plant responses to environmental variation. Three lectures, one lab each week. Lab fee $56. Prerequisite: BIO 2234.

BIO 3544. Wildlife Biology – 4 hours (Fall, even years)
A study of the principles and techniques used to manage and measure animal populations. Topics include managing endangered species and game animals, the impacts of habitat fragmentation on wildlife populations, and the use of habitat corridors. Three lectures, one laboratory each week. Lab fee $56. Prerequisites: BIO 1004, BIO 2134 (BIO 3334 recommended).

BIO 4224. Cell and Molecular Biology - 4 hours (Spring)
The study of the structure and function of cellular organelles, cell transport, signal transduction, apoptosis, and cell cycle. DNA, transcription, translation, replication, control, repair, and gene expression will be studied as well as an introduction to bioinformatics within these disciplines. Three lectures, one laboratory each week. Lab fee $106. Prerequisites: BIO 1004 and 64 hours completed.

BIO 4404. Pathophysiology - 4 hours (Spring)
The study of human diseases and the mechanisms that govern them. Four lectures each week. Prerequisites: BIO 2204 and BIO 3304 and 64 hours completed.

BIO 4414. Freshwater Biology - 4 hours (On demand)
Study of the freshwater ecosystem. The course is designed to include four major areas: water chemistry, including characteristics of lakes, rivers and streams; plankton, including algae and zooplankton; fisheries; and aquatic entomology. Three lectures, one laboratory each week. Lab fee $56. Prerequisites: BIO 1004 and 64 hours completed.

BIO 4444. Vertebrate Embryology - 4 hours (On demand)
Study of the embryological development of the vertebrate and controlling mechanisms involved. Two lectures, two laboratories each week. Lab fee $56. Prerequisites: BIO 1004, BIO 2134, and 64 hours completed.

BIO 4471. Seminar in Biology - 1 hour (Fall, Spring)
Investigation of biological literature related to selected topics and presentation of scientific material for group discussion and evaluation. One session each week. Prerequisite: Biology major or minor with 96 hours completed.

BIO 448(1-3). Biological Investigations - 1-3 hours (Fall, Spring)
Opportunity for qualified biology majors to conduct investigations in association with staff members on an acceptable phase of biology. By arrangement. Lab fee will be based on project. Prerequisites: Biology major or minor and 64 hours completed.

BIO 498(1-3). Internship in Biology - 1-3 hours (Fall, Spring, Summer)
A course designed to give the student on-the-job experience in the area of student's major. The purpose is to gain practical experience and enhance the student's educational preparation at SBU. Prerequisite: Biology major or minor and 64 hours completed.

BIO 495(1-4). Intensive Studies in Biology - 1-4 hours (On demand)
Intensive studies of special topics in biology. Topics will vary from time to time. The course may be repeated for different topics. Credit hours will be determined at the time of course planning. Lab fee will be based on course.

BIO 499(1-3). Independent Studies - 1-3 hours (Fall, Spring)
Advanced studies of specific topics arranged by departmental chair.

Methods of Teaching Science in the Middle and Secondary Schools
(See EDU 4522).

BUSINESS

BUS 1013. Introduction to Business - 3 hours (Fall)
Introduction to the characteristics and practices of business in the American free enterprise system, including the environments of business and career opportunities in business. Open to all students except junior and senior Accounting and Business Administration majors.

BUS/MAT 1193. Business Calculus - 3 hours (Fall, Spring)
Derivatives and antiderivatives of functions inclusive of exponential and logarithmic, with applications to business and economics. NOTE: A student who takes BUS/MAT 1193 and MAT 1195 will receive credit for only MAT 1195. Prerequisite: MAT 1143 or MAT 1163 or satisfactory scores on the prealgebra and intermediate algebra portions of the Enhanced ACT Examination.

BUS 2013. Business Communications - 3 hours (Fall, Spring)
A general introduction to the uses of communication in the business world today. Four major sections include basic language usage; communication foundations and writing principles; business letters, memos and emails; and problem analysis and report writing. Prerequisite: ENG 2213.
BUS 2023. Business Statistics - 3 hours  (Fall, Spring)
An introduction to business statistics. Students will calculate and interpret measures of center and dispersion. Normal, binomial, Chi-square, F, t, and Poisson distributions, elementary probability, sampling techniques, hypothesis testing, confidence intervals, linear correlation, simple and multiple regression, contingency tables and computer applications are also covered. Prerequisite: MAT 1143.

BUS (2-3)06(1-2). PBL Practicum - 1-2 hours (Fall, Spring)
PBL Practicum is a course designed to enhance the benefits to be gained from participation in Phi Beta Lambda, the collegiate division of Future Business Leaders of America. Students will learn how to properly conduct business meetings, direct projects, work in teams to accomplish objectives and prepare business-related reports. Students may earn up to four hours of cumulative credit for this course.

BUS 295(1-4). Special Topics in Business - 1-4 hours (On demand)
Topics will vary with each offering; therefore, the course may be repeated for credit.

BUS 3073. Legal Environment of Business I (Business Law I) - 3 hours  (Fall)
Ethical, social and legal issues in business environment. The development and resolution of contemporary issues found in the business environment. Emphasis on the perspective and systematic approach to the law to such issues. Topical areas: legal history, reasoning, procedure; environmental, administrative, criminal and tort law; law of contracts, law of sales. Prerequisite: 24 credit hours completed.

BUS 3083. Business Enterprise/Debtor and Creditor Rights (Business Law II) - 3 hours  (Spring)
Legal alternatives in the structuring of the business enterprise and its relationships with employees. The rules of law governing financial transactions in today's business and personal affairs. Topical areas: agency, partnerships, corporation, personal property, real property, bailments, intellectual property rights, commercial paper, secured transactions and bankruptcy. Prerequisite: BUS 3073.

BUS 4053. International Business - 3 hours  (Spring)
Introduction to the multinational business organization and environmental factors of international business. Emphasis on the development of sound problem-solving, decision-making methods in the analysis of environmental and organizational variables. The course also examines strategies for firms involved in marketing across national borders and in other countries. Special attention is given to planning and implementing marketing mix variables in international settings. Prerequisites: MGT 3013 and MKT 3023.

BUS 477(1-3). International Experience - 1-3 hours (Fall, Spring, Summer, Winterfest)
Inter-cultural experience and international travel. Requires a minimum of four weeks spent outside of the United States. For International Business program students, the country should ideally correspond to the specific modern language chosen in the degree plan. Students are responsible for costs of international travel and activities, in addition to the tuition.

BUS 495(1-4). Intensive Studies in Business - 1-4 hours  (On demand)
Topics will vary with each offering; therefore, the course may be repeated for credit.

BUS 498(1-3). Internship in Business - 1-3 hours  (Fall, Spring, Summer, Winterfest)
Academically planned and supervised work experience in area(s) of the student's major within business or other organizations, approved by the faculty advisor and department chair as an enhancement to the student's educational preparation at SBU. Written reports will be required of the student and performance reports from the employer. A maximum of six semester hours of internships may be applied to the major. Prerequisite: 60 credit hours completed.

BUS 499(1-3). Independent Study in Business - 1-3 hours  (On demand)
Independent study of some problem or area not covered in the organized courses under the direction of a faculty member in whose field of specialization the problem or area lies. Prerequisites: 3.00 GPA in major field and 60 credit hours completed.

CHEMISTRY
CHE 1004. Chemistry for Allied Health - 4 hours  (Fall)
The study of the fundamentals of general chemistry, organic chemistry, and biochemistry. Three lectures, one laboratory each week. Does not satisfy the major or minor requirements for chemistry. Lab fee $52. Prerequisite: High school algebra.

CHE 1104. Principles of Chemistry - 4 hours  (On Demand)
Fundamentals of chemistry, i.e., atomic structure, chemical periodicity, terminology, equations, kinetics, energy relationships, nuclear and descriptive chemistry. Three lectures, one laboratory each week. Does not satisfy the major or minor requirements for chemistry. Lab fee $60. Prerequisite: High school algebra.
CHE 1115. General Chemistry I - 5 hours (Fall)
A study of the fundamental laws and theories involved in chemical changes. Topics will include atomic theory, thermochemistry and nuclear chemistry. Stress will be on the solving of mathematical problems which illustrate the principles of chemistry. The course is designed principally for students planning on careers related to the natural sciences. Four lectures, one laboratory each week. Lab fee $75. Prerequisite: MAT 1143 or concurrent enrollment. Note: A student who takes CHE 1104 and 1115 will receive credit for only CHE 1115.

CHE 1125. General Chemistry II - 5 hours (Spring)
A continuation of CHE 1115 covering chemical equilibrium, oxidation-reduction, acid-base theory, thermodynamics, chemical kinetics, the basics of coordination chemistry, and an introduction to organic chemistry. Four lectures, one laboratory each week. Lab fee $75. Prerequisite: CHE 1115.

CHE 295(1-3). Special Topics in Chemistry - 1-3 hours (On demand)
Topics of special interest not available to the student from the traditional course offerings. May be repeated as the topics change. Lab fee $14-$42 as necessary. Prerequisite: CHE 1125.

CHE 3002. Environmental Chemistry - 2 hours (Spring, even years)
The study of the sources, reactions, transport, effects and fates of chemical species in water, soil, air and living environments and the effects of technology thereon. Two lectures per week. Prerequisite: CHE 1125.

CHE/BIO 3012. Methods in Scientific Research - 2 hours (Fall)
A study of the principles and techniques used to develop and construct a scientific proposal. Topics include statistical analysis, experimental design, developing a proposal, determining a budget, and scientific presentations. Two lectures each week. Prerequisites: Biology/chemistry major or minor with 64 hours completed.

CHE 3304. Organic Chemistry I - 4 hours (Fall)
Study of the theory and mechanisms of the basic reactions of organic compounds and their derivatives. Emphasis on alkyl halides, alkanes, alkenes, stereochemistry, alicyclics, alkyynes and dienes. Three lectures, one laboratory each week. Lab fee $76. Prerequisite: CHE 1125. CIS 1103 is strongly recommended.

CHE 3314. Organic Chemistry II - 4 hours (Spring)
Continuation of CHE 3304. Emphasis on aromatic compounds, interpretive spectroscopy, alcohols, carboxylic acids and their derivatives, aldehydes, ketones, amines and ethers. Three lectures, one laboratory each week. Lab fee $76. Prerequisite: CHE 3304.

CHE 3323. Physical Chemistry - 3 hours (Spring, odd years)
Study of physicochemical systems, kinetic theory, thermodynamics, chemical equilibria and solutions. Three lectures, one laboratory each week. Prerequisites: CHE 1125, MAT 1195.

CHE 3345. Analytical Chemistry - 5 hours (Fall)
Study of the fundamental principles of quantitative analytical chemistry including basic statistics. An intensive laboratory experience which applies these principles to gravimetric, volumetric and electroanalytical determinations. Three lectures, two labs each week. Lab fee $90. Prerequisite: CHE 1125.

CHE 3354. Instrumental Analysis - 4 hours (On demand)
Study of the basic principles of instrumental methods of analysis. Topics studied include optical methods, chromatographic methods and selected other modern methods. Three lectures, one laboratory each week. Lab fee $56. Prerequisites: CHE 3304 or concurrent enrollment and either PHY 1124 or PHY 2225.

CHE/BIO 3364. Biochemistry - 4 hours (Fall)
A study of the chemistry and metabolism of biologically important compounds. Includes the biochemistry of proteins, lipids and carbohydrates, nucleic acids and the energetics of living organisms. Three lectures, one laboratory each week. Lab fee $106. Prerequisite: CHE 3314. CIS 1103 is strongly recommended.

CHE 3371. Seminar in Chemistry I - 1 hour (Spring)
Presentation and discussion of modern developments in the field of chemistry. One session each week. Prerequisite: CHE 3304.

CHE 4002. Interpretive Spectroscopy - 2 hours (On demand)
The study of the four main spectral techniques used for the identification of known organic compounds and for the determination of the structures of unknown organic compounds - infrared spectroscopy (IR), proton nuclear magnetic resonance spectroscopy (PMR), carbon-13 nuclear magnetic resonance spectroscopy (CMR) and mass spectroscopy (MS). Two lectures per week. Prerequisite: CHE 3314.

CHE 4413. Advanced Inorganic Chemistry - 3 hours (Spring, even years)
Principles and theories of modern inorganic chemistry, including group theory, bonding, coordination chemistry and relationships of the periodic table. Three lectures, one laboratory each week. Prerequisites: CHE 3314.
CHE 4471. Seminar in Chemistry II - 1 hour (Spring)
Presentation and discussion of modern developments in the field of chemistry. One session each week. Prerequisite: CHE 3314.

CHE 448(1-3). Undergraduate Research in Chemistry - 1-3 hours (Fall, Spring)
Independent research investigations. May be repeated with consent of department. Lab fee $14-$42. Consent of department chair or research director required. Prerequisites: CHE 3314 and CHE 3345.

CHE 495(1-5). Intensive Studies in Chemistry - 1-5 hours (On demand)
Topics of special interest not available to students in the traditional course offerings. Courses could include such topics as advanced organic chemistry, nuclear chemistry, quantum chemistry, reaction kinetics and polymer chemistry. May be repeated as topics change. Lab fee $14-$70 as necessary. Prerequisites: Determined by the nature of topics studied.

CHE 499(1-3). Independent Study - 1-3 hours (On demand)
Intensive individual study in areas of chemistry not usually covered in the normal curriculum. Prerequisites: Determined by the nature of topics studied. Consent of department chair required.

Methods of Teaching Middle School and Secondary Science
(See EDU 4522).

CHRISTIAN EDUCATION
CED 2003. Introduction to Christian Education - 3 hours (Fall, even years)
A study of Christian education including history, faith development and Christian conversion, leadership, curriculum and facilities.

CED 2033. Principles of Teaching in the Church - 3 hours (Spring, odd years)
Basic principles and concepts of Christian teaching formulated and projected into planning and presented in church-related learning experiences.

CED/REC 2062. Drama in the Church and Community - 2 hours (Spring, on demand)
See REC 2062 for course description.

CED 295(1-4). Special Topics in Christian Education - 1-4 hours
A focus on special topics in the field of Christian education.

CED 3013. Youth Ministry in the Church - 3 hours (Spring, odd years)
A study of the objectives, organization and methodologies for youth, ages 12-17, and the directing of a youth program. Prerequisite: CED 2003

CED 3023. Church and Denominational Administration - 3 hours (Fall, odd years)
A functional study including duties of church officers and committees, constitutions, by-laws, and parliamentary procedure.

CED 3043. Children's Ministry - 3 hours (Fall, even years)
A study of ministries involving children from birth through sixth grade to include but not limited to Bible study methods, vacation Bible school, children's worship, child care facilities in the church, and child care during church events. Prerequisite: CED 2003.

CED 4003. Adult Ministry in the Church - 3 hours (Fall, odd years)
A study of the development tasks of adulthood and ministries with adults in the church. Prerequisite: CED 2003.

CED 4053. Youth Discipleship and Evangelism - 3 hours (Spring, even years)
A study of (1) the challenges of youth and their culture (including suicide, pregnancy, parental problems, drugs) and (2) evangelism strategies, events and programs designed to reach unchurched youth. Prerequisites: BIB 1013/1213, 1023/1223, SPF 2012.

CED 495(1-4). Intensive studies in Christian Education - 1-4 hours
Focus on special areas of interest in the Christian education field. Topic will vary from year to year. (May be taken more than once). Prerequisites: CED 2003.

CED 498(1-6). Apprenticeship in Christian Education - 1-6 hours (Fall, Spring, Summer)
On-the-job training under the supervision of a full-time minister of education, minister of childhood education or youth minister. Includes observation, supervision, planning, instruction, guided practical leadership and evaluation. Prerequisite: Major in Christian Education (concentrations in general Christian education, youth ministry or children's ministry) or minor in student ministries and 96 hours completed. Note: Apprenticeships are not paid positions; the student learns under the supervision of a qualified staff member. Assignment of apprenticeships is made strictly by the SBU faculty member involved, not by the student or a particular church.
CHRISTIAN MINISTRIES

CHR/MUS 023(0-1).  Worship Lab – 0-1 hour (Fall, Spring)
Laboratory in worship planning and worship leadership. Attendance at a designated number of department-sponsored learning and discussion events, plus assignment to worship-leading teams for rehearsal and participation in worship-leading opportunities.

CHR 2043.  Introduction to Evangelism - 3 hours (Fall, odd years)
An introduction to the biblical basis of and contemporary models for evangelism in order to develop effective methods for sharing the gospel in a variety of contexts.

CHR/MUS 2712.  Worship Leading for Small Groups - 2 hours (Spring, odd years)
See MUS 2712 for course description.

CHR 295(1-3).  Special Topics in Christian Ministries - 1-3 hours  (On demand)
A focus on special topics in the field of Christian Ministries.

CHR 3003.  Introduction to Disciple-making - 3 hours (Spring)
Study of the biblical definition and contemporary models of the disciple-making process, including practical training and experience in discipleship.

CHR 3013.  Introduction to Ministry - 3 hours (Fall)
Study of the work of the vocational ministers of the local church with special attention given to the ministry of all believers. Prerequisites: BIB 1013/1213, 1023/1223.

CHR 3023.  Introduction to Preaching - 3 hours (Fall, even years)
A study of the task of preaching the Christian message to today's world including practice in preparing and delivering sermons. Some attention may be given to other types of religious communication.

CHR/MUS 3752.  Instrumental Ministry in the Church - 2 hours  (Spring, even years)
A practical study of the use of instrumental music in the church, including all aspects of instruments in music ministry. Techniques and materials used by the church pianist and organist involving hymn playing, modulation, transposition, improvisation, and accompanying choirs and soloists. The use of band and orchestra instruments in varying combinations and the use of handbells in music ministry. Prerequisite: Two semesters of piano (or organ) or permission of instructor.

CHR/MUS 3783.  Worship and Song in the Church - 3 hours (Fall)
A historical survey of the worship practice and congregational song of the major Christian denominations with an emphasis on planning worship for today's churches.

CHR 4003.  Expository Preaching - 3 hours (Spring, odd years)
A study is made of the expository method of preaching. Sermons by recognized expository preachers are considered. Each student develops expository sermons and presents one sermon for video taping and review. Prerequisite: CHR 3023.

CHR/MUS 4101.  Church Music Technology - 1 hour (Spring, even years)
An introductory overview of the technology available to church musicians. Prerequisite: CIS 1103.

CHR/MUS 4743.  Church Music Administration - 3 hours  (Fall, odd years)
Study of the functional approach to the church music ministry including organization, administration, budget, calendar, scheduling, purchase and maintenance of equipment, rehearsal, performance, service planning, congregational activities and staff relations.

CHR 495(1-4).  Intensive Studies in Christian Ministries - 1-4 hours
A focus on a special area of interest in the field of Christian Ministry. Areas of study will vary from year to year. (May be taken more than once).

CHR 498(1-3).  Christian Ministries Apprenticeship – 1-3 hours  (Fall, Spring)
Guidance of an apprentice in direct relationship to the practice of ministry. Apprenticeships may be completed in the following areas: associational, chaplaincy, and pastoral ministries. Prerequisite: 96 hours completed. Note: Apprenticeships are not paid positions; the student learns under the supervision of a qualified mentor. Assignment of apprenticeship is made strictly by the SBU faculty member involved, not by the student or a particular church. During the semester in which students enroll in this course they are not allowed to enroll in more than 16 total hours, except when the on-site work of the apprenticeship is completed during the summer.

COMMUNICATION

COM 1013.  Media and Society - 3 hours  (Fall, on demand)
A study of communication strategies in mass media. The history, development and current structures of the media and their effects on society.
COM 1103. Fundamentals of Speech Communication - 3 hours (Fall, Spring)
Foundations of speech communication. Special attention to the theory and practice of effective preparation and delivery of public speeches.

COM 2023. Introduction to Sports Communication – 3 hours (Spring)
This course offers an introduction to communication through the lens of sports. Students will explore the history of sports communication through the present through analyzing message strategies within the field of sports. Special attention will be paid to public relations, interpersonal, organizational, and mediated communication through the lens of the sports industry.

COM 2033. Introduction to Digital Video - 3 hours (Fall)
An introduction to digital video production. Students will learn all the fundamentals of digital video production including: editing, writing, shooting, directing, and producing. Students will demonstrate their skills by producing various projects such as music videos, interviews and news segments. Course fee $50.

COM/HON 2213. Honors Fundamentals of Speech Communication - 3 hours (Spring)
Foundations of speech with emphasis upon speech preparation and delivery. Exploration of classical and contemporary rhetorical principles. Prerequisite: minimum ACT of 25 and/or enrollment in COM 4413.

COM 2223. Argumentation and Debate - 3 hours (Fall)
Emphasis on methods and theories of argumentation and debate. Attention to research, analysis, case building and oral participation. Prerequisite: ENG 1113 and COM 1103.

COM 2233. Introduction to Public Relations - 3 hours (Fall)
Emphasis upon understanding the theoretical foundations of public relations. Attention to practical methods and steps in conducting the processes and activities of public relations.

COM 2393. Interpersonal Communication - 3 hours (Fall, Spring)
Theory and practice of effective interpersonal encounters. Special attention to listening, language, self-perception, interviewing and nonverbal communication.

COM 295(1-4). Special Topics - 1-4 hours

COM 3003. Communication Theory - 3 hours (Spring, On demand)
Survey of theories in interpersonal, small group, organizational, rhetorical, mass media, and cultural communication contexts. Special emphasis on using theoretical knowledge to improve communication skills. Prerequisite: COM 1103.

COM 3013. Rhetorical Theory and Criticism - 3 hours (Fall, odd years)
This course offers in-depth exploration of both the theoretical and methodological aspects of rhetorical studies. Since rhetorical theories are foundational to the study and practice of effective communication, students will learn how to use both historical and contemporary rhetorical theories to analyze a variety of important texts including speeches, films, advertising campaigns, and any other type of persuasive discourse. Prerequisite: COM 1103 or COM 2393.

COM 3043. Communication Research Methods - 3 hours (Spring, even years)
This course offers systematic study of the various types of research methodologies used in the communication discipline. Students will learn the basics of investigating communication phenomena using social scientific, qualitative and critical rhetorical methods. Prerequisite: COM 1103 or COM 2393.

COM 3063. Digital Video Journalism - 3 hours (Spring)
Students will acquire the knowledge and skills necessary to become digital video journalist professionals and will receive advanced training in interviewing, writing, and producing. Prerequisite: COM 2033. Course fee $50.

COM 3163. Nonprofit Public Relations - 3 hours (Fall, odd years)
This course offers exploration of the unique persuasive and organizational challenges associated with being a public relations practitioner in the nonprofit sector. Students will learn how to develop and implement public relations plans that will effectively communicate with a variety of target audiences. Students will also learn about various nonprofit public relations essentials such as fundraising, establishing corporate partnerships, promoting nonprofit organizations through special events, and maximizing the use of the internet and social media. Prerequisite for Communication Majors: COM 2223 and COM 2233.

COM 3263. Public Relations and Crisis Management - 3 hours (Spring)
Students in this course will learn relevant theories and practice the various communication skills necessary to develop and implement public crisis response plans. Significant emphasis will be placed upon the examination of historical and contemporary case studies of both effective and ineffective instances of crisis management. Prerequisite for Communication Majors: COM 2223 and COM 2233.

COM 3283. Persuasion: Theory and Practice – 3 hours (Fall)
Theories and practice of persuasion and social influence. Prerequisite: COM 1103.
COM/THR 3303. Oral Interpretation of Literature - 3 hours (Fall, even years)
Emphasis on theory and practice of communicating works of literature from the printed page. Prerequisite: COM 1103. Course Fee: $10.

COM 3313. Advanced Public Speaking - 3 hours (Spring)
Advanced study of preparation and delivery of various speech types. Special attention to extemporaneous and manuscript speaking. Prerequisite: COM 1103.

COM 3333. Intercultural Communication - 3 hours (Spring)
This course will cover a wide variety of intercultural issues as they pertain to media, religion, business, politics, education, health care and interpersonal communication. A balanced emphasis will be placed on developing intercultural awareness and competence. Prerequisite: COM 1103.

COM 3343. Multi-Media Productions for Nonprofit Organizations - 3 hours (Fall, On demand)
This course prepares students to design and produce multi-media campaigns suitable for nonprofit organizations. Students will design campaigns which utilize television, radio, print, graphics, and various other media. Course fee $50.

COM 3351. Intercollegiate Forensics and Debate - 1 hour (Fall, Spring)
Participation in intercollegiate debate and forensics program. May be repeated; however, only 6 hours may count toward a major. Prerequisite: COM 1103.

COM 3353. Organizational Communication - 3 hours (Fall)
This course allows students to study how communication intersects with organizational life and culture on both the theoretical and practical levels. Special emphasis will be given to how organizations use communication to function and how students can communicate effectively within a wide array of organizational contexts. Prerequisite: COM 1103 or COM 2393.

COM 3361. Student Media Practicum - 1 hour (Fall, Spring)
Guided practical experience in college newspaper production. May be repeated; however, only 6 hours may count toward a major.

COM 3363. American Public Address - 3 hours (Spring, odd years)
Historical and critical study of leading American speakers, their speeches and philosophies. Individual research and analysis. Prerequisite: COM 1103.

COM 3373. Writing and Editing for Journalism - 3 hours (Spring)
An emphasis upon the essentials of journalism writing. Special attention to principles and skills required to gather, write and edit newspaper stories. Lab fee $10. Prerequisite: ENG 1113 and COM 1103.

COM 3383. Small Group Communication - 3 hours (Fall)
Systematic study and practice of principles of effective communication in groups. Exploration of dynamic variables and features unique to small group interaction. Public discussion formats are also explored. Prerequisite: COM 1103.

COM 3873. History and Contemporary Issues in Journalism - 3 hours (Spring)
This course is both a survey of the major landmarks of journalism history and an in-depth exploration of the issues and practices of contemporary journalism. This course will also consider how advances in communication technology and social media are reshaping the journalistic landscape.

COM 3973. Journalism Law and Ethics - 3 hours (Fall)
This course explores the legal and ethical aspects of the profession of journalism.

COM 4013. Communication and Leadership - 3 hours (Spring)
This course explores how we understand and become better leaders. It will integrate components of leadership and established leadership models from the communication field. The class will also focus on general leadership responsibilities and learning basic interview and job skills.

COM 4283. Communication and Social Media - 3 hours (Spring)
This course provides students the opportunity to learn to effectively use social media as an increasingly vital component of organizational public identity. The course will focus upon how social media is changing the culture of organizational communication and identity as well as teach students how to become effective practitioners of social media communication.

COM 4311. Communication Senior Capstone - 1 hour (Fall)
This course allows students to obtain a sense of perspective about the degree they are about to complete in communication. It serves two purposes: (a) It familiarizes prospective communication graduates with a number of the career options available in the field of communication, and (b) equips them to produce effective employment or graduate school portfolios.
COM 4413. Forensics - 3 hours (On demand)
Laboratory practice and techniques for coaching contest speaking events: oratory, extemporaneous speaking, interpretation and after-dinner speaking. Prerequisite: COM 2223.

COM 4433. Interviewing - 3 hours (Fall, odd years)
This course will survey the relevant theories and practices concerning interviewing as a job-seeking and non-job-seeking communication behavior. Students will learn to conduct and participate in both journalistic and professional interviews.

COM 495(1-4). Intensive Studies - 1-4 hours
COM 496(1-3). Practicum - 1-3 hours
COM 497(1-3). Symposium - 1-3 hours
COM 498(1-6). Internship - 1-6 hours (Fall, Spring, Summer)
COM 499(1-3). Independent Studies - 1-3 hours
Advanced studies of specific topics arranged through consultation with the department chairperson.

Methods of Teaching Theatre
(See EDU 4502).

Methods of Teaching Speech in the Middle and Secondary Schools
(See EDU 4552).

COMPUTER AND INFORMATION SCIENCES

CIS 0103. Computer Literacy - 3 hours (Fall)
An introduction to computer hardware and software. Special emphasis is given to personal computer systems and the following common applications: word processors, presentation software, spreadsheets and databases. This course does not count toward the 128 hours required for graduation. Lab fee $12.

CIS 1001. Seminar in Computer and Information Sciences - 1 hour (Fall, Spring)
Seminar in Computer and Information Science provides a broad overview of foundational topics related to professional computing. Included in the course are career and internship preparation, the establishment of a digital portfolio, ethics in the technical academic environment, personal and legal issues in technical security, oral and written technical communication, and the role of faith in a computing professional’s life. Prerequisite: CIS1144 with a grade of C or better. One lecture and one lab of 50 minutes each. Corequisite: CIS 1154.

CIS 1033. Foundations of Computer Science - 3 hours (Fall, Spring)
An introduction to key concepts in computer and how computation is related to all scientific fields. Topics include, but are not limited to, robotics, web design, software engineering, artificial intelligence, computer architecture, digital media storage, algorithm design and computability. Required for computer science majors. Lab fee $12. Prerequisite: MAT 1143 or concurrent enrollment.

CIS 1103. Computer & Information Management - 3 hours (Fall, Spring, Winterfest, Summer)
This course presents the fundamental ideas related to information technology, reinforces proficiency in contemporary computer applications, and supports computational problem-solving processes. Emphasis is given to effective use of spreadsheets and databases as tools for problem-based learning and analysis. Lab fee $12.

CIS 1113. COBOL - 3 hours (On demand)

CIS 1144. Computer Science I - 4 hours (Fall, Spring)
This course introduces the concepts of computer programming and problem solving and the associated ideas of algorithms and data structures. It is designed to provide the serious computer science student with basic skills and a solid foundation for further study. Includes an introduction to the Java programming language. Three lectures, one lab per week. Lab fee $16. Prerequisite: MAT 1143 or concurrent enrollment.

CIS 1154. Computer Science II - 4 hours (Fall, Spring)
This course is a continuation of CIS 1144 with emphasis upon good programming methodology (software engineering). The data structures of linked lists, stacks, queues and trees are developed along with an introduction to file structures. Recursion, searching and sorting algorithms are analyzed for order as well as time and space efficiency. Parallel sorting and searching algorithms are introduced. Java is utilized for programming. Three lectures and one lab per week. Lab fee $16. Prerequisite: CIS 1144. Corequisite: CIS 1001.

CIS 1163. Introduction to Cybersecurity - 3 hours (Spring)
The course will be a broad overview of computer security topics including security threats, personal computer security, operating system security, web security, physical security, access control, intrusion detection, anti-virus & anti-spyware systems, cryptography, steganography, security models & practice, business continuity & disaster recovery,
and risk management. A brief introduction to secure software development is included. The course will not include a significant coding component. Lab fee $12. Prerequisite: CIS 1033 or CIS 1103.

**CIS 2003. Web Design - 3 hours (Spring, even years)**
This course presents introductions to many of the basic concepts, design issues, web standards, and techniques related to designing, developing and deploying Web sites. Topics include web and animation tools, including editors, image manipulation tools, utilities, traffic analysis, internet security, and e-commerce issues. Lab fee $12. Prerequisite: CIS 1154 with a grade of C or better.

**CIS 2013. Networks - 3 hours (Spring)**
This course examines the physical and conceptual structures underlying local and wide area networks. Topics include network topologies and architectures, network devices, common protocols and services, error and flow control mechanisms, and network monitoring and traffic analysis. Programming assignments will include multithreaded clients and servers. Lab fee $12. Prerequisite: CIS 1154 and MAT 1173.

**CIS 2033. Information Assurance - 3 hours (Fall Even Years)**
This course provides an overarching model for information assurance for businesses, government agencies, and other enterprises needing to establish a comprehensive security plan. Students will be guided through the components of security and the construction of an effective security policy. Topics include asset identification, human factors, compliance with regulations, personnel security, risk assessment, business continuity, and ethical considerations are covered, as well as computer and network security tools and methods. Prerequisite: CIS 1163.

**CIS 2043. System Administration - 3 hours (Fall Odd Years)**
An introduction to system administration examining both the Linux and Windows operating systems running on physical hardware, as well as Type-1 hypervisors and hosted virtual machines. Topics will include installation, configuration, logging and auditing, backup and restoration, and account management. Lab fee $12. Prerequisite: CIS 1163.

**CIS 2213. Systems Analysis and Design - 3 hours (Fall, Spring)**
Study of the phases a system project using current design tools and techniques. Includes an introduction and overview of several development methodologies with in depth study of one development methodology. Lab fee $12. Prerequisites: CIS 1113 or CIS 1033 or CIS 1144.

**CIS 2253. Web Engineering and Development - 3 hours (Fall)**
A study of the development techniques, protocols, and approaches to engineering web-based software systems. Topics include HTML, CSS, XML, CGI, PHP, Javascript, Ajax, DOM, client/server computing and Ruby on Rails. Issues related to design, maintainability, metrics, security, and performance are addressed. Lab fee $12. Prerequisite: CIS 1154 with a grade of C or better.

**CIS 295(1-3). Special Topics - 1-3 hours (On demand)**
Selected topics of special interest in the field of computer science. May be repeated. Lab fee when appropriate. Prerequisite: 6 hours in computer science.

**CIS 3013. Digital Forensics Principles and Practices - 3 hours (Spring Odd Years)**
This course provides the student a thorough background in the principles and practices employed in the field of digital forensics. The course provides students with a working foundation of the types of computer and electronic crimes being committed today, and identifies techniques used by offenders to compromise computer systems as well as vulnerabilities of computer and electronic systems. Practical applications of theory and academic study are included as coursework. Lab fee $12. Prerequisite: CIS 1144 and CIS 1163.

**CIS 3023. Network Security - 3 hours (Fall Odd Years)**
A detailed examination of network security tools and techniques. The course will also include a detailed study of both encryption and steganography. Lab fee $12. Prerequisites: CIS 1163 and CIS 2013.

**CIS 3033. Secure Software - 3 hours (Spring Even Years)**
A study of the most common security-related design and coding flaws in modern computer programs. Students will develop and refine secure design and programming techniques through correcting flaws in example programs and creation of their own secure programs. Students will perform in-class code reviews. Both Java and C will be utilized in programming assignments. Lab fee $12. Prerequisites: CIS 1154 and CIS 1163.

**CIS 3113. Interface and Interaction Design - 3 hours (Spring, odd years)**
A study of interaction theory and interface design for computing devices. Applied approaches are used to address issues in the development of mobile, web and other screen-based interfaces. Includes an introduction to Microsoft Visual Studio. Lab fee $12. Prerequisite: CIS 1154 with a grade of C or better.

**CIS 3303. Systems Management - 3 hours (Fall, Spring)**
This course examines the issues and challenges involved in the management and implementation of information systems. It includes a foundational understanding of information technology, an overview of the correlation between
business and information systems, and the challenges associated with the integration of multiple applications across a variety of platforms. Prerequisite: CIS 1103, CIS 1033.

**CIS 3313. Advanced Systems Analysis and Design - 3 hours (Fall, even years)**
This course presents an advanced study of analysis and design methodologies, techniques and tools. Topics include object-oriented methodologies, prototyping, client/server architectures, Joint Application Development, Rapid Application Development, human interface design and CASE. A project based approach is utilized. Lab fee $12. Prerequisite: CIS 2213.

**CIS 3323. Database Management Systems Design - 3 hours (Spring)**
A study of the concepts and structures necessary to design and implement a database system. Topics include data hashing and encryption, access controls, security models, and DBMS vulnerabilities. Lab fee $12. Prerequisite: CIS 2213.

**CIS 3333. Algorithms and Data Structures - 3 hours (Fall, Spring)**
This course presents an advanced study of algorithms and data structures. Topics include precise iterative and recursive runtime and storage usage calculation and optimization, linear runtime sorting, graphs, Red-Black trees, AVL trees, B-trees, file structures and external sorting. Parallel sorting and searching algorithms are introduced. A non-object oriented language with manual memory management such as C is utilized for programming assignments. Prerequisite: CIS 1154 and MAT 1173.

**CIS 3353. Survey of Programming Languages and Artificial Intelligence - 3 hours (Spring, odd years)**
Survey of programming languages including their structure, syntax, semantics, uses and design. Methods used for representing knowledge will be studied including algorithms for learning. Lab fee $12. Prerequisite: CIS 3333.

**CIS 3363. Mobile App Development - 3 hours (Spring, odd years)**
This course introduces students to app development on mobile handheld devices (phones and tablets). Students will learn the fundamentals of the platforms, SDKs, and the development environments. Throughout this course student will develop a number of mobile apps with increasing complexity. Each app will focus on a key mobile app component. Lab fee $12. Prerequisite: CIS 3333 with a grade of C or better.

**CIS/PHY 3413. Machine Organization - 3 hours (Fall)**
A survey of the electronic and mechanical components of a computer, including processing units, memory and I/O devices. Also includes an introduction to assembly language programming. Lab fee $12. Prerequisites: CIS 1154 and MAT 1173.

**CIS 4001. Cooperative Education in Computer Science - 1 hour (Fall, Spring, Summer)**
Part-time, on-the-job experience in the areas of analysis, design, programming and maintenance. Credit will only be available for jobs with employers having a cooperative education agreement with the University. Course may be repeated up to six times. Credit hours may count toward the major only with the approval of the department chair and the cooperative education coordinator. Prerequisites: Declared CIS Department major, placement with an employer participating in the cooperative education program and permission of the cooperative education coordinator.

**CIS 4123. Management Information Systems and E-Commerce – 3 hours (Summer)**
This course equips students with the knowledge and skill needed to effectively integrate (ERM, ERP) computer based information systems for planning and decision support and operational control throughout all functional areas of the organization. It also equips students to understand and interact with e-business systems and to keep up with rapidly changing technologies. Prerequisite: computer proficiency. Application and acceptance to the MBA program is necessary prior to enrolling in this course. Fee: $150.

**CIS 4423. Operating Systems - 3 hours (Spring, even years)**
Introduction to the design and architecture of operating systems. Topics will include hypervisors, virtualization, and secure operating system design principles of domain separation, process isolation, resource encapsulation, and least privilege. Lab fee $12. Prerequisite: CIS 3413.

**CIS/MAT 4433. Numerical Methods - 3 hours (Fall, even years)**
A study of mathematical concepts in a computing context. Topics include numerical integration, systems of equations, root-finding, curve-fitting, and differential equations. Emphasis will be placed on computer-based solutions with implications for programming, algorithm complexity, data representation and approximation, and error measurement. Lab fee $12. Prerequisite: CIS 1033 and MAT 2263.

**CIS 4453. Systems Security - 3 hours (Fall Even Years)**
A detailed study of the preemptive configuration / hardening and the subsequent active defense of a computer system. Workstations, servers, virtual machines, mobile devices, IOT, SCADA systems, industrial control systems, and peripheral devices will be discussed. Lab fee $12. Prerequisite: CIS 1154 and CIS 2043.
CIS 4462. Applied Software Engineering I - 2 hours (Fall)
A comprehensive software engineering project conducted by a team of students. Students are required to define, design and do the initial implementation of a practical, commercial quality software project. Lab fee $8. Prerequisites: CIS 3333.

CIS 4463. Ethical Hacking - 3 hours (Spring Odd Years)
A hands-on study of ethical hacking and cryptanalysis. White, grey, and black box testing will be performed in isolated systems. Legal and ethical limitations will be stressed. Lab fee $12. Prerequisite: CIS 3033. Note: Students will be required to sign an ethical conduct agreement as a part of this course.

CIS 4472. Applied Software Engineering II - 2 hours (Spring)
A continuation of CIS 4462. Students are required to complete the project started in CIS 4462. Lab fee $8. Prerequisite: CIS 4462.

CIS 495(1-3). Intensive Studies - 1-3 hours (On demand)
Selected topics of special interest in the computer science field. May be repeated. Lab fee when appropriate. Prerequisite: 18 hours in computer science.

CIS 498(1-3) Internship in Computing - 1-3 hours (Fall, Spring, Summer, Winterfest)
Academically planned and supervised work experience in areas of the student's major within professional computing or other organizations, approved by the faculty advisor and department chair as an enhancement to the student's educational preparation at SBU. Weekly written reports will be required of the student and performance reports from the employer. A maximum of six semester hours of internships may be applied to the major. Prerequisites: 30 hours completed.

CIS 499(1-3). Independent Studies - 1-3 hours (On demand)
Independent study of some problem or area in the major not covered in the organized courses. The study is under the direction of a faculty member in whose field of specialization the problem or area lies. Prerequisites: 3.00 GPA in major field and 60 hours completed.

Methods of Teaching Computer Science (See EDU 4213).

CRIMINAL JUSTICE

CRJ 2313. Introduction to Criminal Justice - 3 hours (Spring)
An analysis of the criminal justice system in the United States. An examination of crime and nature of law, aspects of criminal law and procedure, the courts and adjudication, the process of justice, and law enforcement.

CRJ 2333. Judicial Process - 3 hours (Spring, even years)
An overview of major structures and processes which underlie the American judicial system, focusing on history and development of prosecution, defense, judge and jury practices at both the state and federal levels. Prerequisite: CRJ 2313.

CRJ 295(1-3). Special Topics - 1-3 hours (On demand)
A study of critical issues in criminal justice that are not covered in other course offerings. Areas of study will vary from year to year. Students may elect to repeat the course.

CRJ 3033. Serial Killers - 3 hours (Spring, odd years)
A topical study of the factors common to serial murders, emphasizing the distinctions between myth and fact, the psychological profiles of such murderers, and the impact of such crimes on victims and society.

CRJ 3313. Law Enforcement Organization and Administration - 3 hours (Fall)
An examination of the organization and administration of police departments and the role of law enforcement in relationship to the community and established political structure. Prerequisite: CRJ 2313.

CRJ 3373. Juvenile Delinquency - 3 hours (Spring)
An overview of the problem of juvenile delinquency and how it relates to society as a whole. Causation, prevention, control, and treatment will be examined. Prerequisite: CRJ 2313 or SOC 4033.

CRJ 4313. Corrections in America - 3 hours (Fall)
A systematic examination of the penal system and insight into its daily operations. Various theories of corrections will be explored. Prerequisite: CRJ 2313 or SOC 4033.

CRJ 4333. Criminal Law - 3 hours (Spring)
An overview of the general laws and crimes which effect law enforcement. Elements which are required to constitute a crime will be explored. Prerequisite: CRJ 2313.

CRJ 4373. Police Methods and Procedures - 3 hours (Fall)
Examination of law enforcement subjects including laws of search and seizure, laws of arrest, arrest procedures, criminal investigations, courtroom demeanor, rules of evidence, and patrol techniques. Prerequisites: CRJ 2313.
CRJ 495(1-4). Intensive Studies - 1-4 hours (On demand)
A study of critical issues in the field of criminal justice that are not covered in other course offerings. Areas of study will vary from year to year. Students may elect to repeat the course. Prerequisite: 12 hours criminal justice or consent of instructor.

CRJ 498(3-6) Internship - 3-6 hours (On demand)
The internship experience is designed to give the upper level criminal justice major supervised field experience in an area related to criminal justice. Prerequisites: Junior or senior standing, completed at least one-half of the major, minimum GPA of 3.0 and recommendation from a behavioral sciences faculty. Graded Pass/Fail.

ECONOMICS
ECO 2003. Literacy in Free Enterprise (LIFE) Economics - 3 hours (Fall, Spring, Summer, Winterfest)
This General Education course will help the student develop an understanding of economic systems based on freedom. It will emphasize the importance of individual initiative and involvement in day-to-day community and business matters. Developing literacy about individual responsibility in personal and community decision making is a primary concern. NOTE: For non-business majors; does not meet the Robert W. Plaster College of Business and Computer Science requirements. Not available to students who have taken a previous economics course. Prerequisite: 24 credit hours completed.

ECO 2023. Principles of Microeconomics - 3 hours (Fall)
A study of economic principles with emphasis upon microeconomics. Includes a study of economics of the firm, consumer demand theory and current problems. Prerequisite: 24 credit hours completed.

ECO 2033. Principles of Macroeconomics - 3 hours (Spring)
Study of the basic principles of macroeconomics designed to give a broad understanding of the economy. Emphasis upon aggregate problems and issues considered important to the nation. Prerequisite: 24 credit hours completed.

ECO 2043 (HON 2003). Honors Literacy in Free Enterprise (LIFE) Economics - 3 hours (Fall)
Honors LIFE Economics is the study of basic macro- and microeconomic concepts for non-business majors. This course will help the student develop an understanding of economic systems based on freedom. It will emphasize the importance of individual initiative and involvement in day-to-day community and business matters. Developing literacy about individual responsibility in personal and community decision-making is a primary concern. As an honors section, this class will explore the topic of free enterprise and economics through classroom discussion, enrichment activities and field trips. Prerequisite: Enrollment in the Dutile Honors Program or a minimum composite ACT of 26 or SAT equivalent.

ECO 2061. Enactus Practicum - 1 hour (Fall, Spring)
Enactus is an international non-profit organization that works with leaders in business and higher education to mobilize university students to make a difference in their communities while developing the skills to become socially responsible business leaders. Students apply business concepts to develop outreach projects that improve the quality of life and standard of living for people in need. This course may be taken a maximum of two times.

ECO 295(1-4). Special Topics in Economics - 1-4 hours (On demand)
Topics will vary with each offering; therefore, the course may be repeated for credit.

ECO 3023. Money and Banking - 3 hours (Fall)
Study of history and present characteristics of money and banking structure in the United States. Emphasis upon monetary policy as it affects economic activity. Prerequisites: ECO 2023 and ECO 2033.

ECO 3043. Managerial Economics - 3 hours (Spring)
Combines the basic tools used by economists with techniques common in other business disciplines. This course deals with how decisions are made in order to achieve an organization's goals. It emphasizes use of quantitative techniques to solve production, marketing, management and financing problems. Prerequisites: ECO 2023 and MGT 3013.

ECO 3053. International Economics/Finance - 3 hours (Fall, even years)
A study of theory and policy related to international capital flows, exchange rates, and financial management. International economic institutions and policies are analyzed. Prerequisites: ECO 2023 and ECO 2033.

ECO 3063. Capital and Credit Markets - 3 hours (On demand)
The principles involved in the market structure of interest rates along with the source and uses of funds in the financial markets. Prerequisite: ECO 3023.

ECO 4023. Special Topics in Economics/Finance - 3 hours (Winterfest)
A study and discussion of the theory, recent history and current problems of economics and finance issues. Prerequisite: 60 credit hours completed.
ECO 4061. Enactus Practicum - 1 hour (Fall, Spring)
Enactus is an international non-profit organization that works with leaders in business and higher education to mobilize university students to make a difference in their communities while developing the skills to become socially responsible business leaders. Students apply business concepts to develop outreach projects that improve the quality of life and standard of living for people in need. Prerequisite: junior or senior status. This course may be taken a maximum of two times.

ECO/FIN 4173. History of Finance and Economic Thought - 3 hours (Winterfest)
An introduction of the different economic schools of thought as well as recent economic developments. This course will also provide an introduction of the development of major topics in the field of finance. Prerequisites: ECO 2023, ECO 2033, and FIN 3053.

ECO 495(1-4). Intensive Studies in Economics - 1-4 hours (On demand)
Topics will vary with each offering; therefore, the course may be repeated for credit.

ECO 499(1-3). Independent Study in Economics - 1-3 hours (On demand)
Independent study of a topic not covered in the regular curriculum under the direction of a faculty member in whose field of specialization the area lies. Prerequisites: 3.00 GPA in major field and 60 credit hours completed.

EDUCATION

NOTE: EDU 2113, EDU 2313 and Field Experience I (observing/assisting) are prerequisites for admittance to upper-level elementary, middle and secondary education courses. EDU 3333 must be taken at Southwest Baptist University. EDU 2343 and EDU 2353 are also prerequisites for admittance to upper-level elementary methods courses. Enrollment in upper-level education courses by all students seeking State Teacher Certification is limited to those students who have a cumulative GPA of 2.75, a GPA of 3.0 in content area coursework, a GPA of 3.0 in professional education coursework, passed all state required assessments, completed their file in the Office of Teacher Education, and been approved by faculty in the Department of Department of Education and, in the case of students seeking K-12 or 9-12 certification, the approval of faculty in the respective department. Only professional education courses transferred from junior colleges and senior colleges having state-approved teacher education programs can be used to meet certification requirements. Students must earn a grade of “C” or better in all EDU courses.

EDU 2003. Curriculum Planning and Assessment - 3 hours (Fall, Spring)
The course uncovers the dynamics of planning and implementing year long, unit and daily instruction based on state standards, utilizing formative and summative assessments in student learning, analyzing grading practices and issues, interpreting standardized tests and statewide assessments, proctoring individual skill or academic assessments, and investigating the classroom teacher’s role in district accreditation through the Missouri School Improvement Program (MSIP). Prerequisites: ENG 1113 and 2213, or ENG 1123, and a 2.50 GPA.

EDU 2113. Educational Psychology - 3 hours (Fall, Spring)
Study of social and behavioral theory, including the nature of educational psychology, measurement, personality, the classroom as a social system, learning and instruction. Prerequisites: 2.50 GPA. Students should be enrolled concurrently in Field Experience Level 1 or Field Experience Level l may be taken with EDU 2313, Foundations of Education.

EDU 2121. Field Experience Level 1: (observing/assisting) in Elementary School, Grades 1-6 - 1 hour (Fall, Winterfest, Spring)
Forty-five clock hours of supervised practical experience in the classroom at the elementary school level. Prerequisites: EDU 2113 or EDU 2313 (or either may be taken concurrently), 2.50 GPA and completion of the teacher education file. Permission from the Coordinator of Clinical Experiences must be obtained, and teacher candidate must pre-enroll. Course fee $10. Pass/Fail credit is given.

EDU 2131. Field Experience Level 1: (observing/assisting) in Middle/Jr. High - 1 hour (Fall, Winterfest, Spring)
Forty-five clock hours of supervised practical experience in the classroom at the middle/junior high level. Prerequisites: EDU 2113 or EDU 2313 (or either may be taken concurrently), 2.50 GPA and completion of the teacher education file. Permission from the Coordinator of Clinical Experiences must be obtained, and teacher candidate must pre-enroll. Course fee $10. Pass/Fail credit is given.

EDU 2141. Field Experience Level 1: (observing/assisting) in Secondary 9-12 or K-12 School - 1 hour (Fall, Winterfest, Spring)
Forty-five clock hours of supervised practical experience in the classroom at the secondary level. Prerequisites: EDU 2113 or EDU 2313 (or either may be taken concurrently), 2.50 GPA and completion of the teacher education file. Permission from the Coordinator of Clinical Experiences must be obtained, and teacher candidate must pre-enroll. Course fee $10. Pass/Fail credit is given.
EDU 2232. Introduction to Early Childhood Education - 2 hours (Spring)
This course is designed to provide an introduction to the study of early childhood education birth through eight years of age (grade 3). It includes a historical perspective, goals of early childhood education, the role of play in early childhood development, developmentally appropriate programs and curriculum models. Concurrent enrollment in EDU 2381 or EDU 2391 is required. Prerequisites: ENG 1113, 2213, or ENG 1123 and 2.50 GPA.

EDU 2243. Health, Safety and Nutrition for the Young Child - 3 hours (On sufficient demand)
Provides information about current concepts in the fields of health, safety and nutrition and their relationship to the young child; includes application of principles of health, safety and nutrition for young children. Prerequisites: EDU 2113 or EDU 2313 or concurrent enrollment and 2.50 GPA.

EDU 2283. Methods of Teaching Number Theory for Elementary and Middle School Teachers - 3 hours (Fall)
This course includes the use of sets and set notation to describe and define number properties and operations, an axiomatic development of the system of whole numbers through the use of logic, the development of algorithms and models for teaching addition, subtraction, multiplication, and division of whole numbers, integers, and rational numbers (fractions, decimals, and percentages) as well as developing methods for teaching proportional reasoning. Prerequisites: ENG 1113 and 2213, or ENG 1123 and 2.50 GPA.

EDU 2313. Foundations of Education - 3 hours (Fall, Spring)
The course presents major issues of schooling and education basic to professional preparation and an introduction to the teacher education program at Southwest Baptist University. Areas included are governance, finance, legal and ethical aspects of teaching, societal issues, cultural diversity, preparation for working with English language learners, and current topics in the field. Prerequisites: 2.50 GPA. Teacher candidates should be enrolled concurrently in Field Experience 1 or Field Experience 1 may be taken with EDU 2113, Educational Psychology.

EDU 2332. Teaching the Young Child - 2 hours (Fall)
This course provides a continuation of the study of early childhood education birth through eight years of age (grade 3). It includes a study of how to establish and maintain a safe, healthy learning environment and how to set up a well-run, purposeful, developmentally appropriate program that is responsive to participant needs. Additionally, there is a focus on how to advance the physical, intellectual, social and emotional needs of young children with an emphasis on the application of brain research in the preschool and kindergarten classroom. Concurrent enrollment in EDU 2381 or EDU 2391 is required. Prerequisites: ENG 1113, 2213, or ENG 1123 and 2.50 GPA.

EDU 2343. Emergent Literacy - 3 hours (Fall, Spring)
This course develops an understanding of communication arts instruction with a particular focus on emergent language and literacy development. It is designed as a foundational course to additional reading methods courses and provides an understanding of how young children learn oral and written language, of the learning environment necessary for this learning to develop naturally, and the cultural and societal influences upon literacy development. Prerequisites: EDU 2113, 2313 or concurrent enrollment, 2.50 GPA, and 30 hours completed. Lamination fee $5.

EDU 2353. Children’s Literature - 3 hours (Fall, Spring)
This course presents an overview of the various genres of children's literature with demonstrations of teaching and integrating literature in the early childhood through middle school classrooms. Prerequisites: EDU 2113, 2313 or concurrent enrollment, 2.50 GPA, and 30 hours completed. Lamination fee $5.

EDU 2381. Early Childhood Practicum - 1 hour (Fall, Spring)
Thirty clock hours of experience at the early childhood level (birth through grade 3). Teacher candidates will experience a variety of early childhood facilities and apply developmentally appropriate practices for early childhood. Lab fee $12. Concurrent enrollment in EDU 2232 or EDU 2332 is required. Prerequisite: 2.50 GPA.

EDU 2391. Early Childhood Practicum, Lower Elementary (grades 1-3) - 1 hour (Fall, Spring)
Provides 30 clock hours of experience in an early childhood setting, specifically in lower elementary school (grades 1-3). Teacher candidates will experience an early childhood setting and apply developmentally appropriate practices for young children. Lab fee $12. Concurrent enrollment in EDU 2232 or EDU 2332 is required. Prerequisite: 2.50 GPA.

EDU 2463. Foundations of the Middle School - 3 hours (Fall)
A focus on the historical and philosophical foundations of the traditional junior high and subsequent middle school movement. This course will provide an examination of middle level practices and organizational components. Among these practices will be consultation and collaboration with colleagues, parents and the community. Prerequisites: EDU 2113 and 2313 or concurrent enrollment and 2.50 GPA.

EDU 2823. Technology for Educators - 3 hours (Fall, Winterfest, Spring)
Develops teachers who are able to apply critical thinking and problem solving skills to perform a variety of personal and professional technological functions. These functions include effective use of media to maximize student learning and to collaborate with colleagues, administrators, parents and the community. Students will be experience and use a
wide variety of media and technological systems utilized in teaching and evaluating student learning. Prerequisites: CIS 1103 or 1033, EDU 2113, 2313 or concurrent enrollment and 2.50 GPA. Lab fee $20.

EDU 295(1-3). Special Topics in Education - 1-3 hours (On demand)
An intensified approach to selected education topics or subject matter not regularly offered by the department. Prerequisite: 2.50 GPA.

Enrollment in upper level education courses by all students seeking State Teacher Certification is limited to those students who have a cumulative GPA of 2.75, a GPA of 3.0 in content area coursework, a GPA of 3.0 in professional education coursework, passed all state required assessments, completed their file in the Office of Teacher Education, and been approved by faculty in the Department of Department of Education and, in the case of students seeking K-12 or 9-12 certification, the approval of faculty in the respective department.

EDU 3003. Teaching Social Sciences in Early Childhood and Elementary Schools - 3 hours (Fall, Spring)
This course is designed for interactive, integrated learning of methods, techniques, and skills for engaging early childhood and elementary students in social studies concepts. This course will focus on pedagogy, multiculturalism, cultural diversity, English language learners, utilizing social studies trade books in instruction, differentiated instruction, and integrating the arts. Prerequisites: EDU 2003, 2113, 2313, 2343, 2353, or 2121 and a 3.00 GPA.

EDU 3013. Analyzing and Amending Reading Problems - 3 hours (Fall, Spring)
In this course, students will learn about instructional techniques, reading assessments, diagnostic evaluations, and learning materials specifically designed to detect and correct reading difficulties. Students will administer and interpret a variety of reading assessments in order to diagnose students’ difficulties and plan remediation lessons and activities. Students will practice test administration and diagnosis with students who are struggling with literacy development, demonstrating the ethics of testing procedures and reporting. Prerequisites: EDU 2113, 2313, (2131 or 2141) and 2.75 GPA.

EDU 3043. Learner Development and the Classroom - 3 hours (Fall, Spring)
This course is concerned with the psychological development of children and adolescents during the school age years. The course will focus primarily on the cognitive, physical, social, personal and moral development of children and adolescents and the impact of these developmental areas on learning and behavior in the school classroom. Prerequisites: ENG 1113 and 2213, or ENG 1123 and 2.50 GPA.

EDU 3114. Teaching Reading/Language Arts in Early Childhood and Elementary Education I - 4 hours (Fall, Spring)
Teacher candidates examine the teaching of the language arts components (reading, writing, speaking, and listening) as well as “Literacy’s Big 5.” Teacher candidates will also explore approaches and strategies that are appropriate for use in facilitating developmental reading in today’s early childhood and elementary classrooms. Specifically, topics include handwriting, the reading and writing process, phonics, phonemic awareness, language arts programs, and differentiated instruction. In addition, the broad topics of differentiated instruction and English language learners will be included. Prerequisites: EDU 2003, 2113, 2313, 2343, 2353, or 2121 and a 3.00 GPA. Lamination fee $5.

EDU 3124. Teaching Reading/Language Arts in Early Childhood and Elementary Education II - 4 hours (Fall, Spring)
Teacher candidates apply the principles of integrated language arts teaching throughout the curriculum. Teacher candidates will plan instruction and prepare materials to be used to foster developmental and functional reading skills that enable students to use reading as a tool to learn. Pre-service teachers will also assess and evaluate students with diverse needs in the regular classroom. Specific topics to be covered include multiple intelligences, vocabulary, fluency, spelling, grammar, comprehension, and listening/speaking. In addition, the broad topics of differentiated instruction and English language learners will be included. Prerequisites: EDU 2003, 2113, 2313, 2343, 2353, or 2121 and a 3.00 GPA. Lamination fee $5.

EDU 3143. Integrating Art, Music and Movement into the Early Childhood and Elementary School - 3 hours (Fall, Spring)
This course is designed to enable the student to integrate literature, art, music and physical education/movement into the early childhood and elementary classroom. Prerequisites: EDU 2003, 2113, 2313, 2343, 2353, or 2121 and 3.00 GPA.

EDU 3163. Teaching Integrated Math in Early Childhood and Elementary Education - 3 hours (Fall, Spring)
Analyzes methods of teaching mathematics in early childhood and elementary classrooms and integrating mathematics in other content areas in ways that are developmentally appropriate and are reflective of the NCTM standards. Methodology includes developing investigative lesson plans, using technology and learning centers in the math classroom, evaluating mathematics textbooks, formulating performance goals and objectives, and assessing the
EDU 3183. Teaching Integrated Science in Early Childhood and Elementary Education - 3 hours (Fall, Spring)
Analyzes methods of teaching science in the early childhood and elementary schools using process inquiry skills, integrating science with other content areas, and teaching science in ways that are developmentally appropriate and are reflective of the National Science Education Standards and the Missouri Grade-level Expectations. Prerequisites: EDU 2003, 2113, 2313, 2343, 2353, or 2121, two science courses - a biological science with a lab and a physical science with a lab and a 3.00 GPA.

EDU 3212. Screening, Diagnosis and Prescription in Early Childhood Education - 2 hours (On demand)
A study of methods, procedures and instruments used in early childhood for screening and diagnosing individual children in order to prescribe specific learning activities. Prerequisites: EDU 2003, 2113, 2313, 2332, 2343, 2381, 2391 and a 3.00 GPA. Course fee $10.

EDU/ENG 3303. American Literature for Young Adults - 3 hours (Fall)
The study of young adult and ethnic American literature and of methods for teaching this literature in the middle and secondary school classrooms. Designed for those seeking teacher certification. Prerequisites: EDU 2003, 2113, 2313, 2381, 2391 and a 3.00 GPA. Course fee $10.

EDU 3311. Field Experience Level 2 in Lower Elementary, Grades 1-3 - 1 hour (Fall, Spring)
Minimum of forty-five clock hours of supervised practical experience in the classroom at the early childhood level taken concurrently with methods courses. Prerequisites: EDU 2003, 2113, 2313, 2343, 2353, or 2121 and a 3.00 GPA. Permission from the Coordinator of Clinical Experiences must be obtained and teacher candidate must pre-enroll. Course fee $10. Pass/Fail credit is given.

EDU 3321. Field Experience 2 in Upper Elementary, Grades 4-6 - 1 hour (Fall, Spring)
Minimum of forty-five clock hours of supervised practical experience in the classroom at the elementary school level taken concurrently with methods courses. Prerequisites: EDU 2003, 2113, 2313, 2343, 2353, or 2121 and a 3.00 GPA. Permission from the Coordinator of Clinical Experiences must be obtained and teacher candidate must pre-enroll. Course fee $10. Pass/Fail credit is given.

EDU 3331. Field Experience Level 2 in Middle/Jr. High School (NOT SECONDARY) - 1 hour (Spring)
Minimum of forty-five clock hours of supervised practical experience in the classroom at the middle/junior high level taken concurrently with EDU 4493. Prerequisites: EDU 2113, 2131, 2313, 2463 and 3.00 GPA. Permission from the Coordinator of Clinical Experiences must be obtained, and teacher candidate must pre-enroll. Course fee $10. Pass/Fail credit is given.

EDU 3333. Principles and Methods of Secondary Instruction - (Fall, Spring)
This course will emphasize examining and implementing teaching methods, developing critical thinking and problem solving skills, analyzing learners and the learning process, refining communication skills, and constructing curriculum. EDU 3333 must be taken at SBU. A Field Experience Level 2 (EDU 3341) must be taken concurrently. Prerequisites: EDU 2113, 2313, 2141 and 3.00 GPA.

EDU 3341. Field Experience Level 2 in Secondary School - 1 hour (Fall, Spring)
Minimum of forty-five clock hours of supervised practical experience in the classroom at the secondary school level. Must be taken concurrently with EDU 3333. Prerequisites: EDU 2113, 2141, 2313 and 3.00 GPA. Permission from the Coordinator of Clinical Experiences must be obtained and teacher candidate must pre-enroll. Course fee $10. Pass/Fail credit is given.

EDU 3483. School, Home and Community Collaboration - 3 hours (Fall, Spring)
This course focuses on the history, current trends, and issues of family and community involvement in the schools. Materials, techniques, and resources for the improvement of home, school, and community partnerships and communication will be included. This course will prepare future educators to collaborate with other school professionals and families and take advantage of professional learning opportunities to benefit student learning and well-being. The importance of differentiated instruction and working with English language learners as they relate to student learning and collaboration will be addressed. Prerequisites: EDU 2003, 2113, 2313, 2343, 2353, 2121, and a 3.00 GPA.

EDU 3613. Content Area Literacy - 3 hours (Fall, Spring)
This course is designed to prepare middle school/junior high and/or secondary teachers to use functional reading and writing skills, strategies and techniques to enhance the reading and writing skills of learners as tools for learning in various content areas. Prerequisites: EDU 2113, 2313, Field Experience Level 1 and a 3.00 GPA.

EDU/MUS 3813. Elementary Music Education - 3 hours (Spring)
Study of administrative teaching techniques and survey of materials for teaching vocal and instrumental music in early childhood and elementary grades. Examination of musical concepts and skills appropriate at each age or learning
level. Training in use of piano, recorder, autoharp and fretted instruments. Prerequisites: EDU 2113, 2141, 2313, MUS 1621 and 1623 (music majors and minors only). In order to be enrolled in EDU 3813 a GPA of 3.00 is required.

**EDU 3823. Behavior and Classroom Management in Early Childhood and Elementary Education - 3 hours (Fall, Spring)**

The content of this class is an exploration of the dynamics of behavior and management that make a community of learners in a classroom. Emotional, social, and physical aspects will be considered in making an environment conducive to teaching and learning. Management of student behavior, discipline approaches, cultural diversity, the presence of English language learners, and the total makeup of the classroom will be studied, discussed, researched, and observed in early childhood and elementary class settings. Prerequisites: EDU 2003, 2113, 2313, 2343, 2353, or 2121 and a 3.00 GPA.

**EDU 3833. Behavior and Classroom Management - Secondary - 3 hours (Fall, Spring)**

An examination of current and past principles of classroom management will be examined in light of biblical, theoretical, and philosophical assumptions concerning humankind. Modern theories of discipline will be evaluated as to effectiveness and will be contrasted with historical views of schooling and education. It is intended that teacher candidates will be challenged to contemplate methods of instructing and modeling behavior (proactively) instead of simply responding (reactively) to inappropriate student actions. Wisdom and virtue, the cornerstones of any education, will be discussed as goals versus simply controlling and conforming behavior. Prerequisites: EDU 2113, 2141, 2313 and 3.00 GPA.

**EDU 4023. Methods of Teaching Social Science in the Middle and Secondary Schools - 3 hours (Spring)**

Exploration of basic concepts within each of the social sciences and possible teaching methods. Prerequisites: EDU 2113, 2313, Field Experience Level 1, and a 3.00 GPA.

**EDU 4213 Methods of Teaching Computer Science – 3 hours (On Demand)**

This course for prospective secondary STEM teachers explores computer science as a discipline that encourages inquiry, creativity, and collaboration. Given that the nature of computing is investigative, the computer science activities will be hands-on to gain insights about teaching and learning computing concepts in classroom settings. Students will examine a variety of computing tools, virtual environments, and other instructional resources that support learning across STEM disciplines. Students will learn that pedagogical methods in computer science require intellectual rigor in order to develop lessons that are relevant to secondary students and pertinent to our culturally diverse world today.

**EDU 4473. Psychology of the Middle School Student - 3 hours (Fall)**

This course offers a broad overview of the history of young adolescent psychology, its advocates, researchers and its implications for middle level educational practices. Among the practices addressed will be the utilization of differentiated instruction to promote differentiated learning in young adolescents. Prerequisites: EDU 2113, 2131, 2313, 2463 and 3.00 GPA.

**EDU 4493. Middle School Curriculum - 3 hours (Spring)**

This course offers an in-depth study of curriculum development and instructional strategies targeting the young adolescent. Teacher candidates will develop pedagogical practices that meet the vast physical, emotional, social, intellectual and affective developmental needs of young adolescents. The course will emphasize differentiated instruction, responses to cultural diversity, meeting the instructional needs of English language learners as well as consultation and collaboration with colleagues, parents and the community. Middle school majors must take Field Experience Level 2 (EDU 3331) concurrently. Prerequisites: EDU 2113, 2131, 2313, 2463 and 3.00 GPA.

**EDU 4502. Methods of Teaching Theatre - 2 hours (Spring)**

An introduction to methods of teaching theatre in the secondary school. Topics include curriculum development; teaching strategies; and assessment. Additionally, this course addresses strategies for organizing and implementing a production schedule. Prerequisites: EDU 2113, 2313, Field Experience Level 1 and a 3.00 GPA.

**EDU 4512. Methods of Teaching Art, K-12 - 2 hours (Fall)**

Understanding motivation, materials and techniques in school art programs. Prerequisites: EDU 2113, 2313, Field Experience Level 1 and a 3.00 GPA.

**EDU 4513. Methods of Teaching Mathematics in the Middle and Secondary Schools - 3 hours (Spring)**

Theory and application of current practices in teaching mathematics in middle and secondary schools. Prerequisites: EDU 2113, 2313, Field Experience Level 1 and a 3.00 GPA.

**EDU 4522. Methods of Teaching Science in the Middle and Secondary Schools - 2 hours (Fall)**

Course will provide practical methods for the teacher candidate to use for the instruction of middle and secondary school students in such areas as laboratory safety, investigative and questioning skills. Course activities will include inquiry teaching, use of demonstrations in teaching, budgeting and supply ordering, science fairs and projects, and the
use of the computer in the science classroom. Prerequisites: EDU 2113, 2313, Field Experience Level 1, and a 3.00 GPA.

EDU/ENG 4543. Methods of Teaching Writing in the Secondary School - 3 hours (Spring, odd years)
Theory and application in the teaching of writing and grammar in secondary schools with emphasis on the writing process. A requirement for secondary English majors. Prerequisites: EDU 2113, 2141, 2313 and a 3.00 GPA.

EDU 4552. Methods of Teaching Speech in the Middle and Secondary Schools - 2 hours (Fall)
Emphasis on principles, techniques and problems that are unique in teaching speech. Unit and course plans are developed for all areas of speech. Attention is given to directing forensic activities. Prerequisites: EDU 2113, 2313, Field Experience Level 1, and a 3.00 GPA.

EDU 4563. Methods of Teaching Foreign Language - 3 hours (On sufficient demand)
Study of methods of teaching modern languages in public school. Prerequisites: EDU 2113, 2313, Field Experience Level 1, and a 3.00 GPA.

EDU/MUS 4573. Methods of Teaching Vocal Music in the Middle and Secondary Schools - 3 hours (Fall, odd years)
Study of philosophy of music education, administrative and teaching techniques and materials for teaching vocal music in the middle and secondary schools. Music majors and minors only. Prerequisites: EDU 2113, 2141, 2313, MUS 1621, MUS 1623 and 3.00 GPA.

EDU/MUS 4582. Methods of Teaching Instrumental Music in the Middle and Secondary Schools - 2 hours (Fall, even years)
Study of philosophy of music education, administrative and teaching techniques and materials for teaching instrumental music in middle and secondary schools. Music majors and minors only. Prerequisites: EDU 2113, 2141, 2313, MUS 1621, MUS 1623 and 3.00 GPA.

EDU 4593. Spiritual Issues in Public Schools - 3 hours (On demand)
This course is designed to help teachers plan curriculum in ways that stay true to one’s faith and helps teach Christian values in a multicultural community. Students will review which laws determine the religious rights of students and teachers in public schools and how to apply these laws to real situations in the classroom.

EDU 4691. Student Teaching Seminar - 1 hour (Fall, Spring)
This course is designed as a seminar/discussion section to accompany the student teaching clinical experiences of EDU 4929, 4939, 4949 and 4959. Students will refine their skills as reflective practitioners through a variety of experiences that focus on contemporary problems and issues in the field of education. Class discussion and guest presenters will provide a recap of the legal and ethical aspects of teaching. Prerequisites: EDU 2113, 2313, Field Experience Levels 1 and 2, and a 3.00 GPA.

EDU 4832. Assessment and Evaluation of Learners - 2 hours (Block-Fall, Spring)
Study of the principles of assessment from organizing the classroom as a social setting, to planning and conducting instruction based on sound objectives, to the formal assessment of student learning, to grading students and finally to interpreting standardized tests and statewide assessments. Prerequisites: EDU 2113, 2313, Field Experience Levels 1 and 2, and a 3.00 GPA. Must be taken as part of the professional block semester.

EDU 4842. Teaching Diverse Learners - 2 hours (Block-Fall, Spring)
Mentally, emotionally and physically exceptional children are studied. Diagnosis and methods of teaching gifted, mentally retarded, visual and sound-impaired, learning disabled and physically handicapped children and children with communication and behavior problems are included. The use of differentiated instruction to promote differentiated learning will be addressed. Prerequisites: EDU 2113, 2313, Field Experience Levels 1 and 2, and a 3.00 GPA. Must be taken as part of the professional block semester.

EDU 4929. Student Teaching in the Elementary School - 10 hours (Block-Fall, Spring) - for Elementary Majors
Observation, participation and directed teaching in public schools. Prerequisites: Unconditional admittance to Teacher Education Program. Must be taken as part of the professional block semester. Student Teaching fee $350 (an additional fee will be assessed to teacher candidates allowed to student teach beyond the 50 mile radius).

EDU 4939. Student Teaching in the Middle School - 10 hours (Block-Fall, Spring) for Stand Alone Middle School Majors
Observation, participation and directed teaching in public schools. Prerequisites: Unconditional admittance to Teacher Education Program. Must be taken as part of the professional block semester. Student Teaching fee $350 (an additional fee will be assessed to teacher candidates allowed to student teach beyond the 50 mile radius).

EDU 4949. Student Teaching in the Secondary School - 10 hours (Block-Fall, Spring) for Secondary Certification
Observation, participation and directed teaching in public schools. Prerequisites: Unconditional admittance to Teacher Education Program. Must be taken as part of the professional block semester. Student Teaching fee $350 (an additional fee will be assessed to teacher candidates allowed to student teach beyond the 50 mile radius).
EDU 4959. Student Teaching in the K-12 School System - 10 hours (Block-Fall, Spring) for Art K-12, Music K-12, and Physical Education K-12 Majors
Observation, participation and directed teaching in public schools. Prerequisites: Unconditional admittance to Teacher Education Program. Must be taken as part of the professional block semester. Student Teaching fee $350 (an additional fee will be assessed to teacher candidates allowed to student teach beyond the 50 mile radius).

EDU 495(1-3). Intensive Studies in Education - 1-3 hours (On demand)
An intensified approach to selected education topics or subject matter not regularly offered by the department. Prerequisites: EDU 2003, 2113, 2313, Field Experience Levels 1 and 2, and a 3.00 GPA.

EDU 499(1-3) Independent Studies (Elementary Majors) - 1-3 hours (On demand)
Advanced studies of specific topics arranged by department chair. Prerequisites: EDU 2003, 2113, 2313, Field Experience Levels 1 and 2, and a 3.00 GPA.

ENGLISH

ENG 0103. English Skills - 3 hours (Fall, Spring)
Introduction to and practice in formal English with emphasis upon basic sentence and paragraph skills. This course does not count toward the 128 hours required for graduation. Students placed in this course due to their ACT/SAT scores must make at least a C grade in ENG 0103 to take ENG 1113. However, those placed in ENG 0103 on the basis of the ACT/SAT scores may bypass ENG 0103 and take ENG 1113 on the evidence of writing skills demonstrated on a departmental exam.

ENG 1003. English as a Second Language - 3 hours (On demand)
First course for the student whose native tongue is not English, unless the student presents transferred credit for ENG 1113.

ENG 1113. English Composition I - 3 hours (Fall, Spring)
Expository writing based on a study of essays. In addition to the writing of essays, a student will write a research paper. Prerequisite: An English score of at least 18 on the ACT examination in English or at least a C grade in English 0103.

ENG/HON 1123. Honors Composition - 3 hours (Fall, On demand in Spring)
An honors-level course in expository writing based on a study of imaginative literature. The course fosters the development of writing and research skills. Fee $2. Prerequisite: An English score of at least 28 on the ACT examination. A grade of C or above in this course and the payment of a transcription fee permit the student to receive credit for ENG 1113 also.

ENG 2213. English Composition II - 3 hours (Fall, Spring)
Expository writing based on a study of imaginative literature. The course fosters the development of writing and research skills. Fee $2. Prerequisite: ENG 1113.

ENG 231(2-3). Survey of World Literature – 2-3 hours (Fall, Spring)
Masterpieces of world literature, from antiquity to the twentieth century. Prerequisite: Completion of the general education requirement in composition.

ENG 295(1-4). Special Topics - 1-4 hours
The study of selected language and literary topics. Prerequisite: Completion of the general education requirement in composition.

ENG/ESL 3003. ESL: Methods - 3 hours (Spring, even years)
A course designed to introduce in-service or pre-service teachers to current methods and techniques used to instruct students in learning English as a second language regardless of the age group or goal. Prerequisite: Completion of the general education requirement in composition.

ENG/WRT 3013. Writing Poetry - 3 hours (Spring, odd years)
A workshop in the writing of original poetry, based on a study of poetic characteristics and genres. Prerequisite: Completion of the general education requirement in composition.

ENG/WRT 3023. Writing Creative Nonfiction –3 hours (Fall, even years)
A workshop in creative nonfiction writing utilizing readings from varying genres and peer/instructor feedback. Prerequisite: Completion of the general education requirement in composition.

ENG/WRT 3033. Writing Creatively for Young Adults –3 hours (Spring, even years)
A workshop in learning to write creatively for young adults in a variety of genres. Prerequisite: Completion of the general education requirement in composition.

ENG 3233. Medieval and Renaissance English Literature - 3 hours (Fall, even years)
Literature of England from Beowulf to Shakespeare. Prerequisite: Completion of the general education requirement in composition.
ENG 3243. Seventeenth and Eighteenth-Century English Literature - 3 hours (Spring, even years)
Literature of England from Donne to Boswell. Prerequisite: Completion of the general education requirement in composition.

ENG/EDU/ESL 3303. American Literature for Young Adults - 3 hours (Fall)
The study of young adult and ethnic American literature and of methods for teaching this literature in the middle and secondary school classroom. Designed for those seeking teacher certification. Prerequisite: Completion of the general education requirement in composition. In order to enroll in EDU 3303 a GPA of 3.00 is required.

ENG 3313. American Literature I - 3 hours (Fall)
Literature of America from Colonial Period to Romantic Period. Prerequisite: Completion of the general education requirement in composition.

ENG 3323. American Literature II - 3 hours (Spring)
Literature of America from Age of Realism to present. Prerequisite: Completion of the general education requirement in composition.

ENG 3333. The Romantic Period - 3 hours (Fall, even years)
Literature of England from Blake to Keats. Prerequisite: Completion of the general education requirement in composition.

ENG 3343. The Victorian Period - 3 hours (Spring, odd years)
Literature of England from Tennyson to Hopkins. Prerequisite: Completion of the general education requirement in composition.

ENG/WRT 3353. Advanced Composition - 3 hours (Fall, Spring)
Advanced expository writing, based on a study of contemporary prose. Prerequisite: Completion of the general education requirement in composition.

ENG/ESL 3363. History of the English Language - 3 hours (Spring, even years)
The development of the English language from its beginning to the present. Prerequisite: Completion of the general education requirement in composition.

ENG/ESL 3373. Structure of the English Language - 3 hours (Fall)
Detailed study of current English sounds, grammar and usage. Prerequisite: Completion of the general education requirement in composition.

ENG/WRT 4003. Technical Writing - 3 hours (Fall, even years)
The application of rhetorical principles to the writing of investigative and descriptive reports on scientific and technological subjects. Prerequisite: Completion of the general education requirement in composition.

ENG/WRT 4013. Writing Short Fiction - 3 hours (Fall, odd years)
A workshop in short fiction writing utilizing readings from varying fiction genres and peer/instructor feedback. Prerequisite: Completion of the general education requirement in composition.

ENG 4023. Contemporary British Literature – 3 hours (Fall, odd years)
A focused study of the works of a specific author or genre of British literature ranging from the twentieth century to the present. Prerequisite: Completion of the general education requirement in composition.

ENG 4033. Focused Readings in American Literature —3 hours (Spring, even years)
A focused study of the works of a specific author or genre of American literature. Prerequisite: Completion of the general education requirement in composition.

ENG/ESL 4043. ESL: Design and Assessment - 3 hours (Spring, odd years)
An examination of curriculum design and testing techniques in an ESL educational environment. Prerequisite: Completion of the general education requirement in composition.

ENG/ESL 4053. ESL: Practicum for ESL Teachers - 3 hours (On demand)
A practicum in which students demonstrate in a field-based setting the knowledge and skills developed in previous ESL coursework. This class is designed to prepare students for leadership roles in the development and management of ESL, Bilingual, or modern-language programs. Prerequisites: Completion of the general education requirement in composition, three credit hours of ESL, and three credit hours of linguistics (preferably ENG 3373).

ENG/THR 4413. Shakespeare - 3 hours (Spring, odd years)
Tragedies, histories and comedies of Shakespeare. Prerequisite: Completion of the general education requirement in composition.

ENG/EDU 4543. Methods of Teaching Writing in the Secondary Schools - 3 hours (Spring, odd years)
Theory and application in the teaching of writing and grammar in secondary schools with emphasis on the writing process. A requirement for English majors pursuing secondary certification and middle school majors with a language arts concentration. Prerequisites: EDU 2113, 2313, and completion of the general education requirement in composition. In order to enroll in EDU 4543 a GPA of 3.00 is required.
ENG 495(1-4). Intensive Studies - 1-4 hours (On demand)
The study of selected language and literary topics. Prerequisite: Completion of the general education requirement in composition.

ENG 499(1-3). Independent Studies - 1-3 hours (On demand)
Advanced studies of specific topics. Prerequisite: Completion of the general education requirement in composition.

ENGLISH AS A SECOND LANGUAGE (ESL)
ESL/ENG 3003. ESL: Methods - 3 hours (Spring, even years)
A course designed to introduce in-service or pre-service teachers to current methods and techniques used to instruct students in learning English as a second language regardless of the age group or goal. Prerequisite: Completion of the general education requirement in composition.

ESL/ENG/EDU 3303. American Literature for Young Adults - 3 hours (Fall)
The study of young adult and ethnic American literature and of methods for teaching this literature in the middle and secondary school classroom. Designed for those seeking teacher certification. Prerequisite: Completion of the general education requirement in composition. In order to enroll in EDU 3303 a GPA of 3.00 is required.

ESL/ENG 3363. History of the English Language - 3 hours (Spring, even years)
The development of the English language from its beginning to the present. Prerequisite: Completion of the general education requirement in composition.

ESL/ENG 3373. Structure of the English Language - 3 hours (Fall)
Detailed study of current English sounds, grammar and usage. Prerequisite: Completion of the general education requirement in composition.

ESL/ENG 4043. ESL: Design and Assessment - 3 hours (Spring, odd years)
An examination of curriculum design and testing techniques in an ESL educational environment. Prerequisite: Completion of the general education requirement in composition.

ESL/ENG 4053. ESL: Practicum for ESL Teachers - 3 hours (On demand)
A practicum in which students demonstrate in a field-based setting the knowledge and skills developed in previous ESL coursework. This class is designed to prepare students for leadership roles in the development and management of ESL, Bilingual, or modern-language programs. Prerequisites: Completion of the general education requirement in composition, three credit hours of ESL, and three credit hours of linguistics (preferably ENG 3373).

EXERCISE SCIENCE
ESC 1013—Introduction to Exercise Science - 3 hours (Spring)
A course designed to help students develop perspectives in the field of exercise science. Students will examine the different areas of study within the field, kinds of programs, qualifications needed to enter the field, career opportunities, and issues facing exercise science professionals.

ESC 4001—Exercise Science Capstone - 1 hour (Fall)
Exploration of exercise science knowledge and issues facing professionals in the field. Students will prepare to take the ACSM Health Fitness Instructors Exam or the NSCA Certified Strength and Conditioning Specialist Exam. Prerequisites: Limited to students enrolled in final semester of senior year.

ESC 4033. Special Populations - 3 hours (Spring)
Focusing on the specific needs of people with a certain disease, condition, or stage of life, this course surveys in the areas of exceptionalities that occur within different special populations. It is designed to help the student identify and understand the uniqueness of the exceptional individual.

ESC 4043—Exercise Science Practicum - 3 hours (Spring)
Credit given for hands-on experience gained through exercise prescription and training of selected volunteer clients. Prerequisite: 64 hours completed.

ESC 4053—Biomechanical Analysis - 3 hours (Fall)
A course to acquaint students with various evaluation methods in exercise science and exercise physiology. Practice is given to administering tests and interpreting results with appropriate statistical procedures. Prerequisite: 64 hours completed, PSY/SOC 3243 Elementary Statistics. Course fee $50.

ESC 4986—Exercise Science Internship - 6 hours (Fall, Spring, Summer, Winterfest)
A fulltime residency for on-the-job training under the supervision of an exercise science professional. Includes observation, supervision, planning, instruction, direct leadership and evaluation. Minimum requirement-240 hours. Prerequisites: A minimum grade of “C” in all exercise science courses; a minimum overall GPA of 2.00 in all course work taken at SBU prior to application for internship and prior to internship itself; restricted to Exercise Science
majors of senior standing; advanced application no later than September or February of preceding semester. Course fee $100.

FINANCE
FIN 295(1-4).  Special Topics in Finance - 1-4 hours (On demand)
Topics will vary with each offering; therefore, the course may be repeated for credit.

FIN 3003.  Personal Financial Planning - 3 hours (Spring)
Topics to be studied include budgeting, banking, major consumer purchases (including lease vs. buy decisions), home ownership, all types of personal insurance (from liability to disability), investments, estate planning and taxes. Prerequisite: 24 credit hours completed.

FIN 3053.  Business Finance - 3 hours (Fall)
Study of the principles of financing short-term and long-term capital needs of business firms in keeping with an objective of maximizing the firm's value to its shareholders, i.e., stock price. Special attention given to Capital Asset Pricing Model, the various capital budget theories and computer applications. Prerequisites: ACC 2043 and BUS 2023.

FIN 4023.  Special Topics in Finance/Economics - 3 hours (On Demand)
A study discussion of the theory, recent history and current problems of economics and finance issues. Prerequisite: 60 credit hours completed.

FIN 4033.  Introduction to Derivatives - 3 hours (Spring, odd years)
This course provides the student with a working knowledge of options, forwards, futures, and swap markets. The course provides the student with techniques that enable him or her to discuss, analyze, value, and use derivative securities to manage both financial and commodity price risk. Hedging with derivative securities is emphasized. Considerable attention is paid to the role of options and option pricing models in corporate finance. Prerequisites: FIN 3003 and  FIN 3053.

FIN 4053.  Investments - 3 hours (Spring, even years)
A study of the entire field of investments with major emphasis on security valuation theories, security markets, portfolio management and computer applications in the investment decision making process. Course fee $12. Prerequisites: FIN 3003 and FIN 3053.

FIN 4063.  Commercial Banking - 3 hours (On demand)
An examination of the operation of commercial banks, trust companies, and other credit institutions. Special attention will be given to recent bank legislation, bank valuation, performance, strategic planning, asset-liability management, risk management, credit risk, money management services, and off-balance sheet risks. Trends such as consolidation, internationalization, and product diversification will also be addressed. At its core the class will use banks as the model but other financial service providers such as savings and loans and brokerage firms will be covered as well. Prerequisite: ACC 2043.

FIN 4073.  Insurance - 3 hours (Fall, odd years)
An introduction to the use of insurance as a risk management tool. Specific attention will be given to the structure of the insurance market, current issues regarding regulation and reform of insurance, and the use of insurance by firms and individuals to appropriately manage risk. Prerequisite: FIN 3003.

FIN/ECO 4173.  History of Finance and Economic Thought - 3 hours (Winterfest)
An introduction of the different economic schools of thought as well as recent economic developments. This course will also provide an introduction of the development of major topics in the field of finance. Prerequisites: ECO 2023, ECO 2033, and FIN 3053.

FIN 495(1-4).  Intensive Studies in Finance - 1-4 hours (On demand)
Topics will vary with each offering; therefore, the course may be repeated for credit.

FIN 499(1-3).  Independent Study in Finance - 1-3 hours (On demand)
Independent study of some problem or area in the major not covered in the organized courses. The study is under the direction of a faculty member in whose field of specialization the problem or area lies. Prerequisites: 3.00 GPA in major field and 60 credit hours completed.

FINE ARTS
FAR 1003.  Introduction to Fine Arts - 3 hours (Fall)
A course designed to help the general education student to develop a basic understanding of music and art of various cultures and historical periods. Course fee $30.
FAR/ART 1013. Introduction to Art - 3 hours (Spring)
An introduction to art from all historical periods to help the non-art major develop an understanding of the role of art in the life of man and the value of art to the individual. Required for art majors. Course fee $30.

FAR 1023. Introduction to Music - 3 hours (Fall, Spring)
A course to help the non-music major develop a basic understanding of music from historical periods of the western world and gain exposure to music of various non-western cultures. Course fee $30.

FAR/THR 1033. Introduction to Theatre - 3 hours (Fall)
A study of the history and literature of the theatre with introductory participation in the areas of acting and stagecraft. Emphasis on reading and attending plays. Course fee $30.

FRENCH
FRE 1114. Elementary French I - 4 hours (On demand in Fall)
Pronunciation, conversation, reading, composition and basic grammar.
FRE 1124. Elementary French II - 4 hours (On demand in Spring)
Continuation of FRE 1114. Prerequisite: FRE 1114 or satisfactory placement scores or one year of high school French.

GEOGRAPHY
GEO 1103. Geography - 3 hours (Fall, Spring)
Basic survey introducing the various elements of geographical study. Course fee: $2.

GERMAN
GER 1114. Elementary German I - 4 hours (On demand in Fall)
Pronunciation, conversation, reading, composition and basic grammar.
GER 1124. Elementary German II - 4 hours (On demand in Spring)
Continuation of GER 1114. Prerequisite: GER 1114 or satisfactory placement scores or one year of high school German.

GREEK
GRE 2014. Elementary Greek I - 4 hours (Fall, odd years)
Study of the basic elements of New Testament Greek, stressing vocabulary, conjugation, declension, composition and translation. Prerequisites: BIB 1013/1213, 1023/1223.
GRE 2024. Elementary Greek II - 4 hours (Spring, even years)
Continuation of GRE 2014. Oral and written exercises continued; introduction to Greek New Testament through passages which are relatively uncomplicated. Prerequisite: GRE 2014.
GRE 3013. Intermediate Greek - 3 hours (Fall, even years)
GRE 3023. Advanced Greek - 3 hours (Spring, odd years)
Extensive reading in the Greek New Testament with emphasis upon syntax and careful, accurate exegesis. Prerequisite: GRE 3013.
GRE 495(1-3). Intensive Studies in Greek - 1-3 hours
Exegetical studies in selected books or passages of the Greek New Testament. The course may be taken more than once. Prerequisite: GRE 3023.

HEALTH SCIENCES
HSC 1009 Emergency Medical Technician – 9 credit hours (Fall, Spring)
The course is designed for individuals interested in becoming Emergency Medical Technicians. Emphasis will be placed on the development of knowledge and skills needed to provide basic lifesaving care. In addition, the student will be given the opportunity to use their skill in the ambulance and clinical setting.
HSC/NUR 1013. Medical Terminology - 3 hours (On demand)
This course focuses on the basic principles of medical terminology and application to the day-to-day work of allied health personnel. This course does not fulfill the elective requirement for the B.S.N. program.
HSC/NUR 3003. Legal and Ethical Issues for Health Professionals - 3 credit hours - (On demand)
This course introduces ethical and legal concepts. Explores the basic principles of ethics and the law and how they affect health care decisions. Examines the responsibilities of health care professionals in legal matters and ethical dilemmas. Emphasizes a Christian approach to the law and ethics in health care.

HSC/NUR 3013. Organization and Delivery of Health Care - 3 hours - (On demand)
This course provides an overview of health care delivery systems, examining such influencing forces as history, values and resources. Considers the role of reimbursement methods, technology, personnel and public policy in health care delivery. Explores the structures, processes, outcomes and challenges of the U.S. health care system.

HSC/NUR 3043. Missionary Nursing - 3 hours (Summer)
The focus of this course is on the MCONHS annual Ecuador nursing missions trip. This course examines the culture of the area, our mission as nurses, Christ’s call upon our lives, and the ministry of nursing. ASN or BSN course elective, ASR or BSHS course elective.

HSC/NUR 3073. Patient Education and Health Promotion - 3 hours (On demand)
This course focuses on patient education and health promotion methods for a variety of clinical settings. Students will go through the educational nursing process of assessment of client’s needs, establishing nursing diagnoses, writing learning objectives, establishing learning activities/ interventions, and evaluation of their educational intervention and learning objectives. Health promotion and health belief models and theories will be integrated into this patient education process. Students will examine techniques of, and barriers to, health education in various health care settings. ASR BSHS elective.

HSC/NUR 3083. Clinical Genetics - 3 hours (On demand)
This course focuses on the fundamentals of genetics. The course is designed to give the student a basic understanding of genetic concepts so that this knowledge can be utilized to understand current and future genetic theories and therapeutics. ASN, BSHS, or BSN course elective.

HSC/NUR 3093. Survey of Human Anatomy and Physiology for Nursing and Health Sciences - 3 hours (Fall, Spring)
This course is designed as a refresher course for students who have outdated (>5 years) coursework in human anatomy and physiology. The course will be offered as an accelerated compendium of key concepts of human anatomy and physiology.

HSC/NUR 3103. Basics of APA Writing in Health Care - 3 hours - (On demand)
This course introduces students to the basic organization of the sixth edition of the Publication Manual. Students will be provided guidelines to format reports, essays, and research documents according to the standards set by the American Psychological Association (APA), 6th edition, or the most updated edition of the Publication Manual. This course will develop a standard writing practice for clarity in layout, punctuation, grammar, spelling, font size, and type by creating an overall consistency in the final documents recognized by publishers throughout the industry. The course will also provide defining foundational expectations and standards that foster and develop strong communication skills for the student to listen, write, and speak effectively to promote respect and credibility. ASR/BSHS elective course.

HSC/NUR 3202. Foundations of Learning - 2 hours - (On demand)
This course gives students a solid foundation for successful professional learning. The course orient students to the online learning environment, including how to use the learning management system, how to conduct research online using electronic library databases, how to write academic papers using APA format, and how to access essential information related to courses, registration, and grades. Students will examine the core competencies of their program in light of personal and professional goals, and will develop a professional résumé. ASN, BSHS, or BSN course elective.

HSC 3204. Computed Tomography Imaging - 4 hours - (On demand)
This course examines normal anatomical structures and the relative position of organs to one another in the sagittal, coronal, oblique, and transverse planes. Normal structures of the head, neck, thorax, abdomen, pelvis, spine, and extremities will be presented and compared to various abnormalities typically revealed through the use of computed tomography. Content includes contrast media, scanning methods, image display, computer post-processing and radiation protection.

HSC 3214. Computed Tomography Physics and Instrumentation - 4 hours - (On demand)
This course presents a study of the physical principles, instrumentation, and clinical application of computed tomography. Physical principles related to data acquisition and image formation will be presented as well as artifacts and other factors affecting image quality. Image production, clinical application, and protocol options will be presented for the following anatomical regions: central nervous system, musculoskeletal regions, neck, chest, abdomen, and pelvis.
HSC 3324. Magnetic Resonance Imaging Physics - 4 hours (On demand)
This course provides in depth information regarding pulse sequences, image formation, and contrast. Emphasis is placed on details of MR parameters, pulse sequences, methods of data acquisition, imaging options, image artifacts, and quality assurance to enable the student to maximize MR quality by understanding the fundamentals of MR.

HSC 3334. Magnetic Resonance Imaging - 4 hours (On demand)
This course provides a knowledge base necessary to perform standard magnetic resonance imaging procedures. Content includes MRI imaging procedures and sectional anatomy and physiology relating the central nervous system and the musculoskeletal system, cardiovascular system, thorax, abdomen, pelvis, and special imaging procedures. The study of normal anatomy and pathologic conditions aid the student in recognizing the need for imaging changes based on these conditions. Topics covered include clinical considerations regarding contrast administration and safety, magnetic field safety, and procedural considerations for optimal scanning techniques.

HSC/NUR 3373. Professional Health Care Practice – 3 hours (Fall, Spring)
This course examines professional concepts that guide health care practice. The concepts build on prior education and experience to enhance professional growth. These concepts include evidence-based practice, ethics, professional organizations, political action, health care economics, and future trends in health care.

HSC/NUR 3453. Spirituality in Health Care – 3 hours (Fall, Spring, Summer, Winterfest)
This course explores personal Christian spiritual development, theory, and diverse models of spirituality emphasizing their impact on health care settings. Spiritual practices and the responsibilities and issues of spiritual care are examined. Christian discipleship and a Christian theology are discussed as they apply to professional practice in a secular environment.

HSC 3464. Interventional Procedures Physics and Instrumentation - 4 hours (On demand)
This course offers instruction on the principles of instrumentation in vascular and visceral interventional radiology. Visceral and vascular anatomy and pathology will be examined. Skills will be developed in the selection, operation and function of imaging equipment. Topics addressed include cineangiography, panning and positioning criteria, hemodynamic data, angioplasty, pressure measurement, and various vasodilator techniques. Discussion of pre-procedural and post-procedural assessment and protocol including laboratory and medication guidelines will be addressed. Other topics covered include contrast media reaction, conscious sedation, surgical aspesis, and radiation protection.

HSC 3474. Interventional Procedures Imaging I - 4 hours (On demand)
This course provides in depth coverage of the anatomy and physiology pertinent to the head, neck, central nervous system, and viscera as well as pathological conditions. Instrumentation and pharmacology is discussed. Topics addressed include thrombolysis, vasodilatation, vasoconstriction, and nonvascular interventional procedures.

HSC/NUR 3563. Health Care Informatics - 3 hours (Fall, Spring, Summer)
This course focuses on the investigation of computer technology and information science to identify, gather, process and manage information. An understanding of information and technology theory, computer and decision-making systems, data management and electronic information retrieval will be presented with relevance to patient care, health care management and health care research.

HSC/NUR 4013. Health Care in Culturally Diverse Populations - 3 hours (Fall, Spring, Summer)
This course explores current issues in health care pertaining to culturally diverse populations from a Christian perspective. Examines the social, economic, political, environmental, and religious factors that affect health in different cultural groups. Identifies therapeutic health care practices for culturally diverse clients, families, and communities.

HSC/NUR 4023. Health Care Finance - 3 hours (On demand)
This course examines financial principles, techniques, vocabulary, and procedures used to manage health care budgets and operations. Students will learn how to assess the health care financial environment, seek appropriate data, analyze information, and apply the results to the management of daily operations, using a Christian approach to fiscal responsibilities. ASR, BSHS elective.

HSC 4143. Research for Health Care Professionals - 3 hours (On demand)
This course develops critical thinking skills, life-long learning skills, and the ability to work in a health care setting with the knowledge of practical research skills.

HSC 422(1-4). Computed Tomography Clinical Education – 1-4 hours (On demand)
This course provides supervised clinical practice experience designed for sequential development, application, critical analysis, integration, synthesis, and evaluation of concepts and theories in the performance of computed tomography procedures. Content includes experience in CT scanning techniques, safety procedures, image evaluation, image post processing, patient care, and professional development. Clinical fee $100.
HSC 423(1-4). Magnetic Resonance Imaging Clinical Education – 1-4 hours (On demand)
This course provides supervised clinical practical experience designed for sequential development, application, critical analysis, integration, synthesis, and evaluation of concepts and theories in the performance of magnetic resonance imaging procedures. Content includes experience in MR scanning techniques, safety procedures, image evaluation, image post processing, patient care, and professional development. Clinical fee $100.

HSC 424(1-4). Interventional Procedures Clinical Education- 1-4 hours (On demand)
This course includes supervised clinical practice experience designed for sequential development, application, critical analysis, integration, synthesis, and evaluation of concepts and theories in the performance of interventional procedures. Content includes experience in interventional procedure techniques, safety procedures, image evaluation, image post-processing, patient care, and professional development. Clinical fee $100.

HSC/NUR 4333. Research and Evidence Based Practice - 3 hours (Fall, Spring)
This course introduces students to the elementary components of the research process and the application of research to professional practice including the retrieval of relevant literature and critical appraisal. An emphasis is placed on the combined use of literature, clinical judgment, interprofessional perspectives, and patient preferences to guide practice decisions. Legal and ethical conduct for health care professionals involved in research and quality improvement involving diverse populations are examined. The role of theory in the research process with contribution to the development of health care knowledge is explored. ASR or BSHS elective.

HSC 4343. Human Resource Management for Health Care Professionals - 3 hours (On demand)
This course examines the complexities and multiple issues involved in human resources management in health care organizations. It provides the student with the opportunity to explore the human resources in health care and their unique perspectives. ASR, BSHS elective

HSC/NUR 4434. Administration and Leadership - 4 hours (3 hours didactic, 1 hour practice experience) (Fall, Spring) Curriculum lab fee: $100
This course prepares students to provide high quality patient care exploring principles of organizational and systems leadership, including quality improvement, and safety through practice experiences. The course incorporates knowledge and communication strategies within interprofessional teams, care coordination, delegation, and developing conflict resolution strategies to be effective leaders and administrators in a complex and dynamic health care setting. Management theories and concepts are emphasized. Professional issues related to work-life balance, healthy work environments, and resource assistance in building a nursing career are also considered.

HSC 4444. Leadership and Management for Health Care Professionals - 4 hours (On demand)
This course examines the knowledge and skills necessary to be an effective leader and administrator in the current changing health care environment. There will be a focus on the application of servant leadership and the ability to design and implement programs. ASR or BSHS elective. Curriculum Lab Fee: $100.

HSC 4453. Capstone (registration with permission only) - 3 hours (Fall, Spring)
This course provides an exploration and synthesis of knowledge and practice issues facing the health care profession and the health care system, and includes a discussion of issues in practice, education, and research. Each student will reflect on their learning in the BSHS program and evaluate their achievement of the BSHS Program Competencies. This class is limited to students who are enrolled in the final semester of senior year and intend to graduate at the end of this semester.

HSC/NUR 499(1-3). Independent Studies - 1-3 hours (On demand)
Student-proposed topics in nursing practice, education or research which are approved by faculty and department chair for independent study. ASN, ASR, BSHS, or BSN course elective.

HEBREW
HEB 2014. Elementary Hebrew I - 4 hours (Fall, even years)
Introduction to the basic skills of translating biblical Hebrew with emphasis upon vocabulary, grammar, composition and translation. Prerequisites: BIB 1013/1213, 1023/1223.

HEB 2024. Elementary Hebrew II - 4 hours (Spring, odd years)
Continuation of HEB 2014 with an introduction to the Hebrew Old Testament through translating representative passages which are relatively uncomplicated. Prerequisite: HEB 2014.

HEB 3013. Intermediate Hebrew – 3 hours (Fall, odd years)
Focus is upon identifying the Masoretic pointing, parsing verbs, translating Old Testament narrative texts, and making syntactical judgments in exegesis. Prerequisite: HEB 2024

HEB 3023. Advanced Hebrew – 3 hours (Spring, even years)
Focus is upon textual criticism, lexical study, translating Old Testament poetic and prophetic texts, and making syntactical judgments in exegesis. Prerequisite: HEB 3013
HEB 495(1-3). Intensive Studies in Hebrew - 1-3 hours
Exegetical studies in selected books or passages of the Hebrew Old Testament. This course may be taken more than once. Prerequisite: HEB 2024.

HISTORY
HIS 1113. Introduction to the History of World Civilization: From the Earliest Times Through the Renaissance - 3 hours (Fall)
The roots of modern civilization from the dawn of agricultural society in the Middle East and other regions through the Renaissance in western Europe.

HIS 1123. Introduction to the History of World Civilization: From the Renaissance to the Present - 3 hours (Spring)
Examines the history of world civilization from the Reformation in Europe to the late twentieth century.

HIS/HON 2013. Honors United States History I - 3 hours (Fall, even years)
This course offers a political and social survey of United States history from colonization to the end of the Civil War. Prerequisite: A minimum composite ACT of 28 or SAT equivalent.

HIS 2213. History of the United States, 1492-1865 - 3 hours (Fall, Spring)
Political and social survey of United States history from colonization to the end of the Civil War.

HIS 2223. History of the United States, 1865-Present - 3 hours (Fall, Spring)
Political and social survey of United States history from the Reconstruction to the present.

HIS 295(1-4). Special Topics - 1-4 hours (On demand)
Topics of special interest not available to the student from the traditional course offerings. May be repeated as topics change.

HIS 3003. The US Civil War - 3 hours (On demand)
This class provides a detailed evaluation of the social, economic, and military aspects of the United States Civil War, with special emphasis on the effect of the War on the State of Missouri.

HIS/MIL 3153. American Military History - 3 hours (Spring, odd years)
American Military History from the colonial period to the present; its relation to the national development in war and peace. (May be taken through MSU.)

HIS 3323. Ancient Rome and the Empire - 3 hours (Spring, odd years)
A survey of Roman history tracing the main lines of political, social and cultural development from earliest times through the periods of the Republic, the early Empire and the High Empire through the reign of Constantine.

HIS 3333. Ancient Military History - 3 hours (On demand)
A survey of the development of weapons, armor, strategy, and tactics from the earliest recorded battles to the fall of the Roman Empire in 476 AD, including Biblical battles.

HIS 3423. Europe in the Middle Ages - 3 hours (Fall, odd years)
Traces the political, economic, social, intellectual and religious changes in western Europe from the late Roman Empire of the 4th century A.D. to the apex of the area's first advanced civilization, c. 1300 A.D.

HIS 3513. Europe during the Renaissance and Reformation Period - 3 hours (Spring, even years)
Traces the political, economic, social, intellectual, and religious conditions and developments in western Europe between the fourteenth and early seventeenth centuries. It emphasizes the Italian Renaissance and the Reformation movement.

HIS 3533. Early Modern Europe - 3 hours (Fall, even years)
Traces the political, economic, social, intellectual, and religious conditions and developments in western Europe between the mid-seventeenth and early nineteenth centuries. It emphasizes the Enlightenment movement.

HIS 3613. East Asian History to the Rise of the Mongols - 3 hours (On demand)
A survey of East Asian history tracing the political, economic, social, intellectual and religious conditions and developments in East Asia from earliest times to the Mongol Conquest. Particular emphasis will be placed on East Asian interaction with and influence on the Christian world.

HIS 3783. United States Diplomatic History, 1775-1928 - 3 hours (On demand)
Survey of late 18th and 19th Century diplomatic relations of the United States. Prerequisite: HIS/HON 2013 or HIS 2213 or 2223.

HIS 3813. Colonial and Revolutionary America - 3 hours (Fall, odd years)
This course covers important topics in American history from the voyage of Columbus in 1492 to the ratification of the Constitution in 1788. The course emphasizes the development of England’s American colonies, the independence movement and the successful establishment of the United States of America.
HIS 3823. America in the Early National and Civil War Eras – 3 hours (Spring, even years)
This course covers important topics in American history from Washington’s inauguration as president in 1789 to the end of Reconstruction in 1877. The course will examine the important political, social, intellectual and economic areas of American development during the early national and Civil War eras.

HIS 3833. Gilded Age and Progressivism, 1877-1928 – 3 hours (Fall, even years)
A topical exploration of the period with emphasis on politics, the rise of big business, intellectual history, social and economic reform, imperialism, and society's efforts to meet the challenges of the industrial age. Course requirements stress reading, writing and class participation.

HIS 3843. Recent United States History, 1929-1991 – 3 hours (Spring, odd years)
A topical exploration of the period with emphasis on the Great Depression and New Deal, America’s confrontation with totalitarianism during World War II and the Cold War, the domestic effects of WWII and the Cold War, the Civil Rights Movement, Vietnam, Watergate, the Johnson, Nixon, and Reagan presidencies, and the collapse of the Soviet Union.

HIS 3893. United States Diplomatic History, 1929-Present – 3 hours (On demand)
Survey of 20th century diplomatic relations of the United States. Prerequisite: HIS/HON 2013 or HIS 2213 or 2223.

HIS/POL 4013. African History and Politics – 3 hours (Spring, odd years)
Explores the political and economic changes in African states and the issues of development since independence. Included in the study are the historical origins of the African state, the contemporary context of globalization, and the position of Africa in the world economic system. Prerequisite: POL/HON 1013 or POL 1113.

HIS 4303. The Ancient Near East – 3 hours (Fall, odd years)
A survey of Ancient Near Eastern history tracing the main lines of political, social, and cultural development from the earliest times to the Roman Conquest.

HIS 4313. Ancient Egypt – 3 hours (Spring, even years)
A survey of Egyptian history tracing the main lines of political, social, and cultural development from the earliest times to Egypt's conquest by the Romans in 31 BC.

HIS 4323. Ancient Greece – 3 hours (Fall, even years)
A survey of Greek history tracing the main lines of political, social, and cultural development from the origin of the Mycenaecans to the Roman conquest of the Greek world.

HIS 4413. Roman Imperial Civilization and the Early Church – 3 hours (On demand)
A detailed study of the period from c. 50 B.C. to c. A.D. 450. Emphasis is placed on the political, social, economic, religious and intellectual characteristics of the Hellenistic civilization of that period. Special attention is given to the Jewish sub-culture and the emerging Christian movement in that context.

HIS 4503. History Capstone Seminar – 3 hours (Fall)
This course provides history majors with a capstone experience for their History degree and helps prepare them for the required History ACAT Examination in World and US History. Prerequisites: History major, Junior standing.

HIS 495(1-4). Intensive Studies in History – 1-4 hours (On demand)
Seminar or directed class investigation of selected topics in the context of current historiographical opinion. Content variable. Student may elect to repeat the course. Prerequisite: Nine hours of history.

HIS 499(1-3). Independent Studies – 1-3 hours (On demand)
(History majors; Social Science Education majors)
Advanced studies of specific topics arranged by department chair. Prerequisite: History or Social Science Education major, 15 hours of history and 60 or more hours of credit.

Methods of Teaching Social Science in the Middle and Secondary Schools
(See EDU 4023).

HONORS

HON 1003. Honors Fine Arts – 3 hours (Spring)
This course is intended for students enrolled in the Dutile Honors Program. The course is designed to provide students with a basic understanding of the music and art of various cultures and historical periods. Prerequisite: Enrollment in the Dutile Honors Program. Course fee: $30.

HON/POL 1013. Honors American Government and Politics – 3 hours (Fall, odd years)
This course surveys the origin, organization, and policy of United States government at the national, state, and local levels and encourages citizen participation and leadership in democratic processes beginning at the community level. Fulfills the Missouri statutory requirement. Prerequisite: A minimum composite ACT of 28 or SAT equivalent.
HON 1111. University Seminar - 1 hour (Fall)
This course is designed to acclimate students to campus life and to the mission of SBU. It is also designed to develop time management and study skills and explore personality typing and career choices. Prerequisite: Enrollment in the Dutile Honors Program. Course fee: $12.

HON 1121. Introduction to Critical Thinking - 1 hour (Spring)
This course is designed to promote awareness of a personal value system as well as to promote the use of critical thinking skills in the study of issues in today's society. Prerequisite: Enrollment in the Dutile Honors Program.

HON/ENG 1123. Honors Composition - 3 hours (Fall)
An honors-level course in expository writing based on a study of imaginative literature. The course fosters the development of writing and research skills. Fee $2. Prerequisite: An English score of at least 28 on the ACT examination and enrollment in the Dutile Honors Program.

HON/BIB 1213. Honors Old Testament History – 3 hours (Fall)
A survey of the literature, history, and theology of the Old Testament with a concern for discerning its contemporary relevance. Prerequisite: Enrollment in the Dutile Honors Program or a minimum ACT of 28 or its SAT equivalent.

HON/BIB 1223. Honors New Testament History – 3 hours (Spring)
A study of the life of Jesus and the founding of the church in the New Testament with attention given to historical background, literary features, theological teaching, and contemporary relevance. Prerequisite: Enrollment in the Dutile Honors Program or a minimum composite ACT of 28 or its SAT equivalent.

HON 2003/ECO 2043. Honors Literacy in Free Enterprise (LIFE) Economics - 3 hours (Fall)
Honors LIFE Economics is the study of basic macro- and microeconomic concepts for non-business majors. This course will help the student develop an understanding of economic systems based on freedom. It will emphasize the importance of individual initiative and involvement in day-to-day community and business matters. Developing literacy about individual responsibility in personal and community decision-making is a primary concern. As an honors section, this class will explore the topic of free enterprise and economics through classroom discussion, enrichment activities and field trips. Prerequisite: Enrollment in the Dutile Honors Program or a minimum composite ACT of 26 or SAT equivalent.

HON/HIS 2013. Honors United States History I - 3 hours (Fall, even years)
This course offers a political and social survey of United States history from colonization to the end of the Civil War. Prerequisite: Enrollment in the Dutile Honors Program or a minimum composite ACT of 28 or SAT equivalent.

HON/COM 2213. Honors Fundamentals of Speech Communication - 3 hours (Spring)
Foundations of speech communication with special emphasis on the theory and practice of effective public speaking. Progressive work in speech preparation and delivery and exploration of classical and contemporary rhetorical principles. Prerequisite: Minimum composite ACT of 25 or enrollment in the Dutile Honors Program.

HON 3771. Honors Colloquium - 1 hour (Fall, Spring)
For sophomores and juniors officially enrolled in the Dutile Honors Program. The Honors Colloquium will include student presentations, guest speakers, and panel discussions.

HON 477(1-3). Senior Honors Capstone Experience - 1-3 hours (Fall, Spring)
For seniors officially enrolled in the Dutile Honors Program. This course is offered in the student's field of study and includes the integration of faith and discipline. Each student will be required to write a proposal for an individualized capstone experience and obtain the approval of the Honors Program Director, as well as the supervising faculty member. Experiences may include, but are not limited to, grant writing, research leading to publication, or a project integrating the various components of the Dutile Honors Program.

INTERCULTURAL STUDIES
ICS 2013. Cultural and Global Awareness - 3 hours (Fall)
An introduction to cultural diversity, cultural anthropology, cross-cultural field experiences, cross-cultural ministry, various nations of the world, and current global issues. Prerequisites: BIB 1013/1213, 1023/1223, SPF 2012.

ICS 2118. Barefoot Language Learning - 8 hours (Semester Abroad)
An intensive immersion in language acquisition which utilizes classroom instruction in a foreign country as well as cross-cultural social relationships including living with a national family.

ICS 290(1-3). Same-Culture Service Project - 1-3 hours
Participation in a field service project to an English-speaking group similar to one’s own identity. Approval necessary by the department chair. P/F credit. Course fee $245 per credit hour.

ICS 291(1-3). Cross-Cultural Service Project - 1-3 hours
Participation in a cross-cultural field project to either a non-English speaking group or a group of significantly different ethnic identity. Approval necessary by the department chair. Course fee $245 per credit hour.
ICS 3033. World Christian Foundations - 3 hours (Spring)
A vigorous study of the biblical, historical, cultural, and strategic perspectives concerning the expansion of the world Christian movement. Prerequisites: BIB 1013/1213, 1023/1223, SPF 2012.

ICS 3043. Spiritual Preparation for Cross-Cultural Service - 3 hours (Fall)
A study and practicum in discipleship and spiritual life to prepare the student for the difficulty and isolation of cross-cultural Christian service. Prerequisite: ICS 2013 or 3033.

ICS 3053. Survival Abroad - 3 hours (Spring)
Practical preparation for the student’s Semester Abroad. Studies include country and job assignments, culture adjustment, stress management, interpersonal relations, fund raising, management of finances, family needs, awareness of host country, and personal health and nutrition. Prerequisites: ICS 2013, 3033, 3043, 3073.

ICS 3073. Storying and Discipling Cross-Culturally - 3 hours (Spring, odd years)
A study and practicum in cross-cultural evangelism utilizing biblical narratives and discipling in such a way as to develop indigenous church planting. Prerequisite: ICS 2013 or 3033.

ICS 4001. ICS Senior Seminar - 1 hour
An elective course for ICS majors following their six month Semester Abroad to further discuss what is beyond graduation. Prerequisite: completion of ICS Semester Abroad and the various courses necessary for that internship.

ICS 4023. Indigenous Christian Community - 3 hours (Spring, even years)
A study of principles concerning an indigenous, culturally contextualized, biblical Christian community in terms of its worship, discipling, leadership call and roles, pastoral care, social structures, world-view formation, and cell multiplication. Prerequisite: ICS 2013 or 3033.

ICS 4082. Ethnography and Strategy - 2 hours (Semester Abroad)
Cultural research and FOQUS to examine a cultural group and develop a strategy concerning how to evangelize that group. Instruction through field guidance and via email. Prerequisite: ICS 3073.

ICS 4121. International Market Skills - 1 hour (Spring)
A seminar concerning how to utilize ethically, practically, and strategically a market skill and a secular position as a platform for Christian service cross-culturally. Prerequisites: ICS 2013, 3033, and 3073 or 4023.

ICS 4313. World Religions – 3 hours (Spring)
This course introduces students to the thought and practice of world religions including: Hinduism, Buddhism, Confucianism, Taoism, Islam and animism. Consideration also is given to the issues of religious pluralism, theology of religions, and the appropriate response to each.

ICS 4343. Islamic Studies – 3 hours
An overview of Islam from its early inception to the present time, with a broad treatment of the diversity of beliefs and practices within the Muslim world community in order to help the Christian worker recognize both difficulties and possibilities for Muslim evangelism.

ICS 4953. Intensive Topics - 3 hours (Fall, Spring)
Selected topics of special interest in the area of cross-cultural ministry. Areas of study will vary from year to year. Prerequisite: ICS 2013 or 3033.

ICS 498(1-3). Apprenticeship Practicum - 1-3 hours (Semester Abroad)
On-the-job cross-cultural training under the supervision of a cross-cultural resident. Approval of department chair.

INTERDISCIPLINARY STUDIES
IDS 1112. Reading Skills - 2 hours (Fall, Spring)
Skills in skimming, underlining, outlining, increasing vocabulary, improving comprehension and speed are discussed and practiced in relationship to current university courses. One lecture, two laboratories each week. Lab fee $10. Taught off-campus only.

KINESIOLOGY
KIN 1001. Bowling - 1 hour (On demand)
Study and practice in the fundamental skills of bowling. Course fee $45.

KIN 1012. General Activities I - Team Sports - 2 hours (On demand)
Instruction in skills, knowledge of rules and strategy, care of equipment and history of team sports. Activities will include team sports such as soccer, flag football, volleyball, and softball. Students are expected to participate daily so they get the benefit of physical activity. Course fee $25. (Required of physical education majors.)
KIN 1022. General Activities II - Individual and Dual Sports - 2 hours (On demand)
This is an instructional course in skills, knowledge of rules and strategy, care of equipment, and history of individual sports. Activities include badminton, archery, step aerobics, weight training, pickle ball, and billiards. Students are expected to participate daily to get the benefit of physical activity. Course fee $25. (Required of physical education majors.)

KIN 1023. Individual and Team Activities - 3 hours (Spring)
This course is an instructional course in skills, knowledge of rules and strategy and care of equipment. Activities will include soccer, flag football, volleyball, ultimate Frisbee, floor hockey, lacrosse, badminton, pickle ball, croquet, bocce ball, and Frisbee golf. Course fee $35.

KIN 1031. Tennis - 1 hour (On demand)
Basic skills, rules and courtesies of tennis are presented.

KIN 1033. Foundations of Physical Education - 3 hours (Spring)
A course designed to help students develop perspectives in the field of physical education. Students will examine the different settings; kinds of programs; qualifications needed to enter the profession; career opportunities; and issues facing physical educators.

KIN 1041. Golf - 1 hour (On demand)
Basic skills, rules and individual performance in golf. Course fee $40.

KIN 1043. Personal and Community Health - 3 hours (Online only)
Study of major health problems and factors determining health. Special considerations given to principles and practices of good health for individual and community concerns.

KIN 1051. Beginning Racquetball - 1 hour (On demand)
Beginning racquetball is a course designed to introduce the student to the sport of racquetball. The student will learn the rules of the game, equipment necessary for safe and competitive play, skills necessary for competent court play, and options for practice sessions and matches. Course fee $20.

KIN 1071. Beginning Swimming - 1 hour (On demand)
Instruction in skills and techniques for beginning swimming. The American Red Cross Beginners Test must be passed for course credit to be received. Course fee $10. (Required of physical education majors.)

KIN 1081. Life-Guard Training - 1 hour (Spring, On demand)
Skills and techniques of life saving as identified in the American Red Cross Water Safety Program will be emphasized. Course fee $30.

KIN 1131. Aerobic Exercise - 1 hour (Spring, On demand)
Step and floor aerobics will be utilized to develop skills and expertise in designing a cardiorespiratory program for lifetime wellness. Course fee $5.

KIN 1142. Outdoor Adventure Skills - 2 Hours (On demand)
Instruction and experience in outdoor skills of archery, hunting, fishing, camping, orienteering and outdoor living. Safety and environmental concerns will be incorporated. Course fee $70.

KIN 1162. Foundations of Physical Fitness/Wellness - 2 hours (Fall, Spring, Winterfest, Summer)
Study and participation in programs recommended for development of adult physical fitness. Emphasis is on determining level of fitness, importance of fitness in total well being, nutrition and diet selection, monitoring effect of fitness activities, selection of fitness/wellness programs, stress management, and program implementation. Course fee $10.

KIN 1163. Foundations of Physical Fitness for Professionals – 3 hours (Fall, Spring)
Study and participation in programs recommended for the development of adult physical fitness. Emphasis on determining the level of fitness, importance of fitness in one's total continuing well-being, nutrition and diet selection, monitoring the effect of fitness activities, selection of fitness/wellness programs, stress management, and program implementation. Special consideration will be given to how professionals in Physical Education, Exercise Science, and Sport Management may apply this information to their field. Course fee $10.

KIN 1171. Advanced Swimming - 1 hour (Fall, On demand)
The American Red Cross Advanced Test must be passed for course credit to be received. Instruction on advanced skills and techniques for swimming will be utilized. Course fee $5.

KIN 1181. Aqua Exercise - 1 hour (Fall, Spring, On demand)
Instruction in skills and techniques of exercise in the water. Course fee $5.

KIN 1201. Rock Climbing - 1 hour (On demand)
Students will be taught the theoretical and technical basics of rock climbing. The focus of the course will be to teach the student technique and safety. Knowledge and practice will provide the student a personal lifetime sport. Course fee $10.
KIN 1211. Walleyball - 1 hour (On demand)
This is an introductory course to Walleyball. Rules of the game, equipment necessary for safe and competitive play, skills for competent court play, and options for practice sessions and matches make up the course.

KIN 2011. Scuba Diving - 1 hour (Fall, On demand)
Theory and techniques of scuba diving. Ten lessons in pool and four open water classes. All equipment provided. Course fee $195.

KIN 2012. Officiating Sports - 2 hours (Fall)
A study of the rules, methods and techniques of officiating sports. Emphasis will be on major sports. Course fee $65.

KIN 2023. Perceptual Motor Development - 3 hours (Fall, Spring)
Methods of teaching children through movement experiences. An emphasis will be placed on perceptual motor development as it relates to movement.

KIN 2032. Coaching of Volleyball - 2 hours (Fall, On demand)
Study of offensive and defensive skills and strategy of volleyball. Coaching methods, strategy and organization of practice and matches are emphasized.

KIN 2042. Psychology of Coaching - 2 hours (Fall, On demand)
An examination of the psychological principles that apply in coaching, athletics and physical activity.

KIN 2052. Coaching of Softball and Baseball - 2 hours (Spring, On demand)
The methods and materials used in coaching softball and baseball will be examined. A study of practice organization, skill analysis, teaching methods for each position, purchase and care of equipment. Conditioning will be included.

KIN 2063. School Health Education - 3 hours (On demand)
Curriculum for and methods of teaching health education in elementary and secondary schools.

KIN/REC 2092. Athletic Facilities - 2 hours (Fall)
A course which examines the planning and design of recreation and athletic facilities. Also includes practical considerations for operating a facility.

KIN 2133. Principles of Human Anatomy - 3 hours (Winterfest)
Study of the structure of the human body including study at the cellular, tissue, and organ level. Emphasis will be on the organ systems operational in effecting human movement. Prerequisite: BIO 1004.

KIN 2143. Lifetime Activities - 3 hours (Fall)
The focus of this course is to equip the student with knowledge, safety, and experience of those physical activities an individual can participate in for a lifetime. Activities will include golf, tennis, bowling, rock-climbing, hiking, backpacking, fly fishing, bait casting, archery, basic orienteering, and hunter’s safety. Course fee $70.

KIN/BIO 2243. Nutrition - 3 hours (Fall, Spring)
Nutritional requirements of mankind with emphasis on the roles of nutrients in the body throughout the life cycle. Note: This course may not be included in the curriculum for a biology major.

KIN 3012. Coaching of Football - 2 hours (Fall, On Demand)
Study of offensive and defensive systems; methods of coaching football.

KIN 3013. Teaching of Individual and Dual Sports - 3 hours (Spring, On demand)
Class organization, teaching and coaching methods for selected individual and dual sports. Prerequisites: KIN 1012 and KIN 1022.

KIN 3022. Coaching of Basketball - 2 hours (Fall, odd years)
Study of components of basketball. Emphasis on individual and team skills, conditioning and strategy of play.

KIN 3032 Advanced Scuba Diving B 2 hours (Fall, On demand)
This course, upon completion, will certify the student as an Advanced Specialty Diver. It is the second course in sequence to Basic Scuba Diving. Course Fee:$195.00. Prerequisite: KIN 2011.

KIN 3043. Analysis of Basic Rhythms - 3 hours (Fall, odd years)
Study of basic rhythms patterns including application of music used in basic movements. Application of teaching methods used in Tinkling, square dance, line dance, ballroom dance, and many more basic rhythms used in the physical education curriculum. Tempo, beat, and flow techniques are implemented into each topic. Course fee $25.

KIN 3053. Measurement and Evaluation in Sport - 3 hours (Spring)
A course to acquaint students with various evaluation methods in physical education. Practice is given to administering tests and interpreting results with appropriate statistical procedures. Course Fee: $25.

KIN 3062. Coaching of Track and Field - 2 hours (Spring, On Demand)
Study of accepted forms of track and field events; factors affecting endurance, speed and fatigue; preparation and selection of contestants for competition; and management techniques.
KIN 3073. Physiology of Exercise - 3 hours (Fall, Spring)
Study of the effects of exercise on the organs and systems of the body; special emphasis on the cardio-respiratory system. Prerequisite: KIN 2133 or BIO 2204. Course fee $25.

KIN 3083. Care and Prevention of Athletic Injury - 3 hours (Fall, Spring)
The course is designed for students to understand the basic care and prevention of athletic injuries, including the identification of common physical disorders, sports trauma, typical injury management, taping, bracing, and medical documentation. Prerequisite: KIN 2133. Course fee $50.

KIN 3093. Responding to Emergencies - 3 hours (Fall, Spring)
Study of treatment for common emergencies including treatment of wounds, shock, poisoning, fractures, unconsciousness and stoppage of breathing. American Red Cross certificate may be earned. Course fee $80.

KIN 3133. Teaching Elementary Physical Education - 3 hours (Spring)
Teaching methods; selection of activities; program planning; emphasis on development of a progressive curriculum. Course fee $20. In order to enroll in EDU 3133 a GPA of 3.00 is required.

KIN 4001. Programming - 2 hours (Fall)
This course will provide a comprehensive overview of the elements involved in the planning, organization, implementation, and evaluation of leisure programming as a benefits based service. Emphasis will be given to structuring programs for recreation, sports, games and intramural programming.

KIN 4003. Kinesiology - 3 hours (Fall, Spring)
Study of skeletal and muscle systems as they relate to physical education and athletic movements. Practice is given in identification of proper form and procedures for correcting errors in sports movements. Prerequisite: KIN 2133.

KIN 4013. Sport in American Society - 3 hours (Spring)
Presents an introduction to basic issues and current research in the psychological and sociological aspects of American sport, physical activity, and leisure. Specific emphasis is placed on the influence of sport as a social system and the influence of the psychology on the athlete or in sports. Prerequisite: 64 hours completed.

KIN 4023. Organization and Administration of Sport - 3 hours (Fall)
A course emphasizing the functions of management as they relate to the sport environment. Special consideration is given to the areas within the planning, organizing, leading, and controlling functions of the sport manager’s position. Prerequisite: 64 credit hours.

KIN 4043. Adapted Physical Education - 3 hours (Fall)
Surveys areas of exceptionalities that occur within a physical education class as well as in a classroom setting. It is designed to help the prospective physical education teacher identify and understand the unique problems of the disabled individual giving specific consideration to mental retardation, pervasive development disorders, learning disabilities mental health disorders, physical disabilities, communication and visual disorders, health impairments, aging, juvenile and adult corrections.

KIN 4533. Secondary Methods of Teaching Physical Education - 3 hours (Fall)
Teaching methods; selection of activities; program planning; emphasis on development of a progressive curriculum (restricted to physical education majors.) In order to enroll in KIN 4533 a GPA of 3.00 is required.

KIN 4762. Problem Solving - 2 hours (Spring)
A seminar on problem solving in the recreation profession. Aimed at facilitating transition between the academic and professional experience. (Restricted to recreation majors or minors with 64 hours completed.)

KIN 4773. Principles of Strength Conditioning - 3 hours (Fall)
This is an in depth course which covers specific resistance training and conditioning as it pertains to athletes and adults. It is a cumulative course that allows students to apply human physiology and biomechanics as they relate to human performance. This course is to prepare the student for the Personal Strength and Conditioning certification test. Prerequisite: 96 hours completed. Course Fee: $25.

KIN 495(1-4). Intensive Studies in Physical Education - 1-4 hours (On demand)
An intensified approach to selected physical education topics or subject matter not regularly offered by the department. Areas of study will vary. Prerequisite: 96 hours completed.

KIN 497(1-3). Physical Education Symposium - 1-3 hours (On demand)
Credit given by special short-term, but intensified, study in the field of physical education including labs, workshops, clinics or conferences sponsored by national, regional or state associations or agencies. Prerequisite: 96 hours completed.

KIN 499(1-3). Independent Studies - 1-3 hours (Fall, Spring)
Exploratory projects of undergraduate research and directed individual study in health and physical education areas not included in the regular curriculum. See further guidelines in this catalog under "Independent Study.” Prerequisite: 96 hours completed.
Varsity Sports

KIN credit will be granted for participation in varsity sports. Course numbers for varsity sports are as follows:

- Men's Varsity Basketball: 1091-1, 3091-1 (Fall, Spring)
- Women's Varsity Basketball: 1091-2, 3091-2 (Fall, Spring)
- Men's Varsity Soccer: 1111-1, 3111-1 (Fall)
- Women's Varsity Soccer: 1111-2, 3111-2 (Fall)
- Men's Varsity Baseball: 1191-1, 3191-1 (Spring)
- Men's Varsity Tennis: 1291-1, 3291-1 (Spring)
- Women's Varsity Tennis: 1291-2, 3291-2 (Spring)
- Men's Varsity Cross Country: 1391-1, 3391-1 (Fall)
- Women's Varsity Cross Country: 1391-2, 3391-2 (Fall)
- Men's Varsity Football: 1491-1, 3491-1 (Fall)
- Men's Varsity Track: 1591-1, 3591-1 (Spring)
- Women's Varsity Track: 1591-2, 3591-2 (Spring)
- Men's Varsity Golf: 1691-1, 3691-1 (Spring)
- Women's Varsity Golf: 1691-2, 3691-2 (Spring)
- Women's Varsity Softball: 1791-1, 3791-1 (Spring)
- Women's Varsity Volleyball: 1891-2, 3891-2 (Fall)
- Cheerleading: 1991-1, 3991-1 (Fall, Spring)

LEADERSHIP

LDR 2023. Introduction to Leadership - 3 hours (On demand)
The study of leadership concepts and practices, including an emphasis on the nature and application of servant leadership in a global society. The theoretical basis of leadership is examined. This course should help one discover, understand and develop his/her preferred “style” of leadership.

LDR 3023. Leadership Development in Organizations - 3 hours (On demand)
An examination of leadership issues within institutions, including non-profits, companies, private and public organizations, with an emphasis on the ability of leaders to design and implement training and development programs within organizations.

LDR 4043. Ethics and Professional Development - 3 hours (Fall, Spring)
A senior-level course that equips the graduating student with the life skills and information necessary for making the transition from college to the professional world. Emphases will be placed on career development, etiquette, and personal financial planning. Particular attention will be given to the role of personal and professional ethics from a Christian worldview. Course fee $50. Prerequisite: 64 credit hours completed.

LDR 4063. Leadership Development - 3 hours (Spring)
A review of leadership theory with an emphasis given to the moral and ethical aspects related thereto. The identification and development of leadership characteristics will be stressed with the intent to inspire moral gains on a personal and organizational level. Various tools will be utilized throughout the course to facilitate the identification or development of a student’s leadership traits. Prerequisite: Application and acceptance to the MBA program is necessary prior to enrolling in this course. Fee $150.

LDR 4773. Contemporary Issues in Leadership - 3 hours (On demand)
A study of the cultural, ethical and philosophical issues involved in leadership. This course is the capstone requirement for leadership studies and addresses these issues in the context of a required community project. Students will design and implement a leadership project. Presentations of the project will be made at the conclusion of the course.

MANAGEMENT

MGT 295(1-4). Special Topics in Management - 1-4 hours (On demand)
Topics will vary with each offering; therefore, the course may be repeated for credit.
MGT 3013. Principles of Management - 3 hours  (Fall)
The study of the process of management, which is the coordination of all the resources of organizations in order to achieve organizational objectives. The management process will be described, analyzed and applied to all types of organizations, indicating the universality of management. Prerequisite: 24 credit hours completed.

MGT 3033. Operations Management - 3 hours  (Fall, Spring)
An introduction to operations management, which is the design, operation and improvement of the processes that transform inputs into finished goods and services so as to meet the goals of both manufacturing and service organizations. Students learn how to apply the basic analytical models to operations decisions involving planning, scheduling and controlling product and service facilities, product and service design, processes, cost, quality, quantity assurance, production, capacity, inventory management, just-in-time production, supply chain management, project management and distribution requirements. Prerequisite: BUS 2023.

MGT 4033. Human Resource Management - 3 hours  (Spring)
Focuses on the policies, methods and techniques that professional personnel and human resource managers create and implement to achieve successful human resource programs. Prerequisites: BUS 2013 and MGT 3013.

MGT 4043. Organizational Behavior and Theory - 3 hours  (Spring)
Theory of organizations, individual and group behavior, organizational processes and change. This course is a requirement for many graduate programs in business. Prerequisite: MGT 3013.

MGT 4063. Entrepreneurship and Small Business - 3 hours  (Fall)
Integrates knowledge of the functional areas of entrepreneurial business development, central themes being the impact of the owner or founding team of the company, and the development of systems that will lead to sustainable growth. Emphasis is placed on planning, starting, growing, managing, and expanding a business, with a particular focus on writing a business plan. Prerequisite: MGT 3013.

MGT 4083. Strategic Management - 3 hours  (Fall, Spring)
Examine the cooperation that must exist across various functional areas of the business to effectively scan the environment and formulate, implement, evaluate and control corporate objectives, strategies, and policies in order to positively influence the long-term performance of the organization. A business simulation program will be extensively utilized to reinforce the objectives of the course. This course is the capstone requirement for majors in computer information science and all majors from the Departments of Accounting and Business Administration. Prerequisites: ACC 2043, ECO 2023, ECO 2033, MGT 3013, MKT 3023, FIN 3053, and 110 credit hours completed. Note: To be taken at SBU only during last semester.

MGT/MKT 4153. Retailing - 3 hours  (Fall)
Explores the essential elements of the retail management process. Topics to be covered include strategic planning, the evaluation of retail customers and competitors, target market and location selection, the retailing marketing mix, store design, and managing human resources. Prerequisites: MKT 3023, MGT 3013, and ECO 2023.

MKT 295(1-4). Special Topics in Marketing - 1-4 hours  (On demand)
Topics will vary with each offering; therefore, the course may be repeated for credit.

MKT 499(1-3). Independent Study in Management - 1-3 hours  (On demand)
Independent study of some problem or area in the major not covered in the organized courses. The study is under the direction of a faculty member in whose field of specialization the problem or area lies. Prerequisites: 3.00 GPA in major field and 60 credit hours completed.

MARKETING

MKT 295(1-4). Special Topics in Marketing - 1-4 hours  (On demand)
Topics will vary with each offering; therefore, the course may be repeated for credit.

MKT 3023. Principles of Marketing - 3 hours  (Spring)
The study of the system of activities that constitute marketing with emphasis on the principles, policies and strategies utilized to identify and satisfy the needs and wants of consumers. The universal application of marketing management in all forms or organizations is stressed. Prerequisite: 24 credit hours completed.

MKT 3033. Consumer Behavior - 3 hours  (Fall)
Introduces the key terms, definitions, and concepts used to describe consumer behavior. Students will learn how we shape our product choices and purchase decisions by investigating the ways we think; the ways we process, store, and retrieve information when needed; and how relationships with others affect these decisions. Prerequisite: MKT 3023.
MKT 3073. Professional Selling - 3 hours (Winterfest)
Investigation, study and practice in the science and art of salesmanship, with emphasis on the consultative or professional approach to ascertaining the needs and wants of others, and assisting them to obtain satisfaction. Prerequisites: MKT 3023 and COM 1103 or COM 2393.

MKT 3083. Advertising - 3 hours (Fall)
This course is designed as a creative, innovative introduction to advertising. Types of advertising media, copy and style will be evaluated, and emphasis will be placed on creativeness in advertising. This course includes a semester-long advertising campaign project. Prerequisite: MKT 3023. Recommended: ART 2703.

MKT 4013. Marketing Research - 3 hours (Spring)
Provides the student with a basic understanding of the research process as it applies to marketing and business problems. Subjects covered include the scientific method, problem definition, research design, data collection, data analysis, and interpretation. A comprehensive research project and selected case analysis provide opportunity for relating the theoretical concepts and techniques to real world problems. Prerequisites: MKT 3023 and BUS 2023.

MKT 4023. Marketing Management - 3 hours (Fall)
Advanced study of the role and responsibilities of marketing executives. Emphasis will include the analysis, planning, organization, implementation and control of marketing programs. Prerequisites: MKT 3023 and MGT 3013.

MKT/MGT 4153. Retailing - 3 hours (Fall)
Explores the essential elements of the retail management process. Topics to be covered include strategic planning, the evaluation of retail customers and competitors, target market and location selection, the retailing marketing mix, store design, and managing human resources. Prerequisites: MKT 3023 and MGT 3013.

MKT 4253. Digital and Social Media Marketing - 3 hours (Winterfest Online)
This course covers a variety of topics including online advertising, email marketing, mobile advertising, search engine optimization, social media marketing, online listening and monitoring, and web and social media analytics. Through course assignments and a final project/presentation, students develop capabilities in designing, implementing, and evaluating digital marketing strategies. Students also have the opportunity to gain hands-on learning experience by participating in digital marketing online learning modules. Prerequisite: MKT 3023.

MKT 495(1-4). Intensive Studies in Marketing - 1-4 hours (On demand)
Topics will vary with credit offering; therefore, the course may be repeated for credit.

MKT 499(1-3). Independent Study in Marketing - 1-3 hours (On demand)
Independent study of some problem or area in the major not covered in the organized courses. The study is under the direction of a faculty member in whose field of specialization the problem or area lies. Prerequisites: 3.00 GPA in major field and 60 credit hours completed.

MATHEMATICS

MAT 0103. PreAlgebra - 3 hours (Fall, Spring)
This course gives a review of and practice in basic mathematical skills. Applications studied include the use of whole numbers, common and decimal fractions, and percents. The subjects of perimeter, area, and volume are investigated; and concepts of measurement are developed using consumer problems. This course is recommended for students with less than one unit of high school algebra or who have a score of less than 16 on the Math ACT. There will be three hours of lecture and one hour of laboratory work each week. This course does not count toward the 128 hours required for graduation. Lab fee $18.

MAT 0123. Intermediate Algebra - 3 hours (Fall, Spring)
This course is equivalent to one and one-half units of contemporary high school algebra. It has an emphasis on application. It is recommended for students with one to one and one-half units of high school algebra. There will be three hours of lecture and one hour of laboratory work each week. Prerequisite: Score of 16-17 on the Math ACT or a minimum grade of C in MAT 0103. This course does not count toward the 128 hours required for graduation. Lab fee $18.

MAT 1143. College Algebra - 3 hours (Fall, Spring)
This course explores the use of algebra in the real world. This exploration takes place by examining the concept of function. Conceptual understanding of linear, exponential, logarithmic, quadratic, and other polynomial functions is grounded in the collection and statistical analysis of real world data. Functions will be used to solve real world problems using modeling techniques. The concept of function is also explored in detail using analytic geometry. Prerequisite: Score of 18-25 on the Math ACT or a minimum grade of C in MAT 0123 Intermediate Algebra.

MAT 1163. PreCalculus - 3 hours (Summer-online and On Demand)
This course is a rapid and in depth review of algebra, trigonometry functions in the context that it will be used in Calculus. It is intended for the student needing additional algebra and/or trigonometry skills to enable success in MAT
1195 (Calculus) or MAT/BUS 1193 (Business Calculus). Prerequisite: Score of 24 or higher on Math ACT Examination, or a minimum grade of C in MAT 1143 or its equivalent.

MAT 1173. Discrete Mathematics - 3 hours (Spring)
This course is a study of mathematical concepts that are not dependent upon the continuum. Topics will include sets, logic, combinatorics, probability, functions, relations, matrix algebra, Boolean algebra and graph theory. The concept of proof and the nature of proof will also be explored. Prerequisite: MAT 1143 or its equivalent with a minimum grade of C.

MAT/BUS 1193. Business Calculus - 3 hours (Fall, Spring)
This course studies derivatives and antiderivatives of functions, inclusive of exponential and logarithmic functions, with applications to business and economics. This course is not open to mathematics majors. Prerequisite: MAT 1143 or its equivalent with a minimum grade of C, MAT 1163 or its equivalent with a minimum grade of C, or score of 24 or higher on the Math ACT. Note: MAT 1193 is a terminal math course. Students desiring further study of calculus must take MAT 1195. Also, a student who takes BUS/MAT 1193 and MAT 1195 will receive credit for only MAT 1195.

MAT 1195. Calculus I - 5 hours (Fall, Spring)
This course studies graphs, functions, plane analytical geometry, limits, continuity, derivatives, velocity-acceleration, rates of change, maxima and minima, differentials, the Mean Value Theorems for integrals and derivatives, antiderivatives, definite integrals, area, and methods of finding volumes. Prerequisite: MAT 1143 or its equivalent with a minimum grade of C; MAT 1143 or its equivalent with a minimum grade of C; or score of 26 or higher on the Math ACT. Note: A student who takes BUS/MAT 1193 and MAT 1195 will receive credit for only MAT 1195.

MAT 2255. Calculus II - 5 hours (Spring)
This course examines derivatives and integrals of functions and their inverses including exponential and logarithmic functions. It also investigates techniques of integration, further applications of integrals, sequences, series, polar coordinates, applications of parametric equations, and conic sections. Prerequisite: MAT 1195 or its equivalent with a minimum grade of C.

MAT 2263. Calculus III - 3 hours (Fall)
This course examines curves and surfaces in three dimensions, derivatives and integrals of functions of more than one variable, and vector calculus. Prerequisite: MAT 2255 or its equivalent with a minimum grade of C.

MAT 2393. Geometry, Data, and Probability for Elementary/Middle School Teachers - 3 hours (Spring)
This course develops the concepts of probability and statistics. Analytic, synthetic, and transformation geometry are investigated. Open only to students preparing to teach in the elementary or middle school.

MAT 295(1-4). Special Topics in Mathematics - 1-4 hours
Selected mathematics topics of special interest.

MAT 3313. Abstract Algebra - 3 hours (Spring, even years)
An introduction to abstract algebraic systems and use of properties of groups, rings, integral domains and fields to describe and develop certain characteristics of natural numbers, integers, rational, real and complex numbers. Prerequisite: MAT 1195 and MAT 3332.

MAT 3323. Linear Algebra - 3 hours (Fall)
A study of systems of linear equations, matrices, determinants, vector products, vector spaces, linear transformations and quadratic forms. Prerequisite: MAT 1193 or 1195.

MAT 3332. Symbolic Logic and Set Theory - 2 hours (Spring)
This course is an introduction to symbolic statements, truth tables, quantifiers, inference and implication, special sets of numbers, set operations, correspondences, cardinal numbers, Boolean algebra, and the logical structure of mathematical arguments. Prerequisite: Must have met mathematics general education requirement.

MAT 3343. Mathematical Statistics - 3 hours (Fall)
This course is a Calculus-based investigation of the concepts of probability and statistics including sample spaces, methods of enumeration, discrete and continuous functions or random variables and their distributions, conditional probability, Chebyshev inequalities, central limit theorem, regression and correlation, and sampling and hypothesis testing. Prerequisite: MAT 1195 or BUS/MAT 1193.

MAT 3353. Integrated Mathematics - 3 hours (Spring, even years, Winterfest, odd years)
This course will enable students seeking certification in middle or secondary school teaching to analyze mathematics curriculum from an integrated approach. The course will strengthen the students' level of mathematical knowledge, while broadening their structure of this knowledge in a way that is necessary for teachers. The course is recommended for students seeking certification in middle school or secondary school mathematics teaching. All students taking this course will be teaching a component of the course and will be evaluated on their teaching. Prerequisite: Must have met mathematics general education requirement.
MAT 3363. Differential Equations - 3 hours (Spring)
This course studies explicit and power series solutions of certain types of linear differential equations, boundary value problems, solving differential equations using applications of Laplace Transforms, and various real-world applications of differential equations. Prerequisite: MAT 2263 or concurrent enrollment in MAT 2263.

MAT 3372. Math Technologies - 2 hours (Fall, even years, Winterfest, even years)
What is math technology? How has it and how should it affect how and what we teach in Mathematics? How will it affect your future - be it mathematics, physical science, social science, or business using mathematics? We will consider and write about these and other questions via hands on experience with various math technologies. This course will have a lab component. Topics developed will be tailored to individual students’ backgrounds and interests. Prerequisites: MAT 1193 or 1195.

MAT 3382. History of Mathematics - 3 hours (Fall, odd years)
A survey of the significant developments in mathematics and contributions of great mathematicians from the Greeks (Thales) to present day. The course focuses mainly on mathematics developed since the invention of analytic geometry and the calculus. Prerequisite: MAT 1195.

MAT 3391. Preparing For Secondary Mathematics Teacher Certification Exam - 1 hour (Spring)
This seminar course is designed to help students seeking certification in secondary school mathematics prepare for the current secondary mathematics teacher certification exam. The course will be focused on the content of this exam and test taking strategies.

MAT 3473. Analysis of Variance - 3 hours (Spring, odd years)
This course investigates the analysis of variance and related modeling techniques for cases with fixed, random, and mixed effects. These modeling techniques included one-way, two-way, and three-way ANOVA with and without interaction. Prerequisite, PSY/SOC 3243 or BUS 2023 or MAT 3343.

MAT 4343. Mathematical Statistics II - 3 hours (Spring, even years)
This course is a continuation of the concepts introduced in Mathematical Statistics (MAT 3343). In particular the concept of modeling with regression analysis will be explored further. The course includes an introduction to both simple linear and multiple regression models with a brief exploration of quadratic models. Modeling with both quantitative and qualitative variables will be studied. There will be a brief introduction to stepwise regression and variable screening methods. Prerequisite, PSY/SOC 3243 or BUS 2023 or MAT 3343.

MAT/CIS 4433. Numerical Methods - 3 hours (Fall, even years)
A study of mathematical concepts in a computing context. Topics include numerical integration, systems of equations, root-finding, curve-fitting, and differential equations. Emphasis will be placed on computer-based solutions with implications for programming, algorithm complexity, data representation and approximation, and error measurement. Lab fee $12. Prerequisite: CIS 1033 and MAT 2263.

MAT 4483. Contemporary Geometry - 3 hours (Spring, odd years)
An axiomatic development of geometry that includes both the classical material of Euclidean geometry and the structure of the alternate axiomatic system of hyperbolic geometry. Prerequisites: MAT 1195 and MAT 3332.

MAT 4663. Advanced Calculus - 3 hours (Fall)
Advanced Calculus is a study of the basic concepts in analysis. These include concepts such as continuity, convergence of sequences and series of numbers, convergence of sequence and series of functions, differentiation, and integration. A more complete understanding of these concepts than is achieved in the Calculus sequence is necessary for all mathematics majors and thus this course is a core course of the math major and a type of capstone course. Prerequisites: MAT 2263 and MAT 3332.

MAT 495(1-4). Special Topics in Mathematics - 1-4 hours (On demand)
Selected topics of special interest in mathematics. May be repeated.

MAT 499(1-3). Independent Studies - 1-3 hours (On demand)
Selected mathematics topics of special interest. Students initiate a proposal of study as detailed elsewhere in the catalog.

Methods of Teaching Mathematics in the Middle and Secondary Schools. (See EDU 4513).
Mathematics Through the Eyes of Faith. (See SCF 3422).

MEDICAL TECHNOLOGY
(Courses offered at Cox School of Medical Technology)

MTC 401. Clinical Biochemistry B 10 hours (On demand)
Theory and laboratory study of analytical biochemistry, incorporating both routine and special chemical procedures.
MTC 402. Clinical Microscopy B 2 hours (On demand)
Principles and techniques of the physical, chemical and microscopic examination of urine and other body fluids as related to the disease process.

MTC 403. Clinical Hematology & Coagulation B 7 hours (On demand)
Study of blood cell derivation, maturation and function. Principles of hemostasis and coagulation. Methodology used in routine and special studies and the interpretation and correlation with disease states.

MTC 404. Diagnostic Immunology B 4 hours (On demand)
The science of immunity including antibody development, principles of the antigen-antibody interactions, and techniques of serological testing for various disease states.

MTC 405. Clinical Microbiology - 7 hours (On demand)
The theory and laboratory study of pathogenic bacteria, viruses, rickettsiae, fungi, and parasites. Includes morphology, physiology, taxonomy, and medical significance.

MTC 406. Immunohematology B 4 hours (On demand)

MTC 407. Special Topics in Medical Technology B 1 hour (On demand)
Instruction will include lecture and/or clinical practice in the areas of in-service education, management and supervision, research and development, and the principles and techniques of the instructional process.

MILITARY SCIENCE

MIL 101(1-2). Introduction to Military Science - 1-2 hours
History, organization and mission of the U.S. Army and the Reserve Officer Training Corps (ROTC), rappelling techniques, basic rifle familiarization, map reading and understanding the role of the U.S. Army in today’s world.

MIL 102(1-2). Introduction to Basic Military Skills - 1-2 hours
Rifle marksmanship, advanced rappelling techniques, military radio and telephone communications, military leadership and basic military skills.

MIL 1161. Leadership Fitness - 1 hour
Development of individual fitness and acquisition of the skills necessary to lead group fitness training. (May be repeated)

MIL 211(1-2). Basic Military Skills and Techniques - 1-2 hours
Introduction to techniques of survival in various situations and climates, rappelling and pistol marksmanship.

MIL 212(1-2). Military Fundamentals Practicum - 1-2 hours
The class is designed for the military science students who desire accelerated instruction on rifle marksmanship, rappelling, communications, map reading (to include the compass) and patrolling. The student will be required to wear a military uniform and meet Army appearance standards.

MIL 225(1-5). Basic Military Science Practicum - 1-5 hours
A 6-week course conducted at Fort Knox, KY. The training is rugged and intensive with emphasis placed on leadership application, practical work and physical conditioning. Training will be conducted six days a week out-of-doors and requires active participation by all students.

MIL 3013. Military Leadership and Operations - 3 hours
Introduction to small unit tactics; principles of military leadership, to include theory, responsibilities, techniques and practice; branches of the U.S. Army, oral presentation techniques and practice. One field trip is required. This course may not be taken pass/not pass.

MIL 3023. Military Skills Building - 3 hours
Small unit tactics; applied military leadership (builds on knowledge gained in MIL 3013) with special emphasis on the junior leader’s duties and responsibilities. Two field trips are required. This course may not be taken pass/not pass.

MIL/HIS 3153. American Military History - 3 hours (Fall, Spring)
American Military History from the colonial period to the present; its relation to the national development in war and peace.

MIL 3255. Advance Military Science Practicum - 3 hours
The 6-week course is conducted at Fort Lewis, Washington. The instruction, training and evaluation focuses on the professional development issues required to become an Army Officer. The primary focus is on evaluating the student’s leadership potential through this mentally and physically demanding camp. The training and evaluation are conducted seven days a week for six weeks and require active participation by all students. The student is placed in leadership positions which require him/her to lead up to 120 fellow students for extended periods of time.
MIL 4113. Military Qualification Skills For the Advanced Cadet - 3 hours
Ethics and professionalism of the military officer; Army command staff functions; oral presentation techniques and practice; military leadership at junior officer level; world change and military obligations. One field trip is required. This course may not be taken pass/not pass.

MIL 4123. Transition from Cadet to Lieutenant - 3 hours
Military justice system; army supply and logistics procedures and responsibilities; officer management system; obligations and responsibilities of a military officer; military leadership at junior officer level. Two field trips are required. This course may not be taken pass/not pass.

MIL 496(1-2). Readings/Research in Military Science - 1-2 hours
Planned readings and research on subjects in or related to Military Science. May be repeated for a total of 3 hours. This course may not be taken pass/not pass.

MUSIC

MUS 0100. Recital Attendance - (Fall, Spring)
Laboratory in music literature, listening and performance. Attendance at a designated number of department-sponsored or approved concerts. Music majors must complete six semesters of this course. Enrollment for pass-fail only.

MUS/CHR 023(0-1). Worship Lab – 0-1 hour (Fall, Spring)
Laboratory in worship planning and worship leadership. Attendance at a designated number of department-sponsored learning and discussion events, plus assignment to worship-leading teams for rehearsal and participation in worship-leading opportunities. Lab fee $20.

MUS 1101. Basic Class Piano I - 1 hour (Fall, Spring)
Class instruction in piano designed for non-music students with no previous experience or less than one year. May not be taken by music majors or minors. Two hour lessons per week. No jury required. Lab fee $20.

MUS 1111. Basic Class Piano II - 1 hour (Fall, Spring)
Continuation of MUS 1101 but may be taken by non-music students with one-three years previous study. Students with more than three years study should enroll in Applied Piano. Two one-hour lessons per week. No jury required. Prerequisite: MUS 1101 or permission of instructor. Lab fee $20.

MUS 1121. Secondary Class Piano I - 1 hour (Fall)
Class instruction in piano for music majors and minors to develop functional ability in required secondary performance area. Required each semester until piano proficiency examination is passed. Two one-hour lessons per week. No jury required. Lab fee $20.

MUS 1131. Secondary Class Piano II - 1 hour (Spring)
Continuation of MUS 1121. Prerequisite: MUS 1121 or permission of Coordinator of Applied Music. Lab fee $20.

MUS 1141. Basic Class Voice - 1 hour (Fall, Spring)
Class instruction in voice designed to introduce beginning, non-music majors or minors. Two one-hour lessons per week. Lab fee $20. No jury required.

MUS 1151. Basic Class Guitar I - 1 hour (Fall, Spring)
Class instruction which covers fundamental concepts and applied methods in guitar. Emphasis will be given to chording, beginning music theory, strumming and finger-picking styles of playing, song-writing and performance techniques as they apply to the guitar. Completion of this course satisfies the guitar proficiency requirements for music education majors.

MUS 1161. Basic Class Guitar II - 1 hour (Fall, Spring)
Continuation of MUS 1151.

MUS 1171. Introduction to Church Music and Worship Leadership - 1 hour (Spring)
An introductory overview of the church music curriculum and careers in church music, with an emphasis on the qualifications and skills necessary for worship leaders.

MUS 1601. Music Fundamentals Lab – 1 hour (Fall, Spring)
An elementary study of the basic fundamentals of music reading including notation, rhythm, and chords. Some sightsinging, rhythm reading, and basic keyboard study will also be included. Concurrent enrollment in MUS 1613 or MUS 1623 is required.

MUS 1611. Sightsinging/Eartraining I - 1 hour (Fall)
Training in sightsinging and aural perception. Must be taken concurrently with MUS 1613. Music majors and minors; other with consent of department chair. Lab fee $20.
MUS 1613. Theory I - 3 hours (Fall)
An intensive study of theoretical concepts of music organization, including notation, melody, rhythm and harmony. Must be taken concurrently with MUS 1611; music majors and minors; others with consent of theory coordinator. Concurrent enrollment in MUS 1601 may be required based on theory placement examination. Lab Fee: $20.

MUS 1621. Sightsinging/Eartraining II - 1 hour (Spring)
Continuation of MUS 1611. Must be taken concurrently with MUS 1623. Lab fee $20. Prerequisite: MUS 1611 and MUS 1613 with a minimum grade of C.

MUS 1623. Theory II - 3 hours (Spring)
An historical/analytical study of theoretical concepts of music through the classical period. Must be taken concurrently with MUS 1621; Prerequisite: MUS 1611 and MUS 1613 with a minimum grade of C. Concurrent enrollment in MUS 1601 may be required based on the needs of the student. Lab Fee: $20.

MUS 1623. Survey of Music Literature - 3 hours (Fall, Spring)
Survey of representative music literature from all historical periods and the development of analytical listening techniques. Music majors and minors.

MUS 1701 Introduction to Music Education - 1 hour (Spring)
Introductory overview of the music education curriculum and the profession of the music educator.

MUS 2121. Secondary Class Piano III - 1 hour (Fall)
Continuation of MUS 1131. Prerequisite: MUS 1131 or permission of Coordinator of Applied Music. Lab fee $20.

MUS 2131. Secondary Class Piano IV - 1 hour (Spring)
Continuation of MUS 2121. Prerequisite: MUS 2121 or permission of Coordinator of Applied Music. Lab fee $20.

MUS 2602. Survey of World Music – 2 hours (Spring, even years)
A survey of non-Western musics as a way to experience and understand different cultures through their unique musical systems. Prerequisite: (choose one) FAR 1003, FAR 1023, HON 1003 or MUS 1633.

MUS 2611. Sightsinging/Eartraining III - 1 hour (Fall)
Advanced work in sightsinging and aural perception, including the study of standard music literature. Must be taken concurrently with MUS 2613. Lab fee $20. Prerequisite: MUS 1621 and MUS 1623 with a minimum grade of C.

MUS 2623. Theory III - 3 hours (Fall)
An historical/analytical/compositional study of the theoretical concepts of music of the common-practice period as well as a brief study of counterpoint, fugue and variation techniques. Must be taken concurrently with MUS 2611. Lab fee $20. Prerequisite: MUS 1621 and MUS 1623 with a minimum grade of C.

MUS 2621. Sightsinging/Eartraining IV - 1 hour (Fall)
Continuation of MUS 2611. Must be taken concurrently with MUS 2623. Prerequisite: MUS 2611 and MUS 2613 with a minimum grade of C. Lab fee $20.

MUS 2702. Basic Conducting - 2 hours (Fall)
Introduction to manual techniques of conducting, terminology for the conductor, mechanics of choral, band and orchestral scores. Prerequisites: MUS 1601 and 1623.

MUS 2711. Instrumental Fundamentals - 1 hour (Spring)
An elementary study of woodwind, brass, and percussion instruments with emphasis on tone production, fundamental performance techniques, and pedagogy. Lab fee $25.

MUS/CHR 2712. Worship Leading for Small Groups - 2 hours (Spring, odd years)
To provide basic worship leading skills for ministerial students and others working with small churches and small groups. Attention given to motivating and directing congregational and small group singing, planning worship services and rudimentary techniques in leading choirs of limited skill. No credit for music majors and minors.

MUS 2721. String Fundamentals - 1 hour (Fall)
An elementary study of string instruments with an emphasis on tone production and fundamental performance techniques. Laboratory teaching experience. Two class meetings per week. Lab fee $25.
MUS 2731. Woodwind Methods - 1 hour (Spring, even years)
An intensive study of woodwind instruments including a survey of solo, ensemble and instructional literature. Emphasis on the ability to play and teach. Laboratory teaching experience. Two class meetings per week. Lab fee $35.

MUS 2741. Brass Methods - 1 hour (Fall, even years)
An intensive study of brass instruments including a survey of solo, ensemble and instructional literature. Emphasis on the ability to play and teach. Laboratory teaching experience. Two class meetings per week. Lab fee $25.

MUS 2751. Percussion Methods - 1 hour (Spring, odd years)
An intensive study of percussion instruments including a survey of solo, ensemble and instructional literature. Emphasis on the ability to play and teach. Laboratory teaching experience. Two class meetings per week. Lab fee $25.

MUS 2771. Vocal Diction I 1 hour (Fall)
A basic study of the phonetic pronunciation of the Italian and English languages through the use of the International Phonetic Alphabet. Must be taken concurrently with MUS 1331 or 1332.

MUS 2781. Vocal Diction II - 1 hour (Fall)
A basic study of the phonetic pronunciation of the German and French languages through the use of the International Phonetic Alphabet. Prerequisite: MUS 2771.

MUS 2802. Piano Pedagogy - 2 hours (Fall, even years)
Discussion and analysis of suitable methods and materials of teaching at elementary and intermediate levels. Guidance in establishing and operating the private studio. Prerequisite: MUS 1311 or 1312.

MUS 295(1-4). Special Topics in Music - 1-4 hours (On sufficient demand)
Topics of special interest in music. May require the appropriate applied fee. Prerequisite: Consent of department chair.

MUS 3602. Analysis of Music Structure - 2 hours (Fall, odd years)
Advanced study of analytical techniques applied to music from the 17th-20th centuries. Prerequisite: MUS 2611 and 2623.

MUS 3622. Orchestration - 2 hours (Fall, even years)
Study of the capabilities of band and orchestral instruments; analysis of scores; practical work in scoring for small and large instrumental combinations. Prerequisite or concurrent enrollment: MUS 2611 and 2623. Lab fee $20.

MUS 3653. History of Western Music I - 3 hours (Fall)
Intensive study of the history of music and representative music literature before 1750. Prerequisite: MUS 1633 and MUS 2613 or permission of instructor.

MUS 3663. History of Western Music II - 3 hours (Spring)
Intensive study of the history of music and representative music literature since 1750. Prerequisites: MUS 2623 and MUS 3653.

MUS 3672. Organ Literature and Design - 2 hours (Spring, odd years)
A survey of organ literature and practical study of organ registration, design and pedagogy. Prerequisite: MUS 1321 or 1322.

MUS 3712. Choral Conducting - 2 hours (Spring)
Continued work toward mastery of the basic skills of conducting. Emphasis upon the development of choral rehearsal and performance techniques. Survey of stylistic characteristics of the five major periods of choral literature. Prerequisite: MUS 2702.

MUS 3722. Instrumental Conducting - 2 hours (Spring, even years)
Continued work toward mastery of the basic skills of conducting, including score study, score arranging, and baton technique. Emphasis upon the development of band and orchestra rehearsal and performance techniques. Survey of stylistic characteristics of the major periods of band literature. Prerequisite: MUS 2702.

MUS 3732. Church Music Literature and Materials - 2 hours (Fall, even years)
Survey and analytical study of sacred music literature including choral and instrumental music representing all periods of church music with emphasis on music relevant to the contemporary church. Prerequisite: MUS 1623 and 1633.

MUS 3742. Church Music Education - 2 hours (Spring, odd years)
A study of organizational techniques, methods and materials, unit and rehearsal plans and enlistment procedures for a church music program for children through grade six.

MUS/CHR 3752. Instrumental Ministry in the Church - 2 hours (Spring, even years)
A practical study of the use of instrumental music in the church, including all aspects of instruments in music ministry. Techniques and materials used by the church pianist and organist involving hymn playing, modulation, transposition, improvisation, and accompanying choirs and soloists. The use of band and orchestra instruments in varying
combinations and the use of handbells in music ministry. Prerequisite: Two semesters of piano (or organ) or permission of instructor.

**MUS/CHR 3783. Worship and Song in the Church - 3 hours (Fall)**
A historical survey of the worship practice and congregational song of the major Christian denominations with an emphasis on planning worship for today's churches.

**MUS 3802. Piano Literature - 2 hours (Fall, odd years)**
A general survey of piano repertoire from 1650-Present. Prerequisite: Two semesters of piano or permission of instructor.

**MUS 3812. Vocal Pedagogy - 2 hours (Spring, odd years)**
An intensive study of vocal teaching techniques and vocal literature for use in private studio, voice class, music contest and worship. Laboratory teaching experience. Prerequisite: Four semesters of applied voice or consent of instructor.

**MUS/EDU 3813. Elementary Music Education - 3 hours (Spring)**
Study of administrative teaching techniques and survey of materials for teaching vocal and instrumental music in early childhood and elementary grades. Examination of musical concepts and skills appropriate at each age or learning level. Training in use of piano, recorder, autoharp and fretted instruments. Prerequisite: MUS 1621 and 1623; music majors and minors only. In order to enroll in EDU 3813 a GPA of 3.00 is required.

**MUS 3853. Music Industry I - 3 hours (Fall, even years)**
A study of issues affecting the music industry professional. An introduction to careers, public relations, self-promotion and music licensing organizations. Prerequisite: 64 hours completed or permission of instructor.

**MUS 3863. Music Industry II - 3 hours (Fall, odd years)**
An in-depth study of issues affecting the music industry professional. Aspects of concert promotion, contracts, licensing costs and the role of the music agent will be studied. Prerequisite: 64 hours completed or permission of instructor.

**MUS 3923. Recording Techniques - 3 hours (Spring, odd years)**
Survey of terminology, equipment, and basic techniques of sound reinforcement and recording, along with hands-on projects in recording and live performances. Lab fee $35.

**MUS/CHR 4101. Church Music Technology - 1 hour (Spring, even years)**
An introductory overview of the technology available to church musicians. Prerequisite: CIS 1103 or 1033.

**MUS/EDU 4573. Methods of Teaching Vocal Music in the Middle and Secondary Schools - 3 hours (Fall, odd years)**
Study of philosophy of music education, administrative and teaching techniques and materials for teaching vocal music in the middle and secondary schools. Music majors and minors only. Prerequisites: MUS 1621 and 1623. In order to enroll in EDU 4573 a GPA of 3.00 is required.

**MUS/EDU 4582. Methods of Teaching Instrumental Music in the Middle and Secondary Schools - 2 hours (Fall, even years)**
Study of philosophy of music education, administrative and teaching techniques and materials for teaching instrumental music in middle and secondary schools. Emphasis will be placed on lesson plans and their implementation. Music majors and minors only. Prerequisites: MUS 1621 and 1623. In order to enroll in EDU 4582 a GPA of 3.00 is required.

**MUS 4622. Choral Arranging and Composition - 2 hours (Spring)**
Original composition in idioms of the 20th century, including original pieces suitable for school and church. Emphasis on creative ideas and techniques for choral arranging. Lab fee $20. Prerequisite: MUS 2621 and 2623.

**MUS 4701. Supervised Teaching in Piano - 1 hour (Fall, Spring)**
Practical piano teaching experience in a supervised laboratory situation. Prerequisite: MUS 2802.

**MUS 4712. Choral Techniques - 2 hours (Fall, even years)**
Building the needed understanding, listening skills and expectations for developing a choral ensemble in regard to the aspects which shape choral teaching and performance, which include: vocal pedagogy and choral tone, musicality and performance practice, text and diction, rhythmic vitality, tuning and intonation, and dynamics. Prerequisites: MUS 3712: music major and minors only.

**MUS 4722. Repertoire for Secondary Choral Music - 2 hours (Spring, even years)**
A study of choral music appropriate for use in the secondary school and the criteria for its selection. Prerequisite: MUS 3712 or permission of instructor.

**MUS 4732. Marching and Jazz Band Techniques - 2 hours (Fall, odd years)**
Study of techniques in the organization, training and performance of marching and jazz bands in public schools. Techniques for music arranging and drill writing will be studied. Laboratory: required field trips to high school rehearsals, parades and contests.
MUS 4742. Repertoire for Secondary Instrumental Music - 2 hours (Spring, odd years)
A study of instrumental music appropriate for use in the secondary school and the criteria for its selection. Prerequisite: MUS 3722 or permission of instructor.

MUS/CHR 4743. Church Music Administration - 3 hours (Fall, odd years)
Study of the functional approach to the church music ministry including organization, administration, budget, calendar, scheduling, purchase and maintenance of equipment, rehearsal, performance, service planning, congregational activities and staff relations.

MUS 4752. Supervised Field Experience in Church Music - 2 hours (Fall, Spring)
On-the-job training under the supervision of a full-time minister. Includes observation and supervised work as director and/or accompanist. Course fee $75. Prerequisite: MUS 3743 and 4743.

MUS 495(1-4). Intensive Studies in Music - 1-4 hours (On demand)
Topics of special interest in music. May require the appropriate applied fee. Prerequisite: Consent of department chair.

MUS 4983. Internship in the Music Industry - 3 hours (On demand)
On-the-job training in a music industry agency, such as a recording studio, music store or music theater. Includes 160 hours of observation, instruction, supervised tasks and evaluation.

MUS 499(1-3). Independent Studies - 1-3 hours (Fall, Spring)
Advanced studies of specific topics arranged with department chair.

ENSEMBLES: Students enroll in ensemble according to academic classification prefix.
(1) Freshman (2) Sophomore (3) Junior (4) Senior
The major ensembles are Concert Choir, SBU Chorale, Wind Symphony, and Orchestra.

MUS (1,2,3,4)001. Concert Choir - 1 hour (Fall, Spring)
Open to all students by audition. Study and performance of literature for the mixed choir. Three rehearsals per week. Concerts on campus and off-campus. Lab fee $20.

MUS (1,2,3,4)011. SBU Chorale - 1 hour (Fall, Spring)
Open to all students by audition. Study and performance of advanced literature for the mixed choir. Four rehearsals per week. Concerts on campus and on tours. Lab fee $20.

MUS (1,2,3,4)021. Wind Symphony - 1 hour (Fall, Spring)
Open to all students by audition. Study and performance of works for concert band (woodwinds, brass, percussion and string bass). Four rehearsals per week. Concerts on campus and on tours. Lab fee $20.

MUS (1,2,3,4)031. Chamber Orchestra - 1 hour (Fall, Spring)
Open to all students by audition. Study and performance of works for both string and full orchestra as well as for other combinations involving orchestra string instruments. Three rehearsals per week. Lab fee $20.

MUS/THR (1,2,3,4)041. Opera Theatre - 1 hour (Fall, Spring)
Open to all students by audition. Study and performance of operatic or musical theater solos and ensembles. One major production per year. Lab fee $10.

MUS (1,2,3,4)051. Jazz Ensemble - 1 hour (Fall, Spring)
Open to all students by audition. Study and performance of works for jazz ensemble. Two rehearsals per week. Concerts on campus and on tours. Lab fee $10.

MUS (1,2,3,4)061. Brass Ensemble - 1 hour (Spring)
Open to all students by audition. Various quartets, quintets and choirs. Lab fee $10.

MUS (1,2,3,4)071 - Percussion Ensemble - 1 hour (Fall, Spring)
Open to all students by audition. Various chamber ensembles consisting of percussion instruments. Lab fee $10.

MUS (1,2,3,4)081. Higher Ground - 1 hour (Fall, Spring)
Open to all students by audition. Small ensemble of vocalists and instrumentalists emphasizing contemporary Christian music. Performance on campus and on tour in schools and churches. Vocalists must be enrolled in SBU Chorale or Concert Choir. Lab fee $10.

MUS (1,2,3,4)091. University Band - 1 hour (Fall, Spring)
Open to all students and community members. One/two evening rehearsals per week. Concerts on campus in conjunction with the Wind Symphony. Lab fee $20.

MUS 2111. Community Chorus - 1 hour (Fall, Spring)
Open to all students and community members. One/two evening rehearsals per week. Concerts on campus in conjunction with the Concert Choir. Lab fee $20.
MUS (1,2,3,4)511. Chamber Singers - 1 hour (Fall, Spring)
Open to all students by audition. Vocal ensemble performing chamber literature from major stylistic periods including vocal jazz. Three rehearsals per week. Must be enrolled in SBU Chorale concurrently, or by instructor approval. Lab fee $10.

MUS (1,2,3,4)521. Woodwind Ensemble - 1 hour (Fall, Spring)
Open to all students by audition. Various chamber ensembles consisting of one or more of the following: flutes, oboes, clarinets, saxophones and bassoons. Lab fee $10.

MUS (1,2,3,4)531. String Ensemble - 1 hour (Fall, Spring)
Open to all students by audition. Chamber ensemble consisting of bowed string instruments. Lab fee $10.

NON-CREDIT OPTIONS FOR ENSEMBLE ENROLLMENT
MUS 2010. SBU Chorale – 0 credit hours (Fall, Spring) Lab fee $20.
MUS 2020. Wind Symphony – 0 credit hours (Fall, Spring) Lab fee $20.
MUS 2030. Chamber Orchestra – 0 credit hours (Fall, Spring) Lab fee $20.
MUS 2090. University Band – 0 credit hours (Fall, Spring) Lab fee $20.
MUS 2100. Concert Choir – 0 credit hours (Fall, Spring) Lab fee $20.
MUS 2110. Community Chorus – 0 credit hours (Fall, Spring) Lab fee $20.
MUS 2040. Opera Theatre – 0 credit hours (Fall, Spring) Lab fee $10.
MUS 2050. Jazz Ensemble – 0 credit hours (Fall, Spring) Lab fee $10.
MUS 2060. Brass Ensemble – 0 credit hours (Fall, Spring) Lab fee $10.
MUS 2070. Percussion Ensemble – 0 credit hours (Fall, Spring) Lab fee $10.
MUS 2080. Higher Ground – 0 credit hours (Fall, Spring) Lab fee $10.
MUS 2510. Chamber Singers – 0 credit hours (Fall, Spring) Lab fee $10.
MUS 2520. Woodwind Ensemble – 0 credit hours (Fall, Spring) Lab fee $10.
MUS 2530. String Ensemble – 0 credit hours (Fall, Spring) Lab fee $10.

PRIVATE APPLIED MUSIC (FALL, SPRING)
Private instruction for music majors and minors and intermediate to advanced non-majors. Students should enroll in applied lessons according to the semester of study in the specific applied area (See applied music enrollment criteria). All applied music may be taken for 1 or 2 hours credit. Applied fee $250 per credit hour per semester. Practice room fee $30 per semester.

Enrollment in Applied Conducting presumes previous study in conducting as a prerequisite—this includes MUS 2702 Basic Conducting, along with either: MUS 3722 Instrumental Conducting; or MUS 3712 Choral Conducting and MUS 4712 Choral Techniques.

Enrollment in Applied Composition presumes previous study in music theory as a prerequisite—usually this includes substantial progress in the sequence of music theory courses.

Students who wish to participate in applied music study for no academic credit should enroll in MUS 2200 Applied Music – Applied music for 0 credit hours (1/2 hour lesson each week – applied fee $250).

MUS 2200. Applied Music – 0 credit hours (Fall, Spring) Fee $250.

APPLIED MUSIC ENROLLMENT CRITERIA
1000-level: First or second semester of study
2000-level: Third or fourth semester of study
3000-level: Fifth or sixth semester of study
4000-level: Seventh or more semester of study

(1,2,3,4)20(1,2) Applied Flute
(1,2,3,4)21(1,2) Applied Oboe
(1,2,3,4)22(1,2) Applied Clarinet
(1,2,3,4)23(1,2) Applied Bassoon
(1,2,3,4)24(1,2) Applied Saxophone
(1,2,3,4)25(1,2) Applied French Horn
1,2,3,4)26(1,2) Applied Trumpet
(1,2,3,4)27(1,2) Applied Trombone
(1,2,3,4)28(1,2) Applied Euphonium
(1,2,3,4)29(1,2) Applied Tuba
(1,2,3,4)30(1,2) Applied Percussion
(1,2,3,4)31(1,2) Applied Piano
(1,2,3,4)32(1,2) Applied Organ
(1,2,3,4)33(1,2) Applied Voice
(1,2,3,4)34(1,2) Applied Violin
(1,2,3,4)35(1,2) Applied Viola
(1,2,3,4)36(1,2) Applied Cello
(1,2,3,4)37(1,2) Applied Double Bass
(1,2,3,4)40(1,2) Applied Guitar
(1,2,3,4)41(1,2) Applied Harp
438(1,2) Applied Conducting
439(1,2) Applied Composition

NURSING
NRS 3104 Fundamentals of Nursing Practice- 4 hours (Spring)
Contact hours: 60 classroom
This course introduces fundamentals of nursing practice including the role of the professional nurse, communication, safe patient care, and holistic nursing assessment following evidence-based practice standards.
Co Requisite: NRS 3113. Prerequisites: MAT 1143, CHE 1004, BIO 2204, UNI 1111, PSY 10.13, BIO 3304, BIO 2243, UNI 1121, BIO 2213, CIS 1103.

NRS 3113 Fundamentals of Nursing Practice Clinical- 3 hours (Spring)
Contact hours: 45 clinical 60 lab
This course is the clinical companion for NRS 3105. Students will demonstrate knowledge, skills, and attitudes necessary for safe nursing care using evidence-based practice. Skills are taught in the clinical lab and then applied in patient care settings. Co Requisite: NRS 3104. Prerequisites: MAT 1143, CHE 1004, BIO 2204, UNI 1111, PSY 1013, BIO 3304, BIO 2243, UNI 1121, BIO 2213, CIS 1103.

NRS 3204 Medical Surgical I-Adult and Elderly Care- 4 hours (Fall)
Contact hours: 60 classroom
This course builds on the knowledge from fundamentals of nursing practice NRS 3104 with the introduction of quality improvement. Classroom content includes an emphasis on adult and elderly patients, basic medical/surgical health alterations, teamwork, and collaboration.
Co Requisite: NRS 3313. Prerequisites: NRS 3104, NRS 3113.

NRS 3213 Medical Surgical Nursing I Clinical- 3 hours (Fall)
Contact hours: 45 clinical 60 lab
This course builds on NRS 3104 and NRS 3204 with the introduction of quality improvement, and is the clinical companion for NRS 3204. Clinical experiences are designed to complement didactic content. Students will demonstrate knowledge, skills, and attitudes necessary for safe nursing care using evidence-based practice. Students are expected to increase in skills proficiency and prioritize the delivery of safe, quality nursing care.
Co Requisite: NRS 3204. Prerequisites: NRS 3104, NRS 3113.

NRS 3233 Pharmacology for Nursing Practice- 3 hours (Fall)
Contact hours: 45 classroom
This course introduces the student to the principles of safe medication administration using clinical reasoning. Content will focus on drug classifications and prototypes, adverse effects, patient education, and nursing priorities related to medication administration for patients across the lifespan.
Prerequisites: NRS 3104, NRS 3113.

NRS 3304 Medical Surgical II Complex Adult and Elderly Care- 4 hours (Spring)
Contact hours: 60 classroom
This course builds on the knowledge from Medical Surgical Nursing I NRS 3204. Classroom content includes an emphasis on adult and elderly patients, complex medical/surgical health alterations, neuropsychological, and mental health issues. Associated pharmacological therapies specific to this content will be integrated.
Co Requisite: NRS 3313. Prerequisites: NRS 3104, NRS 3113, NRS 3233, PSY 3063.

NRS 3313 Medical Surgical Nursing II Clinical- 3 hours (Spring)
Contact hours: 90 clinical, 30 lab
This course builds on NRS 3204 and NRS 3213 and is the clinical companion for NRS 3304. Clinical experiences are designed to complement didactic content. Students will demonstrate knowledge, skills, and attitudes necessary for safe nursing care using evidence-based practice. Students are expected to demonstrate skills competency and use...
clinical reasoning to guide interventions, delegation, and collaboration to promote patient-centered, comprehensive
nursing care. Co Requisite: NRS 3304. Prerequisites: NRS 3104, NRS 3113, NRS 3233, PSY 3063.

NRS/NUR/HSC 3453 Spirituality in Health Care – 3 hours
Contact hours: Online Instruction- 8 weeks
This course explores personal Christian spiritual development, theory, and diverse models of spirituality
emphasizing their impact on health care settings. Spiritual practices and the responsibilities and issues of spiritual
care are examined. Christian discipleship and a Christian theology are discussed as they apply to professional
practice in a secular environment.

NRS/NUR/HSC 3563 Health Care Informatics – 3 hours
Contact hours: Online Instruction- 8 weeks
This course focuses on the investigation of computer technology and information science to identify, gather, process
and manage information. An understanding of information and technology theory, computer and decision-making
systems, data management and electronic information retrieval will be presented with relevance to patient care,
health care management and health care research. Prerequisites: CIS 1103 or other approved CIS course.

NRS/NUR/HSC 4013 Health Care in Culturally Diverse Populations – 3 hours
Contact hours: Online Instruction- 8 weeks
This course explores current issues in healthcare pertaining to culturally diverse populations from a Christian
perspective. Students will examine the theoretical, social, economic, political, environmental, and religious factors
that affect health in different cultural groups. This course identifies therapeutic healthcare practices for culturally
diverse patients, families, and communities.

NRS/NUR/HSC 4023. Health Care Finance - 3 credit hours (On demand)
This course examines financial principles, techniques, vocabulary, and procedures used to manage health care
budgets and operations. Students will learn how to assess the health care financial environment, seek appropriate
data, analyze information, and apply the results to the management of daily operations, using a Christian approach to
fiscal responsibilities. ASN, BSN or RN-BSN course elective.

NRS 4102 Maternal Child & Family Health- 2 hours (Fall)
Contact hours: 30 classroom
This course introduces the student to knowledge and evidence based practices necessary for the delivery of safe
professional nursing care to childbearing and childrearing families from diverse populations. Associated
pharmacological therapies specific to this content will be integrated. Co Requisite: NRS 4112. Prerequisites: NRS
3304, NRS 3313.

NRS 4112 Maternal Child & Family Health Clinical- 2 hours (Fall)
Contact hours: 30 lab, 45 clinical
This course is the clinical companion for NRS 4012. Clinical experiences are designed to complement the didactic
content. Students will demonstrate knowledge, skills, and attitudes necessary for safe nursing care using evidence-
based practice. Clinical application includes experiences in obstetrical care, labor and delivery, and pediatrics. Co
Requisite: NRS 4102. Prerequisites: NRS 3304, NRS 3313.

NRS/NUR/HSC 4333 Research and Evidence Based Practice- 3 hours.
Contact hours: Online Instruction: 8 weeks
This course introduces students to the elementary components of the research process and the application of research
to professional practice including the retrieval of relevant literature and critical appraisal. An emphasis is placed on
the combined use of literature, clinical judgment, interprofessional perspectives, and patient preferences to guide
practice decisions. Legal and ethical conduct for health care professionals involved in research and quality
improvement involving diverse populations are examined. The role of theory in the research process with
contribution to the development of health care knowledge is explored. ASR or BSHS course elective.

NRS 4403 Advanced Health Assessment & Critical Care (Fall)
Contact hours: 15 classroom, 45 clinical, 30 lab
This course builds on the knowledge from NRS 3304. Classroom content includes an emphasis on advanced health
assessment and specialized nursing care of patients, critical injuries, emergencies, and trauma. Clinical experiences
are designed to complement the didactic content. Students will demonstrate knowledge, skills, and attitudes
necessary for safe nursing care using evidence-based practice. Associated pharmacological therapies specific to this
content will be integrated.

NRS/NUR 4404 Community Health- 4 hours (Fall, Spring)
Contact hours: 45 clinical
This course focuses on the health of the community, including the holistic care of populations across the lifespan.
Practice experiences are designed to complement the didactic content. Students will demonstrate knowledge, skills,
and attitudes necessary for safe nursing care using evidence-based practice. Comprehensive health promotion, health maintenance and disease prevention are emphasized and include the historical, economic, social, cultural, and political influences of population health.

NRS/NUR 4423. Clinical Case Management - 3 hours (On demand)
This course focuses on nursing case management of the individual/family unit experiencing a life threatening illness or accident. Nursing, family, stress, crisis, and teaching learning theories will be examined. Prerequisites: BIO 4404, NUR 3303. ASN, BSN or RN-BSN course elective.

NRS/NUR/HSC 4434 Administration & Leadership – 4 hours
Contact hours: Online Instruction: 8 weeks
This course prepares students to provide high quality patient care exploring principles of organizational and systems leadership, including quality improvement, and safety through practice experiences. The course incorporates knowledge and communication strategies within interprofessional teams, care coordination, delegation, and developing conflict resolution strategies to be effective leaders and administrators in a complex and dynamic health care setting. Management theories and concepts are emphasized. Professional issues related to work-life balance, healthy work environments, and resource assistance in building a nursing career are also considered.

NRS 4501 NCLEX Review - 1 hour (Spring)
Contact hours: 15 classroom
This course will focus on preparing and evaluating student readiness for the NCLEX-RN licensure examination through intensive topic and course-specific practice examinations integrated from an online, standardized assessment product. Co Requisites: NRS 4544. Prerequisites: NRS 4403.

NRS 4544 Transition to Nursing Practice Preceptorship- 4 hours (Spring)
Contact hours: 15 classroom, 135 clinical
This course integrates leadership principles, ethical/legal considerations, healthcare regulations, and cultural considerations with comprehensive assessment skills and clinical competencies required for safe, quality patient-centered care. Clinical application is obtained through a preceptor-guided experience to prepare the student for entry into professional nursing practice. Co Requisites: NRS 4501. Prerequisites: NRS 4102, NRS 4112, NRS/NUR 4333, NRS/NUR 4013, NRS/NUR 4204, NRS/NUR 3563, NRS/NUR 3453.

NUR/HSC 0011. Student Success Academy - 1 hour (1 hour didactic)
(Contact hours: 30 classroom, 45 clinical)
This course introduces study strategies available to students to promote the successful completion of a program within the nursing and health sciences department. The clinical experiences will be determined by the faculty to ensure the student maintains competency. Clinical experiences are designed to complement the individual student based on individual needs and semester enrolled. This course is required if a student is unsuccessful in any of the NUR 1000/2000 level courses except (NUR 1011, NUR 1021, or NUR 2031). Prerequisites: CHE 1004 or CHE 1104, BIO 2204, BIO 3304, BIO 2213. The following are co-requisite if not previously completed: CIS-1103, PSY-1013, ENG 1113, and PSY 3063. Professional Fee: $400.

NUR 1004. Foundations in Safe Nursing Practice - 4 hours (3 hours didactic, 1 hour lab)
(Contact hours: 45 Classroom, 30 Lab)
Emphasizes health promotion, including self-health and patient health practices. Students build an understanding of concepts foundational to the role of the professional nurse with an emphasis on the assessment of the healthy client across the lifespan. Clinical experiences allow students the opportunity to apply essential nursing knowledge, skills, and attitudes to provide safe patient-centered care. Professional Fee: $400.

NUR 1011. Pharmacology for Nursing I - 1 hour (Didactic only)
(Contact hours: 15 Classroom)
The basic principles of pharmacokinetics will be introduced and the nurse's role in safe medication administration will be reinforced. Medications that promote health and prevent illness and disease across the lifespan will be emphasized. Prerequisites: CHE 1004 OR CHE 1104, BIO 2204, BIO 3304, BIO 2213, NUR 1004. The following are co-requisite if not previously completed: CIS 1103, PSY 1013, NUR 1014. This course may not be taken concurrently with the other Pharmacology courses (NUR 1021 or NUR 2031. Professional Fee: $400.

NUR/HSC 1013. Medical Terminology - 3 hours. (On demand)
This course focuses on the basic principles of medical terminology and application to the day-to-day work of allied health personnel. This course does not fulfill the elective requirement for the B.S.N. program. This course is an elective for the pre-nursing and ASN programs.

NUR 1014. Intro to Nursing Across the Lifespan - 4 hours (2 hours didactic, 1 hour clinical, 1 hour lab)
(Contact hours: 30 Classroom, 45 Clinical, 30 Lab).
Knowledge of growth and development will be used to develop a plan of prevention for at-risk patients across the lifespan. Varied clinical experiences will allow the students opportunities to apply essential nursing knowledge, skills, and attitudes to provide safe patient-centered care. Varied clinical experiences will allow the students opportunities to apply essential nursing knowledge, skills and attitudes to provide safe patient-centered care. 75 contact hours of clinical will be included. Prerequisites: CHE 1004 or CHE 1104, BIO 2204, BIO 3304, BIO 2213, NUR 1004. The following are co-requisite if not previously completed: NUR 1021, ENG 1113, NUR 1011. Professional Fee: $400.

NUR 1021. Pharmacology for Nursing I - 1 hour (didactic only)
(Contact hours: 15 Classroom)
Previously learned pharmacological content will be reinforced and expanded upon. Understanding the nurses’ role in medication administration for patients with physiologic and psychosocial chronic and sub-acute conditions across the lifespan will be emphasized. Prerequisites: CHE 1004 or CHE 1104, BIO 2204, BIO 3304, BIO 2213, CIS 1103, PSY 1013, NUR 1004, NUR 1014, NUR 1011. The following are co-requisite if not previously completed: NUR 1024, NUR 1034, ENG 1113, PSY 3063. This course may not be taken concurrently with the other Pharmacology courses (NUR 1011 or NUR 2031). Professional Fee: $400.

NUR 1024. Patient Centered Care I - 4 hours (2 hours didactic, 2 hours clinical)
(Contact hours: 30 Classroom, 90 Clinical)
Previously learned content will be reinforced and expanded upon. Based on knowledge of the comprehensive assessment of patients across the lifespan, concepts related to chronic and sub-acute physiologic conditions will be introduced. Varied clinical experiences will allow the students opportunity to apply essential nursing knowledge, skills, and attitudes to provide safe patient-centered care. 90 contact hours of clinical will be included. Prerequisites: CHE 1004 or CHE 1104, BIO 2204, BIO 3304, BIO 2213, CIS 1103, PSY 1013, NUR 1004, NUR 1014, NUR 1011. The following are co-requisite if not previously completed: NUR 1021, ENG 1113, PSY 3063. Professional Fee: $400.

NUR 1034. Patient Centered Care II - 4 hours (2 hours didactic, 2 hours clinical)
(Contact hours: 30 Classroom, 90 Clinical)
Previously learned content will be reinforced and expanded upon. Based on knowledge of the comprehensive assessment, students will prioritize care of patients across the lifespan who have chronic and sub-acute physiologic and psychosocial conditions. Varied clinical experiences will allow the students opportunities to apply essential nursing knowledge, skills and attitudes to provide safe patient-centered care. 90 contact hours of clinical will be included. Prerequisites: CHE 1004 or CHE 1104, BIO 2204, BIO 3304, BIO 2213, CIS 1103, PSY-1013, NUR 1004, NUR 1014, NUR 1011, NUR 1024. The following are co-requisite if not previously completed: NUR 1021, ENG 1113, PSY 3063. Professional Fee: $400.

NUR 1104. Paramedic/Advanced Placement Bridge - 4 hours (2 hours didactic, 2 hours clinical)
(Contact hours: 30 classroom, 90 clinical)
This course introduces paramedics to professional nursing practice ranging from basic concepts and theories to care for the medical and surgical patients as in the first and second semester nursing courses. Technical skills and pharmacological interventions will be reviewed in the learning resource center, in the classroom, and with guided self-study. Clinical experiences provide opportunities to apply learned classroom knowledge. Sub-concepts of nursing including caring, communication, client education and accountability will be discussed. Prerequisites: BIO 2204, BIO 2213, BIO 3304, CHE 1004 or CHE 1104, ENG 1113, PSY 1013, admission to the ASN program and current Missouri paramedic licensure. Advanced placement into third semester nursing courses is granted upon successful completion of this course, with 14 nursing hours being waived for previous paramedic education. Professional Fee: $400.

NUR 1223. Transfer Nursing Course II – 3 hours
Nursing students transferring into the 2nd semester from another accredited program will be required to take this course which will introduce them to the skills and procedures utilized within the ASN program. The technical skills, professional nursing concepts, and pharmacological interventions (if needed) covered in first semester will be reviewed in the learning resource center, in the classroom, and via interactive assignments utilizing the SBU learning management system. Clinical experiences will provide opportunities to apply learned classroom knowledge and orientation to the clinical environment. Prerequisites: CHE 1004 or CHE 1104, BIO 2204, BIO 3304, BIO 2213. Advanced placement into second semester nursing courses granted on successful completion of this course, with 6 additional nursing hours granted for previous nursing education. Advanced placement into second semester nursing courses granted on successful completion of this course, with additional nursing hours granted for previous nursing education. Professional Fee: $400.

NUR 2003. LPN Bridge - 3 hours (2 hours didactic, 1 hour clinical)
(Contact hours: 30 classroom/independent study, 45 clinical)
This course introduces LPN’s to professional nursing practice ranging from basic concepts and theories to care of the medical and surgical patients as found in the first and second semester courses. Technical skills and pharmacological interventions are reviewed in the learning resource center, in the classroom and with guided self-study. Clinical experiences provide opportunities to apply learned classroom knowledge. Sub-concepts of nursing including caring, communication, client education and accountability will be discussed. Prerequisites: BIO 2204, BIO 3304, CHE 1004 or CHE 1104, ENG 1113, PSY 1013, admission to the program, and current LPN Missouri License. Advanced placement into third semester nursing courses is granted upon successful completion of this course with 15 hours of nursing credits being waived for previous LPN education. Prerequisites: CHE 1004, BIO 2204, BIO 3304, BIO 2213.

The following are co-requisite if not previously completed: CIS-1103, PSY 1013. Professional Fee: $400.

NUR 2014. Advanced Patient Centered Care I - 4 hours (2 hours didactic, 2 hours clinical)
(Contact hours: 30 Classroom, 90 Clinical)
Previously learned content will be reinforced and expanded upon. Students will focus on patient-centered evidence-based care across the lifespan with emphasis on the child-bearing experience and care of patients with complex health conditions. Varied clinical experiences will allow the students opportunities to apply essential nursing knowledge, skills, and attitudes to provide safe patient-centered care. 90 contact hours of clinical will be included. Prerequisites: CHE 1004 or CHE 1104, BIO 2204, BIO 3304, BIO 2213, CIS 1103, PSY 1013, ENG 1113, PSY 3063, NUR 1004, NUR 1014, NUR 1011, NUR 1024, NUR 1034, NUR 1021. The following are co-requisite if not previously completed: NUR 2031. Professional Fee: $400.

NUR 2024. Advanced Patient Centered Care II - 4 hours (2 hours didactic, 2 hours clinical)
(Contact hours: 30 Classroom, 90 Clinical)
Previously learned content will be reinforced and expanded upon. Students will focus on patient-centered evidence-based care across the lifespan with emphasis on patients with multi-system health conditions. Varied clinical experiences will allow the students opportunities to apply essential nursing knowledge, skills, and attitudes to provide safe patient-centered care. 90 contact hours of clinical will be included. Prerequisites: CHE 1004 or CHE 1104, BIO 2204, BIO 3304, BIO 2213, CIS 1103, PSY 1013, ENG 1113, PSY 3063, NUR 1004, NUR 1014, NUR 1011, NUR 1024, NUR 1034, NUR 1021, NUR-2014. The following are co-requisite if not previously completed: NUR 2031. Professional Fee: $400.

NUR 2031. Pharmacology for Nursing III - 1 hour (didactic only)
(Contact hours: 15 Classroom)
Previously learned pharmacological content will be reinforced and expanded upon. Understanding the nurses’ role in medication administration for patients with child-bearing and complex multi-system health conditions across the lifespan will be emphasized. Prerequisites: CHE 1004 or CHE 1104, BIO 2204, BIO 3304, BIO 2213, CIS 1103, PSY 1013, ENG 1113, PSY 3063, NUR 1004, NUR 1014, NUR 1011, NUR 1024, NUR 2024, NUR 2021. The following are co-requisite if not previously completed: NUR 2014, NUR 2024. This course may not be taken concurrently with the other Pharmacology courses (NUR 1011 or NUR 2021). Professional Fee: $400.

NUR 2034. Complex Patient Centered Care - 4 hours (2 hours didactic, 2 hours clinical)
(Contact hours: 30 Classroom, 90 Clinical)
Previously learned content will be reinforced and expanded upon. Students will focus on patient-centered evidence-based care across the lifespan with emphasis on patients with emergent health conditions, triage, and disaster/mass casualty planning. Varied clinical experiences will allow the students opportunities to apply essential nursing knowledge, skills, and attitudes to provide safe patient-centered care. 90 contact hours of clinical will be included. Prerequisites: CHE 1004 or CHE 1104, BIO 2204, BIO 3304, BIO 2213, CIS 1103, PSY 1013, ENG 1113, PSY 3063, NUR 1004, NUR 1014, NUR 1011, NUR 1024, NUR 1034, NUR 1021, NUR 2024, NUR 2021. The following are co-requisite if not previously completed: BIO 2243, BIB 1013/1213, BIB 1023/1223. Professional Fee: $400.

NUR 2044. Nursing Role Integration - 4 hours (1 hour didactic, 3 hours clinical)
(Contact hours: 15 Classroom, 135 Clinical)
This capstone course will focus on the application of advanced concepts and skills central to professional nursing with an emphasis on the nursing domains of leadership, management of care, professionalism and servant leadership. A preceptor experience is included in the course with 135 contact hours of clinical to allow the student to safely transition into the role of the professional nurse. Prerequisites: CHE 1004 or CHE 1104, BIO 2204, BIO 3304, BIO 2213, CIS 1103, PSY 1013, ENG 11113, PSY 3063, NUR S004, NUR 1014, NUR 1011, NUR 1024, NUR 1034, NUR 1021, NUR 2014, NUR 2024, NUR 2031. The following are co-requisite if not previously completed: BIO 2243, BIB 1013/1213, BIB 1023/1223. Professional Fee: $400.
NUR 2051. NCLEX Preparation – (1 hour hybrid)
This course is designed to prepare students for the NCLEX-RN licensure exam. NCLEX Preparation Transition to Practice is a senior level course designed to assist students in assimilating core nursing content as they prepare to sit for the NCLEX®-RN licensure exam and enter practice. It promotes student success by providing opportunities to improve and develop study skills through guided intense preparation and interactive critical thinking activities. The course builds on the student’s understanding of the core content presented in Hurst’s Critical Thinking and Application NCLEX Review program. The course aids the student in enhancing their critical reasoning and communication skills based on best practices. Professional Fee: $400.

NUR 2333. Transfer Nursing Course III – 3 hours
Nursing students transferring into the 3rd semester from another accredited program will be required to take this course which will introduce them to the skills and procedures utilized within the ASN program. The technical skills, professional nursing concepts, and pharmacological interventions (if needed) covered in first and second semester will be reviewed in the learning resource center, in the classroom, and via interactive assignments utilizing the SBU learning management system. Clinical experiences will provide opportunities to apply learned classroom knowledge and orientation to the clinical environment. Prerequisites: CHE 1004 or CHE 1104, BIO 2204, BIO 3304, BIO 2213. Must also have at least 4 of the 7 General Education requirements already completed (English I, Intro to Computing, General Psychology, Nutrition, Human Growth and Development, Old Testament History. New Testament History). Advanced placement into third semester nursing courses granted on successful completion of this course, with additional nursing hours granted for previous nursing education. Professional Fee: $400.

NUR/HSC 3003. Legal and Ethical Issues for Health Professionals - 3 credit hours (Fall, Spring)
This course introduces ethical and legal concepts. Explores the basic principles of ethics and the law and how they affect health care decisions. Examines the responsibilities of health care professionals in legal matters and ethical dilemmas. Emphasizes a Christian approach to the law and ethics in health care. ASN or BSN course elective.

NUR/HSC 3013. Organization and Delivery of Health Care - 3 hours (Fall, Spring)
This course provides an overview of health care delivery systems, examining such influencing forces as history, values and resources. Considers the role of reimbursement methods, technology, personnel and public policy in health care delivery. Explores the structures, processes, outcomes and challenges of the U.S. health care system. ASN or BSN course elective.

NUR 3023. Faith Community Nursing - 3 hours (On demand)
This course explores the role of nursing in the faith community. The unique dimensions of nursing in the church will be examined as well as an overview of health, healing, and wholeness from a variety of faith traditions and perspectives. The role of the faith community is considered in the light of scripture and Christian traditions. ASN or BSN course elective.

NUR 3033. Care at the End of Life - 3 hours (On demand)
This course examines professional concepts to guide care at the end of life. The concepts build on prior education and experience to enhance professional growth. These concepts include evidence-based practice, ethics, decision-making processes, grief and loss, and future trends in health care. ASN or BSN course elective.

NUR/HSC 3043. Missionary Nursing- 3 hours (Summer)
The focus of this course is on the MCONHS annual Ecuador nursing missions trip. This course examines the culture of the area, our mission as nurses, Christ’s call upon our lives, and the ministry of nursing. ASN or BSN course elective.

NUR 3053. Diabetes Across the Lifespan - 3 hours (On demand)
This course will emphasize current research, clinical practice guidelines, patient education, and patient experience of diabetes as a disease. The course will provide a general overview of the disease along with helping the students better understand the diabetes experience and how to educate/provide nursing care to the diabetic client. ASN or BSN course elective.

NUR 3063. Emergency Preparedness – 3 hours (On demand)
This course examines the challenges that all nurses have when preparing for hazards and emergencies that can occur in our communities. Nurses must plan for pandemic influenza, chemical, biological, radiological/nuclear, and explosive events, mass casualty incidents, natural and environmental disasters, and surge capacity to accommodate victims. This course provides an overview of the essential knowledge and skills for nurses to prepare for disasters, manage disasters, and meet the spiritual needs of victims. ASN or BSN course elective.

NUR/HSC 3073. Patient Education and Health Promotion- 3 hours (On demand)
This course focuses on patient education and health promotion methods for a variety of clinical settings. Students will go through the educational nursing process of assessment of client’s needs, establishing nursing diagnoses, writing learning objectives, establishing learning activities/ interventions, and evaluation of their educational intervention and
learning objectives. Health promotion and health belief models and theories will be integrated into this patient
education process. Students will examine techniques of, and barriers to, health education in various health care
settings. ASN or BSN course elective.

**NUR/HSC 3083. Clinical Genetics - 3 hours (On demand)**

This course focuses on the fundamentals of genetics. The course is designed to give the student a basic understanding
of genetic concepts so that this knowledge can be utilized to understand current and future genetic theories and
therapeutics. ASN, BSHS, or BSN course elective.

**NUR/NRS/HSC 3093. Survey of Human Anatomy and Physiology for Nursing and Health Sciences - 3 hours (Fall, Spring)**

This course is designed as a refresher course for students who have outdated (>5 years) coursework in human anatomy
and physiology. The course will be offered as an accelerated compendium of key concepts of human anatomy and
physiology.

**NUR/HSC 3103. Basics of APA Writing in Health Care - 3 hours (On demand)**

This course introduces students to the basic organization of the sixth edition of the Publication Manual. Students will
be provided guidelines to format reports, essays, and research documents according to the standards set by the
American Psychological Association (APA), 6th edition, or the most updated edition of the Publication Manual. This
course will develop a standard writing practice for clarity in layout, punctuation, grammar, spelling, font size, and type
by creating an overall consistency in the final documents recognized by publishers throughout the industry. The course
will also provide defining foundational expectations and standards that foster and develop strong communication skills
for the student to listen, write, and speak effectively to promote respect and credibility.

**NUR/HSC 3203. Transition to the BSN Role - 3 hours (On demand)**

This course introduces students to baccalaureate nursing standards. The core competencies of the RN-BSN program
are introduced. These competencies include leadership principles, professional standards, research and evidence based
practice, health information technology, health promotion, holistic assessment, and patient education. The
fundamentals of successful learning in the online environment are introduced. Foci include assessing information and
resources, professional communication, and the development and maintenance of a professional portfolio. The
integration of Christian principles and liberal arts education to professional practice are explored.

**NUR 3303. Health Assessment - 3 hours (3 hours didactic) (Fall, Spring) Curriculum lab fee: $100**

This course will emphasize the assessment phase of the nursing process, which will include expanded history, physical
examination, and the skills to perform both for patients throughout the lifespan. Several different types of health
assessment approaches will be covered including: holistic, focused, systems, and complete head-to-toe physical
examinations. As well, the student will learn to define levels of patient care and to vary assessment techniques
accordingly. Critical thinking and assessment skills will be enhanced through practice experiences. Prerequisite:
Current RN license. Critical thinking, assessment skills, and lab didactics will be evaluated through at home practice
and online instruction.

**NUR 3363. Pharmacological and Complementary Therapies - 3 hours (On demand)**

This course expands the student’s ability to counsel clients about which approaches are evidence-based and which
lack this background. This course explores therapies for disease as well as health and wellness. Examines allopathic
pharmaceutical interventions seeking to develop a clearer understanding of how drugs affect the body across the life
span (e.g., pharmacodynamics, pharmacokinetics). Prerequisites: BIO 2204, BIO 3304 and BIO 4404 or permission
of instructor. ASN or BSN course elective.

**NUR/HSC 3373. Professional Health Care Practice - 3 hours (Fall, Spring)**

This course examines professional concepts and nursing theories that guide nursing practice. The concepts build on
prior education and experience to enhance professional growth. These concepts include evidence-based practice,
ethics, professional organizations, political action, health care economics, and future trends in health care.

**NUR 3383. Gerontological Nursing - 3 hours (Fall, Spring)**

This course addresses relevant topics directed at optimum nursing interventions of older adults. Students will examine
the holistic effects of aging as well as issues specific to the older adult.

**NUR/NRS/HSC 3453. Spirituality in Health Care – 3 hours (Fall, Spring)**

This course explores personal Christian spiritual development, theory, and diverse models of spirituality emphasizing
their impact on health care settings. Spiritual practices and the responsibilities and issues of spiritual care are examined.
Christian discipleship and a Christian theology are discussed as they apply to professional practice in a secular
environment.

**NUR/NRS/HSC 3563. Health Care Informatics - 3 hours (Fall, Spring)**

This course investigates concepts of computer technology and information science to identify, gather, process and
manage information. This course focuses on an understanding of information and technology theory, computer and
decision-making systems, data management and electronic information retrieval will be presented with relevance to patient care, health care management and health care research. Prerequisite: CIS 1103.

**NUR/NRS/HSC 4013. Health Care in Culturally Diverse Populations - 3 credit hours (Spring, Summer, Fall)**

This course explores current issues in health care pertaining to culturally diverse populations from a Christian perspective. Students will examine the theoretical, social, economic, political, environmental, and religious factors that affect health in different cultural groups. This course identifies therapeutic healthcare practices for culturally diverse clients, families, and communities.

**NUR/HSC 4023. Health Care Finance - 3 credit hours (On demand)**

This course focuses on the health of the community, including the holistic care of populations across the lifespan. Practice experiences are designed to complement the didactic content. Students will demonstrate knowledge, skills, and attitudes necessary for safe nursing care using evidence-based practice. Comprehensive health promotion, health maintenance and disease prevention are emphasized and include historical, economic, social, cultural, and political influences of population health. ASN or BSN course elective.

**NUR 4123/NUR 5123 Information Systems – 3 hours**

This course is an advanced course that combines knowledge of computer science, information systems, and nursing science to assist in the management and processing of nursing data, information, knowledge, and wisdom to support nursing practice and improve the delivery of nursing care. Students will learn how information systems design and selection, health care decision support, and clinical guidelines impact the delivery of health care. Students will explore a comprehensive approach to system selection, evaluation, and implementation, project management, and regulatory policies that impact health care. Prerequisites: Minimum GPA 3.0, Final year of RN-BSN courses

**NUR/NRS/HSC 4333. Research and Evidence Based Practice - 3 hours (Fall, Spring)**

This course introduces students to the elementary components of the research process and the application of research to professional practice including the retrieval of relevant literature and critical appraisal. An emphasis is placed on the combined use of literature, clinical judgment, interprofessional perspectives, and patient preferences to guide practice decisions. Legal and ethical conduct for health care professionals involved in research and quality improvement involving diverse populations are examined. The role of theory in the research process with contribution to the development of health care knowledge is explored. ASR or BSHS course elective.

**NUR/NRS 4404. Community Health - 4 hours (3 hours didactic, 1 hour practice experience) (Fall, Spring)**

This course focuses on the health of the community, including the holistic care of populations across the lifespan. Practice experiences are designed to complement the didactic content. Students will demonstrate knowledge, skills, and attitudes necessary for safe nursing care using evidence-based practice. Comprehensive health promotion, health maintenance and disease prevention are emphasized and include the historical, economic, social, cultural, and political influences of population health. Prerequisite: current RN license for RN-BSN students only.

**NUR 4423. Clinical Case Management - 3 hours (On demand)**

This course focuses on nursing case management of the individual/family unit experiencing a life threatening illness or accident. Nursing, family, stress, crisis, and teaching learning theories will be examined. Prerequisites: BIO 4404, NUR 3303. ASN or BSN course elective.

**NUR/NRS/HSC 4434. Administration and Leadership - 4 hours (4 hours didactic) (Fall, Spring)**

This course prepares students to provide high quality patient care exploring principles of organizational and systems leadership, including quality improvement, and safety through practice experiences. The course incorporates knowledge and communication strategies within interprofessional teams, care coordination, delegation, and developing conflict resolution strategies to be effective leaders and administrators in a complex and dynamic health care setting. Management theories and concepts are emphasized. Professional issues related to work-life balance, healthy work environments, and resource assistance in building a nursing career are also considered.

**NUR/HSC 445(1-4). Special Topics in Nursing - 1-4 hours (On demand)**

A study of topics from one or more fields chosen to meet students' special and/or advanced needs and interests. Potential topics include alternative modes of care delivery, nurse entrepreneurship, and nursing specialties such as staff development nursing and critical care nursing. ASN, BSHS, or BSN course elective.

**NUR 4442. Capstone - 2 hour (Spring, Fall) Curriculum lab fee: $200**

This course provides an exploration and synthesis of nursing knowledge learned throughout the RN-BSN program. Assignments include direct and indirect measurements of the RN-BSN student learning program level outcomes. Students will reflect on and evaluate their achievement of the RN-BSN student learning program level outcomes. Prerequisites: Current RN license. This class is limited to students who are enrolled in the final semester of senior year and intend to graduate at the end of this semester.
NUR 4533/ NUR 5533 Statistics and Data Analysis for Nursing – 3 hours
This course examines the analysis and application of statistical methods in the interpretation of biological data. The uses of descriptive and inferential statistics are included with an emphasis on advanced understanding of evidence-based research using chi-square, t-test, multiple regression, correlation, ANOVA/MANOVA, power analysis, factor analysis, and select non-parametric tests. The course focuses on the ability of the student to critically read and understand nursing research. Prerequisite: Minimum GPA 3.0, Final year of RN-BSN courses, PSY 3243

NUR/HSC 499(1–3). Independent Studies - 1-3 hours (On demand)
Student-proposed topics in nursing practice, education or research which are approved by faculty and department chair for independent study. ASN, ASR, BSHS, or BSN course elective.

PARAMEDICAL
PAR 1004. Introduction to Paramedic Science - 4 hours (Fall, Spring)
This course serves to introduce the student to the role of the Advanced Life Support Provider. Topics covered include roles and responsibilities of ALS providers, medical terminology, self-care, introduction to pharmacology, and initial patient stabilization and management. Students will learn how to obtain a history and perform a physical assessment on a patient.

PAR 1005. Clinical and Field Experience I - 5 hours (Fall, Spring)
This clinical course serves to introduce the student to the role of the Advanced Life Support Provider. Topics covered include roles and responsibilities of ALS providers, medical terminology, introduction to pharmacology, and initial patient stabilization and management. Students will learn how to obtain a history and perform a physical assessment on a patient. This course must be taken in conjunction with PAR 1004. This course is the complementary clinical component of PAR1004.

PAR 1104. The Trauma Patient - 4 hours (Fall, Spring)
This course provides students with a comprehensive course in the pathophysiology, kinematics, and management of the trauma patient. Topics include multi-system traumas, spinal injury, head injury, orthopedic injury, and burns.

PAR 1105. Clinical and Field Experience II - 5 hours (Fall, Spring)
This course focuses on the clinical management of selected diseases, based on body systems. These include infectious and communicable diseases, allergies and anaphylaxis, behavioral disorders, toxicology and hematology, vascular, neurological, endocrine, renal, urogenital, gastrointestinal systems and associated emergencies. This course must be taken in conjunction with PAR 1014. This course is the complementary clinical component of PAR1014.

PAR 1026. Special Considerations in Trauma - 6 hours (Fall, Spring)
This class provides students with the opportunity to study how growth and development impacts the delivery of emergency care. Topics include pediatric and neonatal emergencies, obstetrical care, geriatric emergencies, and age-appropriate care. Provisions for providing emergency care to all age groups are presented. The normal physiological changes of aging are reviewed.

PAR 2004. Medical Emergencies - 4 hours (Fall, Spring)
This course is an introduction to the pathophysiology and management of selected diseases, based on body systems. These include infectious and communicable diseases, allergies and anaphylaxis, behavioral disorders, toxicology and hematology, vascular, neurological, endocrine, renal, urogenital, gastrointestinal systems and associated emergencies. An overview of common laboratory and diagnostics tests is presented.

PAR 2005. Clinical and Field Experience III - 5 hours (Fall, Spring)
This clinical course is the management of selected diseases, based on body systems. These include infectious and communicable diseases, allergies and anaphylaxis, behavioral disorders, toxicology and hematology, vascular, neurological, endocrine, renal, urogenital, gastrointestinal systems and associated emergencies. This course is the complementary course to PAR 2004. It must be taken concurrently with PAR 2004.

PAR 2014. Operational Management - 4 hours (Fall, Spring)
This course is an overview course covering all aspects of field practice including roles and responsibilities, medical control, written/oral communications, occupational stress, safety and legal considerations. Protocol interpretation and introduction to research design are covered.

PAR 2015. Clinical and Field Experience IV – 5 hours (Fall, Spring)
This course is the clinical course that requires the student to demonstrate mastery of aspects of field practice including roles and responsibilities, medical control, written/oral communications, occupational stress, safety and legal considerations. Protocol interpretation and introduction to research design are covered. This is the complimentary course to PAR 2014. It must be taken concurrently with PAR 2014.
PHI 2013. Philosophical Foundations for a Christian Worldview - 3 hours (Fall, Spring)
Introduction to historical and/or contemporary philosophical questions, problems, issues, and figures, with special emphasis on topics relevant to constructing and defending a coherent, philosophically adequate, Christian worldview.

PHI 3013. Logic and Language - 3 hours (On demand)
Examination of philosophical methods of evaluating arguments, with special emphasis on natural deduction. Possible coverage of additional topics in philosophy of logic and/or philosophy of language. Prerequisite: PHI 2013 or permission of instructor.

PHI 4013. Philosophy of Religion - 3 hours (Spring, even years)
Critical analysis of central problems and issues in philosophy of religion, including such topics as the attributes of God, arguments for and against God’s existence, the relationship of faith and reason, divine foreknowledge and human freedom, the problem of religious diversity, and the possibility and nature of religious experience, miracles, and immortality. Prerequisite: PHI 2013.

PHI 4043. Ethics - 3 hours (On demand)
Critical analysis of prominent historical and contemporary views in ethics, with special attention given to Christian approaches. Exploration of various issues in metaethics (philosophical questions about ethics itself, including the grounding of moral obligation, moral motivation, and the challenge of ethical relativism), normative ethics (theories of right and wrong, such as utilitarianism, Kantianism, and virtue theory), and applied ethics (contemporary ethical issues, such as abortion, euthanasia, and capital punishment). Prerequisite: PHI 2013.

PHI 4153. Metaphysics - 3 hours (On demand)
Critical analysis of central problems and issues in metaphysics, including such topics as the fundamental constituent(s) of reality, the nature of existence and truth, the relationship of mind and body, free will, personal identity, the reality of the external world, and the nature of space and time. Prerequisite: PHI 2013.

PHI 4163. Epistemology - 3 hours (On demand)
Critical analysis of central problems and issues in epistemology, including such topics as the analysis of knowledge; theories of justification, truth, and perception; knowledge of the external world and the challenge of skepticism; the problem of induction; the possibility of religious knowledge; and the ethics of belief. Prerequisite: PHI 2013.

PHI 4213. Kierkegaard – 3 hours (On demand)
This course introduces students to the thought and writings of Søren Kierkegaard, one of the most important and influential Christian thinkers of the nineteenth century. The course is designed to help students grasp the major themes of the Kierkegaardian corpus, with an eye towards personal appropriation of the critiques Kierkegaard levels at his Christian readers. Special emphasis is placed on those works with clear application to contemporary Christian thought. Prerequisite: PHI 2013

PHI 4223. God and Freedom – 3 hours (On demand)
This course discusses several problems that arise from the way that God’s existence and nature bear on the topic of freedom. The first part of the course addresses the alleged threat to human freedom posed by divine foreknowledge and divine sovereignty. The second part of the course develops the problem of divine freedom. The issue here is whether God’s essential nature restricts the range of actions that are possible for God to perform, and if so, whether God thereby fails to be morally responsible or praiseworthy for His actions. Prerequisite: PHI 2013

PHI 4233. Atheism – 3 hours (On demand)
This course introduces students to several facets of the contemporary discussion of atheism. The issue is addressed from multiple perspectives, including (i) “popular” atheism (arguments for atheism pitched at the level of the educated layperson), (ii) philosophical atheology (sophisticated arguments that marshal the full resources of philosophical analysis to try to prove atheism or refute theism), and (iii) theistic responses to atheism (how theists should respond to atheist arguments and whether / why it is important for believers to listen to their atheist critics). Prerequisite: PHI 2013

PHI 4243. The Problem of Evil – 3 hours (On demand)
The problem of evil comes in a variety of forms. Some philosophers claim that God and evil are logically incompatible; others allege that belief in God is unwarranted on the grounds that the particular types and quantity of evil in the world make it unlikely that God exists. Horrendous evils—roughly, evils that seem to make the lives of those who experience them not worth living—raise a unique and seemingly even more intractable difficulty for the classical theist. This course develops each of these versions of the problem of evil and discusses various possible lines of response. Prerequisite: PHI 2013

PHI 4253. The Problem of Hell – 3 hours (On demand)
If God is perfectly loving and just, how could any person be consigned to hell for all eternity? This course explains why the problem of hell is arguably the most difficult version of the problem of evil for Christians. Numerous facets
of the problem are explored, along with various possible ways of responding to the problem. The traditional view of hell (in both its literal and metaphorical forms), annihilationism, universalism, and the choice modal of hell are each considered, developed, and critiqued. Prerequisite: PHI 2013

PHI 495(1-4). Intensive Studies in Philosophy - 1-4 hours (On demand)
Intensive study of selected philosophical issues, problems, historical periods, and/or major figures. Since topics will vary, course may be taken repeatedly for credit. Prerequisite: PHI 2013.

PHI 499(1-3). Independent Studies - 1-3 hours (On demand)
Independent study of some problem, topic, or historical figure(s) in philosophy not covered in the organized courses. Prerequisites: Philosophy minor, 3.00 GPA in major, 9 hours of philosophy and 60 hours total completed, permission of instructor.

PHYSICAL SCIENCE

PHS 1004. Introduction to Physical Science - 4 hours (Winterfest, Spring)
An integrated study of selected basic principles and concepts of chemistry and physics, including topics of current interest. Designed for the general student. Three lectures each week and one laboratory period per week. Lab fee $48. Prerequisite: MAT 1143 or satisfactory scores on the prealgebra and intermediate algebra portions of the enhanced ACT examination.

PHS 1114. Introduction to Earth Science - 4 hours (Fall, Winterfest)
Basic principles of the earth in space, its atmosphere, the oceans and the development of land forms by geologic agents. Designed for the general student. Three lectures, one laboratory period per week. Lab fee $48.

PHS 2005. Physical Science for Elementary and Middle School Teachers - 5 hours (Spring)
A study of the basics of astronomy, chemistry, geology, meteorology, and physics. Designed to emphasize discovery-based learning and inquiry-related instructional techniques by significantly utilizing enhanced classroom technology, hands-on laboratory experimentation, library research, and writing components. Four lectures, one laboratory period each week. Lab fee $60. Prerequisites: ENG 1113 and MAT 1143. Note: Open only to elementary and middle school education majors.

PHS 2214. Meteorology - 4 hours (On demand)
A study of the earth’s atmosphere and forces that influence weather phenomena including environmental trends. Three lectures, one laboratory period per week. Lab fee $48. Prerequisites: MAT 1143 or satisfactory scores on the prealgebra and the intermediate algebra portions of the enhanced ACT examination.

PHS 2314. Astronomy - 4 hours (Fall)
A study of the historical and descriptive aspects of the solar system, stars, galaxies and current topics related to space science. Three lectures, one laboratory period per week. Lab fee $48. Prerequisites: MAT 1143 or satisfactory scores on the prealgebra and the intermediate algebra portions of the enhanced ACT examination.

PHS 295(1-5). Intensive Studies in the Physical Sciences - 1-5 hours (On demand)
Topics of special interest not available to the student in the traditional course offerings. May be repeated as topics change. Lab fee $12-$60 as necessary. Prerequisites: Determined by nature of topic studied.

PHS 3303. History and Philosophy of Science and Technology - 3 hours (Fall, even years)
A study of the historical and philosophical foundations of science and technology, accompanied by an examination of the logical and ethical ramifications of various past and present science and technology phenomena. Prerequisites: The general education life science requirement, the general education physical science requirement, and ENG 2213.

PHYSICAL THERAPY

PTH 2523 Introduction to Physical Therapy - 45 clock hrs (Spring, even years)
Introduces students to the multifaceted role of the physical therapy profession. Topics include the diversity and growth of healthcare and physical therapy, methodologies used in physical therapy education, and the concept of the health care team. Introduction to medical terminology will also be made, teaching the student to form medical terms, and define medical terms used in medical documents to be able to read and write these documents. Prerequisite: none.

PHYSICS

PHY 1115. General Physics I - 5 hours (Fall)
A non-calculus physics course emphasizing the fundamental concepts of mechanics, heat and wave motion. Designed for pre-physical therapy, science education, biology, pre-medical, pre-veterinary, pre-optometry and pre-pharmacy majors. Four lectures, one laboratory period each week. Lab fee $80. Prerequisites: MAT 1143 or satisfactory scores on the prealgebra and intermediate algebra portions of the enhanced ACT examination.
PHY 1125. General Physics II - 5 hours (Spring)
A continuation of PHY 1115, emphasizing the fundamental concepts of electricity, magnetism, and optics; introduction to atomic physics. Four lectures, one laboratory period each week. Lab fee $80. Prerequisite: PHY 1115.

PHY 2215. University Physics I - 5 hours (Fall)
A rigorous calculus-based physics course emphasizing mechanics, heat and wave motion. Designed for pre-engineers, computer science and physical science majors. Four lectures, one laboratory period each week. Lab fee $80. Prerequisite: MAT 2255 or concurrent enrollment. NOTE: A student cannot receive credit for both PHY 1115 and 2215.

PHY 2225. University Physics II - 5 hours (Spring)
A continuation of PHY 2215, emphasizing electricity, magnetism and optics; introduction to atomic physics. Four lectures, one laboratory period each week. Lab fee $80. Prerequisites: PHY 2215 and MAT 2263 or concurrent enrollment. NOTE: A student cannot receive credit for both PHY 1125 and 2225.

PHY 295(1-3). Special Topics in Physics - 1-3 hours (On demand)
A study of topics from one or more of the fields of physics chosen to meet student needs and interests. Lab fee $14-$42 as necessary. Prerequisite: PHY 1124 or PHY 2225.

PHY 3231. Mechanics Laboratory- 1 hour (Spring)
Companion laboratory for PHY 3233. Theory components of PHY 3233 are explored through associated experimentation. Topics included are Impulse-Momentum theorem, the gravitational constant, static equilibrium, catenaries, moment of inertia and physical pendula, along with advanced physics laboratory techniques. One laboratory period each week. Lab fee: $40. Prerequisite: PHY 3233 or concurrent enrollment.

PHY 3233. Mechanics - 3 hours (Spring)
Application of the principles of vector mechanics to problems of equilibrium. Topics include resultants, equilibrium, trusses, centroids and moments of inertia. Designed for pre-engineers and physics minors. Three lectures each week. Prerequisites: PHY 2215 and MAT 2255.

PHY 3361. Modern Physics Laboratory- 1 hour (On demand)
Companion laboratory for PHY 3363. Theory components of PHY 3363 are explored through associated experimentation. Topics included are speed of light, the photoelectric effect, fundamental charge of an electron, Rydberg constant, crystal diffraction and radioactivity, along with advanced physics laboratory techniques. One laboratory period each week. Lab fee: $40. Prerequisite: PHY 3363 or concurrent enrollment.

PHY 3363. Modern Physics - 3 hours (On demand)
A study of the atomic view of matter and radiation, relativity and wave-particle duality; basic concepts of quantum physics. Three lectures each week. Prerequisites: PHY 2225 or PHY 1124 and MAT 1195.

PHY/CIS 3413. Machine Organization - 3 hours (Fall)
A survey of the electronic and mechanical components of a computer, including processing units, memory and I/O devices. Also includes an introduction to assembly language programming. Lab fee $12. Prerequisites: CIS 1154 and MAT 1173.

PHY 395(1-4). Special Topics in Physics - 1-4 hours (On demand)
A study of topics from one or more fields chosen to meet special student needs and interests. Topics could include dynamics, advanced mechanics, optics, thermodynamics, electromagnetic field theory, electronics and nuclear physics. Laboratory may be included. Lecture and laboratory periods variable. Lab fee $12-$48 if necessary. Prerequisites: Determined by nature and level of topics studied.

PHY 4411. Advanced Electricity and Magnetism Laboratory - 1 hour (On demand)
Companion laboratory for PHY 4413. Theory components of PHY 4413 are explored through associated experimentation. Topics included are capacitance, Coulomb’s Law, moving charged particles in electric and magnetic fields, Electron-Spin Resonance and the electrons charge to mass ratio, along with advanced physics laboratory techniques. One laboratory period each week. Lab fee: $40. Prerequisite: PHY 4413 or concurrent enrollment.

PHY 4413. Advanced Electricity and Magnetism - 3 hours (On demand)
A course emphasizing vector calculus techniques in the study of electrostatics, electric fields, magnetostatics, magnetic fields and electrodynamics. Three lectures per week. Prerequisites: PHY 2225 and MAT 3363.

POLITICAL SCIENCE

POL/HON 1013. Honors American Government and Politics - 3 hours (Fall, odd years)
This course surveys the origin, organization, and policy of United States government at the national, state, and local levels and encourages citizen participation and leadership in democratic processes beginning at the community level. Fulfills the Missouri statutory requirement. Prerequisite: A minimum composite ACT of 28 or SAT equivalent.
POL 1111. Missouri Constitution - 1 hour (OLIS course only)
Organization and policy of Missouri State government as established by the Missouri State Constitution. Course promotes familiarity and understanding of Missouri government and its influence on the citizens of the state. This course is designed to meet the state statute requirement for the Missouri Constitution for students transferring with a course equivalent to POL 1113 from an institution outside of the state of Missouri. Course fee $50 in lieu of OLIS course tuition and fees.

POL 1113. American Government and Politics - 3 hours (Fall, Spring)
Origin, organization and policy of United States government at the national, state and local levels. Encourages citizen participation and leadership in democratic processes beginning at the community level. Fulfills the Missouri statutory requirement.

POL 210(1-2). Prelaw Seminar - 1-2 hours (Spring)
A career oriented course which identifies the major fields of law; also includes a study of the requirements for admission to law school with emphasis on the types of Law School Admission Test questions.

POL 2223. American State and Local Government - 3 hours (Spring)
Organization, administration and problems of state, county, municipal and other local governments in the United States. Prerequisite: POL/HON 1013 or POL 1113.

POL 295(2-3). Special Topics in Political Science - 2-3 hours
Prerequisite: POL/HON 1013 or POL 1113.

POL 3313. International Relations - 3 hours (Spring, odd years)
An in-depth study of relations among the nations of the world and the problems which arise with their constantly increasing interactions. Prerequisite: POL/HON 1013 or POL 1113.

POL 3323. Comparative Government - 3 hours (Fall, odd years)
A comparison of different kinds of political systems in the various regions of the world. The U.S. style of democracy will be compared with parliamentary systems, middle eastern and African authoritarianism, socialist systems, Asian democracies and Latin American corporatism. Prerequisite: POL/HON 1013 or POL 1113.

POL 4003. Public Administration – 3 hours (Fall, even years)
Focuses on examination of the core activities of government that are performed for the most part by highly trained experts and specialized organizations. Emphasis is placed on the development and implementation of public policy. Prerequisite: POL/HON 1013 or POL 1113.

POL/HIS 4013. African History and Politics – 3 hours (Spring, odd years)
Explores the political and economic changes in African states and the issues of development since independence. Included in the study are the historical origins of the African state, the contemporary context of globalization, and the position of Africa in the world economic system. Prerequisite: POL/HON 1013 or POL 1113.

POL 4453. Congress and the Legislative Process - 3 hours (Spring, even years)
Major topics include: origin and powers of the United States Congress; relation of Congress to the other branches of government and to the public; leadership, partisanship, the committee system and policy making; comparison with the state legislatures. Prerequisite: POL/HON 1013 or POL 1113 or consent of instructor.

POL 4563. The Supreme Court and Constitutional Development - 3 hours (Fall, odd years)
Focuses on landmark Supreme Court decisions and judicial interpretations of the U.S. Constitution from the 1790's until the present; topics addressed include origins of the Constitution, powers of the three branches, separation of powers, regulation of commerce and individual rights based on the Bill of Rights. Prerequisite: POL/HON 1013 or POL 1113 or consent of the instructor.

POL 4673. The American Presidency - 3 hours (Fall, even years)
Explains the role of the President in the American Federal System. Focuses on relations with the public and the press, the Congress and the Courts, the bureaucracy and public policy. Prerequisite: POL/HON 1013 or POL 1113.

POL 4883. Political Philosophy - 3 hours (Spring, even years)
A study of the political themes in the classical philosophies from Platonism to Marxism in comparison with biblical teachings on the same themes. Major topics addressed include: the nature of man, the ideal form of governments, the citizen's responsibility to the government, the government's responsibility to the citizen, the definition of liberty and the nature of human rights. Prerequisites: POL/HON 1013 or POL 1113 and 60 or more hours of credit.

POL 495(1-4). Intensive Studies in Political Science - 1-4 hours (Fall, Spring)
A seminar investigating a selected topic or theme in the light of previous and current interpretations. Areas of study will vary with each offering; therefore, the student may elect to repeat the course when different content is offered. Prerequisite: Six hours of political science and/or consent of instructor.
POL 498 (1-8). Internship - 1-8 hours (On demand)
Credit for participation in approved off-campus internship, training, or in-service training experience in government related activity. Prerequisite: 12 hours of political science, 60 or more hours of credit, minimum GPA of 2.25, and approval of the department.

POL 499 (1-3). Independent Studies - 1-3 hours (Fall, Spring)
Advanced studies of specific topics. Prerequisites: 15 hours of political science and 60 or more hours of credit.

PSYCHOLOGY

PSY 1013. General Psychology - 3 hours (Fall, Spring)
A "life-oriented" course including physiological backgrounds of behavior, development, motivation, emotion, intelligence, personality, adjustment and social psychology. May be counted towards General Education credit.

PSY/SOC 2001. Sophomore Seminar - 1 hour (Fall, Spring)
This is a topical course emphasizing the content of the majors in behavioral sciences and the APA (American Psychological Association) style of writing.

PSY 2023. Psychology of Adjustment - 3 hours (Fall, Spring)
A psychology of adjustment course focusing on areas affecting mental health (i.e., stress, personality, relationships). Emphasis on class involvement and personal application. Prerequisite: 32 hours completed.

PSY 2033. Social Engineering - 3 hours (Spring Odd Years)
Human behavior relating to cyber systems and operations, such as social engineering, social networks, user experience, and organizational behavior. Lab fee $12. Prerequisites: CIS 1163 and either PSY 1013 or SOC 1003.

PSY 2063. Systems of Psychology - 3 hours (Fall, Spring)
Major concepts of various systems of psychological thought in current and historical perspective. Prerequisite: PSY 1013.

PSY/SOC/SWK 2233. Introduction to Research - 3 hours (Fall, Spring)
This course will provide students with an overview of the various research methods in the behavioral sciences. Specific attention will be given to the different methods of assessment, evaluation, and research inquiry found in the fields of psychology, sociology, and social work. Prerequisites: PSY 1013, SOC 1003 or SWK 2003.

PSY 295 (1-3). Special Topics - 1-3 hours (On demand)
Study of critical issues and topics in psychology not covered in other course offerings. Areas of study will vary from year to year. Students may repeat this course once.

PSY/SOC 3001. Junior Seminar - 1 hour (Fall, Spring)
This is a topical course emphasizing the career opportunities for behavioral science majors and graduate school preparation. Prerequisite: 64 hours completed.

PSY 3003. Human Sexuality - 3 hours (Fall, on demand)
A course designed to provide the student with frank, factual information about the many aspects of sex; to help enable the student to see sex as a natural, integral, God-ordained component of marriage; and to dispel common myths and misconceptions about sex. Prerequisite: 64 hours completed.

PSY 3013. Relationships - 3 hours (On demand)
A personal application course designed to introduce healthy relational principles through self-exploration of interpersonal needs, dynamics, and relating skills.

PSY 3033. Abnormal Psychology - 3 hours (Fall, Spring)
Major psychoses, psychoneuroses, sexual adjustment and an analysis of childhood background which leads to mental breakdowns, phobias, compulsions and hysteria. Prerequisite: PSY 1013.

PSY 3053. Child Development through Adolescence - 3 hours (Fall)
A study of the operation of normal psychological and developmental processes in the lives of children from birth through adolescence. Prerequisite: PSY 1013 or EDU 2113.

PSY 3063. Human Growth and Development - 3 hours (Fall, Spring)
A "Life-Span" study of human growth and developmental processes including physiological, psychological and sociological influences and effects. Students receiving credit for this course cannot receive credit for both PSY 3053 and PSY 4033 in the psychology major. Prerequisites: PSY 1013 or EDU 2113.

PSY/SOC 3073. Social Psychology - 3 hours (Fall, Spring)
Survey of social psychology theories, research methods, and practical applications focusing on how people influence one another and are influenced by others. Includes topics such as attitudes and persuasion, friendships and romantic relationships, the self and social cognition, helping behavior, and group processes. Prerequisites: PSY 1013 or SOC 1003.
PSY/SOC 3083. Neurodevelopmental Disorders: Psychological and Sociological Implications - 3 hours (Spring)
Definition, diagnosis, classification, perceptual and conceptual evaluation. Multi-disciplinary approach to cognitive impairments. Three hours credit in either psychology or sociology (not both). Two lectures, one laboratory each week. Prerequisites: PSY 1013 or SOC 1003.

PSY 3093. Psychology of Learning - 3 hours (Spring, even years)
Survey of the field of learning in terms of historical backgrounds, acquisition, retention, forgetting, transfer and motivation. A brief introduction to the various theories and systems of learning is included. Prerequisites: 2063.

PSY 310(1-3). Contemporary Issues in Psychology - 1-3 hours (Winterfest, Spring, Summer)
In depth course focusing on a series of contemporary issues in psychology. Students will practice critical thinking, reading, and writing skills on topics specific to psychology. Prerequisites: PSY 1013 or SOC 1003 and 64 hours completed.

PSY/SOC 3243. Elementary Statistics - 3 hours (Fall, Spring)
Measurement, averages, variability percentile rank, normal curve, correlation, chi-square and probability related to the behavior sciences. Prerequisites: PSY 1013 or SOC 1003 or EDU 2113 and MAT 1143 or higher (Students with ACT math scores of 27 may elect to take the courses without the pre-requisite of MAT 1143).

PSY 3313. Introduction to Counseling - 3 hours (Spring, on demand)
An introduction to counseling theory, methods and techniques, including a study of client-counselor encounters, stages of counseling and the counseling interview. Prerequisites: PSY 2063 and 64 hours completed.

PSY/SOC 3393. Introduction to Sports Psychology - 3 hours (Spring)
An introduction to the field of sports psychology and performance enhancement. This course will cover sport and exercise psychology as well as techniques used in the field. This course will prepare the student for any graduate program that is in the area of sports psychology. Prerequisites: PSY 1013.

PSY 3393. Introduction to Sports Psychology - 3 hours (Spring)
A topical course for behavioral sciences majors, which emphasizes professional development and ethics of the profession and also serves as a cap-stone course for the purposes of integration and assessment. Prerequisite: 64 hours completed.

PSY 4023. The Psychology of Personality - 3 hours (Spring)
Factors and conditions relating to personality structure and dynamics, defense mechanisms and a critical examination of the theories of personality. Prerequisites: 2063.

PSY 4033. Adolescent Development - 3 hours (Spring)
A study of the development processes of the adolescent, beginning at puberty and continuing through late adolescence. Prerequisite: PSY 2063 or EDU 2113.

PSY/SOC 4053. Dealing with Death and Dying - 3 hours (Fall, Spring)
An examination of how society and its institutions, the individual and survivors view and are affected by the process of dying and death. Guidelines are provided to enable the students to aid others and themselves in dealing with death and dying. Prerequisite: PSY 1013 or SOC 1003.

PSY 4083. Psychology of Religion - 3 hours (Summer)
This course will include an examination of theory and research pertaining to psychological perspectives on religious belief, behavior, development, and outcomes from a Christian perspective. Also to include an examination of the relationship between psychology and Christian faith.

PSY 4093. Behavior Modification - 3 hours (Fall, odd years)
A course oriented to the rationale and theoretical basis of behavior modification and its clinical use in a clinical therapy setting. Specific principles and techniques will be discussed. Prerequisites: PSY 2063.

PSY 4223. Psychological Testing - 3 hours (Spring)
Survey of the field of psychological testing with emphasis on types of tests, validity and reliability. Prerequisites: PSY 2063 and 3243.

PSY/SOC 4233. Research Design and Methods - 3 hours (Fall)
Intensive analysis of experimental designs and methods of research including measurement issues, ethical considerations, sampling techniques, data-gathering techniques, data analysis and interpretation, presentations and reporting of results. Lab fee $12. Prerequisites: PSY or SOC 3243.

PSY 4243. Pre-marital Counseling - 3 hours (J-terms)
An applied course designed to give the student a working knowledge of premarital counseling. Focus will be given to assessment tools, biblical foundation of marriage and the premarital counseling process. Prerequisite: 64 hours completed.
PSY 4263. Physiological Psychology - 3 hours (Fall, even years)
An introduction to the biological/physiological basis for human behavior. The structure and the function of the nervous system, neuropsychological methods, sensation, emotional responses, learning, memory and psychopathology will be covered. Prerequisites: PSY 2063 and BIO 1004 or BIO 1114.

PSY 4273. Small Group - 3 hours (J-terms)
An innovative course that is conducted as an "experiential interaction laboratory" providing students the opportunity to increase their understanding and skills in the areas of personal, interpersonal and small group communication. Prerequisites: 64 hours completed. Graded Pass/Fail

PSY 4313. Counseling Methods and Practice - 3 hours (Fall, Spring)
An experientially oriented study of the counseling process with special emphasis on methodology and practice in the art of listening and the exercise of appropriate judgment. Prerequisite: Minimum of a C in PSY 3313.

PSY/SOC 4333. Child Abuse and Neglect - 3 hours (Fall, on demand)
A study of child abuse and neglect with consideration given to causes, symptoms, treatment and prevention. A special section is included dealing with the treatment of adult survivors of child abuse. Prerequisite: SOC 1003 or PSY 1013.

PSY/SOC 4353. Agape Love and Altruism: Perspective of Science and Faith - 3 hours (On demand)
An interdisciplinary approach to the examination of agape and altruistic love. Perspectives from the social and behavioral sciences, natural sciences, philosophy, and religion will be brought to the discussion of agape love, unconditional love, altruism, prosocial behavior, emergency helping and benevolence. Prerequisites: SOC 1003 or PSY 1013 and 64 hours completed.

PSY 4363. Marriage and Family Counseling - 3 hours (Fall)
Theories and practices of marriage and family practice, with emphasis on the family as a system. Include intergenerational and development issues and characteristics of a successfully functioning family. Prerequisite: 64 hours completed.

PSY/SOC 4373. Being Human and Addicted (Addictionology) - 3 hours (Fall)
A study of the effects of drugs on the human being, issues of physiology, psychology, sociology and religion will be addressed as they relate to chemical dependency. An overview of treatment methods and therapy will be included. Prerequisite: 64 hours completed.

PSY 4883. Advanced Counseling Methods and Practice - 3 hours (On demand)
A course designed to give the advanced counseling minor practice in role-play counseling situations involving the initial interview, analysis of data, written summaries, diagnosis and critique of same. This class will involve videotaping of the role-play sessions. Prerequisite: Minimum of a C in PSY 4313.

PSY 495(1-4). Intensive Studies - 1-4 hours (On demand)
A study of critical issues in psychology that are not covered in other course offerings. Areas of study will vary from year to year. Students may elect to repeat the course. Prerequisite: 64 hours completed.

PSY 498(3-6) Internship - 3-6 hours (On demand)
The internship experience is designed to give the upper level psychology major supervised field experience in a social services or related area. Prerequisites: 64 hours completed, at least 15 hours of the major and minimum GPA of 3.00. Graded Pass/Fail.

PSY 499(1-3). Independent Studies - 1-3 hours (On demand)
Advanced studies of specific topics arranged by department chair.

RADIOPHGRAPHY
RAD 1103. Introduction to Radiologic Technology – 3 hours (Fall 8 weeks)
An overview of the radiology profession and health care environment, radiography program policies, basic radiation protection, introduction to imaging, medical ethics and law, and methods of patient care. Attendance of hospital orientation and basic life support (BLS) certification are required. Prerequisites: Admission to the Program

RAD 1201. Contrast Agents – 1 hour (Fall 8 weeks)
Course involves study of contrast agents and pharmacology, including types, uses, patient reactions, and emergency treatment for reactions. The basic techniques of venipuncture are included. Prerequisites: CHE 1104, CHE 1115, or PHY 1114, RAD 1503

RAD 1305. Radiographic Procedures I – 5 hours (3 hours didactic, 2 hours lab) (Fall)
Fundamentals of radiographic procedures, positioning techniques and terminology. This course includes routine positions and an introduction to image analysis. Radiographic anatomy, radiation protection and patient care skills are reinforced. Lab will include demonstrations, practice and evaluations. Prerequisites: BIO 2204, BIO 3304, Admission to the program.
RAD 1503. Radiologic Science – 3 hours (didactic only) (Fall)
A study of the fundamentals of atomic theory, basic electricity and x-ray circuitry, structure and function of x-ray tubes, the production and emission of x-radiation. Prerequisites: MAT 1143 and Admission to the program.

RAD 1604. Radiographic Procedures II – 4 hours (3 hours didactic, 1 hour lab) (Spring)
Advanced radiographic procedures and positioning techniques. This course includes positioning modifications based on patient’s condition and age. Radiographic anatomy, radiation protection and patient care skills are reinforced. Lab will include demonstration, practice, evaluations and image analysis. Prerequisites: RAD 1304, HSC 1013.

RAD 1612. Radiographic Procedures III – 2 hours (Fall 8 weeks)
A comprehensive study of examinations with emphasis on studies utilizing contrast media. Includes image analysis. Radiographic anatomy, radiation protection and patient care skills are reinforced. Prerequisites: RAD 1604.

RAD 1803. Radiographic Imaging I – 3 hours (Spring)
A study of radiographic image qualities and the factors that produce the image. Methods of improving image quality and image analysis are included. Prerequisites: RAD 1103, RAD 1503.

RAD 1812. Radiographic Imaging II – 2 hours (Fall)
A study of digital imaging radiography systems including an overview of digital imaging, computed radiography, digital radiography, digital fluoroscopy, networking, and PACS systems. Includes image analysis. Also includes conventional fluoroscopy and Introduction to Quality Management. Prerequisites: CIS 1103, RAD 1503, 1803.

RAD 1902. Radiation Protection & Biology - 2 hours (Fall)
An in-depth study of radiation biology and radiation protection principles to include radiation quantities and units, interactions of radiation with matter, molecular and cellular radiation biology, stochastic and deterministic effects, radiation protection principles for the patient and occupational worker, radiation detection and protection from radioisotope sources, radiation exposure limits and regulations. Prerequisites: CHE 1104, CHE 1115, or PHY 1114, RAD 1503, RAD 1803.

RAD 1911. Advanced Modalities - 1 hour (didactic only) (Spring 8 Weeks)
A study of advanced radiologic imaging modalities including Computed Tomography, Magnetic Resonance Imaging, and Ultrasonography. Prerequisites: CIS 1103, RAD 1612

RAD 1921. Career Development - 1 hour (didactic only) (Spring 8 Weeks)
Students will prepare for employment through development of interview skills and creation of resumes. Prerequisites: CIS 1103, RAD 1612

RAD 1922. Radiologic Pathology - 2 hours (didactic only) (Spring 8 weeks)
Introduction to pathology including etiology and process of human trauma and disease according to body systems. Emphasis on radiographic appearance of diseases and adjustments to radiographic technique for disease processes. Prerequisites: BIO 2204, BIO 3304, RAD 1612.

RAD 1931. Cross-Sectional Anatomy - 1 hour (didactic only) (Spring 8 Weeks)
An investigation of cross-sectional anatomy of the cranium, thorax, abdomen, and pelvis. Includes a comparative study of relationship anatomy with correlation of computed tomography and magnetic resonance imaging. Prerequisites: BIO 2204, BIO 3304, RAD 1503, RAD 1612.

RAD 1944. Curriculum Review – 4 hours (didactic only) (Spring 8 weeks)
A comprehensive review with an emphasis on test taking skills in preparation to sit for a credentialing examination. Prerequisites: RAD 1911, RAD 1921, RAD 1922, RAD 1931.

RAD 2002. Clinical Education I – 2 hours (clinical only) (Fall 8 weeks, 1st year)
Clinical experiences under the supervision of registered Radiologic Technologists. Students progress through a structured, sequential, competency-based clinical education system. Students will use critical thinking and problem solving skills in applying concepts learned from radiographic procedure courses in performing examinations. Students will employ patient care and communication skills. Prerequisite: RAD 1103. Course fee: $100.

RAD 2101. Clinical Education II – 1 hour (clinical only) (Winterfest, 1st year)
This is a continuation of Clinical Education I. Clinical experiences under the supervision of registered Radiologic Technologists. Students progress through a structured, sequential, competency-based clinical education system. Students will use critical thinking and problem solving skills in applying concepts learned from radiographic procedure courses in performing examinations. Students will employ patient care and communication skills. Prerequisite: RAD 2002.

RAD 2103. Clinical Education III – 3 hours (clinical only) (Spring, 1st year)
This is a continuation of Clinical Education II. Clinical experiences under the supervision of registered Radiologic Technologists. Students progress through a structured, sequential, competency-based clinical education system. Students will use critical thinking and problem solving skills in applying concepts learned from radiographic procedure courses in performing examinations.
courses in performing examinations. Students will employ patient care and communication skills. Prerequisite: RAD 2101. Course fee: $100.

**RAD 2203. Clinical Education IV – 3 hours (clinical only) (Summer 8 weeks, 2nd year)**
This is a continuation of Clinical Education III. Clinical experiences under the supervision of registered Radiologic Technologists. Students progress through a structured, sequential, competency-based clinical education system. Students will use critical thinking and problem solving skills in applying concepts learned from radiographic procedure courses in performing examinations. Students will employ patient care and communication skills. Prerequisite: RAD 2103. Course fee: $100.

**RAD 2213. Clinical Education V – 3 hours (clinical only) (Fall, 2nd year)**
This is a continuation of Clinical Education IV. Clinical experiences under the supervision of registered Radiologic Technologists. Students progress through a structured, sequential, competency-based clinical education system. Students will use critical thinking and problem solving skills in applying concepts learned from radiographic procedure courses in performing examinations. Students will employ patient care and communication skills. Prerequisite: RAD 2203. Course fee: $100.

**RAD 2223. Clinical Education VI – 3 hours (clinical only) (Spring, 2nd year)**
This is a continuation of Clinical Education V. Clinical experiences under the supervision of registered Radiologic Technologists. Students progress through a structured, sequential, competency-based clinical education system. Students will use critical thinking and problem solving skills in applying concepts learned from radiographic procedure courses in performing examinations. Students will employ patient care and communication skills. Prerequisite: RAD 2213. Course fee: $100.

**RELIGION**

**REL 295(1-3). Special Topics in Religion - 1-3 hours**
Investigation of selected themes, topics or current issues in religion. Areas of study will vary from year to year (the course may be repeated).

**REL 499(1-3). Independent Research - 1-3 hours**

**SCIENCE AND CHRISTIAN FAITH**

**SCF 3402. Biology Through the Eyes of Faith - 2 hours (Fall)**
Study from the biblical perspective of the unique nature of biology and its interaction with Christian thought. Working from the authority of the Scriptures and the conviction that Christianity is true, this course examines the history of biology, emphasizing the interactions of the life sciences with society in medicine, genetics and the environment. Prerequisite: General education requirement in life science.

**SCF 3412. Chemistry Through the Eyes of Faith - 2 hours (Spring, even years)**
Study from the biblical perspective of the unique nature of chemistry and its interaction with Christian thought. Working from the authority of the Scriptures and the conviction that Christianity is true, this course examines the history of chemistry, emphasizing the interactions of chemistry with society in religion, medicine and the environment. Prerequisite: General education requirements in the physical sciences.

**SCF 3422. Mathematics Through the Eyes of Faith - 2 hours (Fall, even years, Winterfest, even years)**
Study from the biblical perspective of the unique nature of mathematics and its interaction with Christian thought. Working from the authority of the Scriptures and the conviction that Christianity is true, this course examines the history of mathematics, emphasizing the interactions of mathematics with society and Christian thought. Prerequisite: General education requirements in mathematics.

**SCF 3432. Physics Through the Eyes of Faith - 2 hours (Spring, odd years)**
Study from the biblical perspective of the unique nature of physics and its interaction with Christian thought. Working from the authority of the Scriptures and the conviction that Christianity is true, this course examines the history of physics, emphasizing the interactions of the physics and astronomy with society and religious thought. Prerequisite: General education requirements in physical science.

**SOCIAL WORK**

**SWK 2003. Introduction to Social Work - 3 hours (Fall)**
This course will provide students with a broad overview of the profession of social work. Specific attention will be given to social work’s historical background, ethics and values, practice settings, and historical and current social welfare policies.
SWK/PSY/SOC 2233. Introduction to Research - 3 hours (Fall, Spring)
This course will provide students with an overview of the various research methods in the behavioral sciences. Specific attention will be given to the different methods of assessment, evaluation, and research inquiry found in the fields of psychology, sociology, and social work. Prerequisites: PSY 1013, SOC 1003 or SWK 2003.

SWK 295(1-3). Special Topics - 1-3 hours (On demand)
Study of critical issues and topics in social work not covered in other course offerings. Areas of study will vary from year to year. Students may repeat this course once.

SWK 3013. Integrating Faith & Social Work Practice - 3 hours (Fall)
This course explores the basic tenants of a Christian worldview and compares and contrasts them with the underlying values and theoretical basis of social work. Students will be encouraged to develop personal insight and understanding on how to integrate Christian principles and values into social work practice. Additionally, considerations for social work practice with other faiths likely to be encountered in practice settings will be explored. Prerequisite: Admission to the BSW program.

SWK 3043. Social Work with Diverse Populations - 3 hours (Spring)
This course prepares students to work with diverse groups in local and global settings. Identifying and developing skills for culturally competent social work generalist practice will be emphasized in this course. Prerequisite: Admission to the BSW program.

SWK 3063. Human Behavior in the Social Environment I - 3 hours (Fall)
This course is the first of two Human Behavior and the Social Environment courses required for social work majors. The class focuses on the biological, psychological, and sociological development of individuals across the lifespan, emphasizing a systems perspective. Theoretical frameworks of understanding a person’s behavior in their social environment will also be emphasized. Prerequisite: SWK 2003 and admission to the BSW program or a declared social welfare minor.

SWK 3073. Human Behavior in the Social Environment II - 3 hours (Spring)
This course is the second of two Human Behavior and the Social Environment courses required for social work majors. The course introduces students to knowledge, theories, and concepts about human behavior within the context of groups, organizations, and communities. Special emphasis will be placed on learning and understanding the functions and effects of racial, ethnic and cultural diversity as they relate to macro theories. Prerequisite: SWK 2003 and admission to the BSW program.

SWK 3113. Social Work Practice I: Helping Skills - 3 hours (Fall)
This course is the first in a series of four social work practice courses. It will introduce the student to fundamental knowledge and skills necessary for professional generalist social work practice. Prerequisite: SWK 2003 and admission to the BSW program or a declared social welfare minor.

SWK 3123. Social Work Practice II: Individuals - 3 hours (Spring)
This course is the second in a series of four social work practice courses. The purpose of this course is continued preparation for generalist social work practice with an emphasis on micro level social work practice with individuals. Program fee $250. Prerequisite: SWK 3113 and admission to the BSW program.

SWK 3133. Social Work Practice III: Families and Groups - 3 hours (Spring)
This course is the third in a series of four social work practice courses. The purpose of this course is continued preparation for generalist social work practice with an emphasis and focus on practice with groups and families. Prerequisite: SWK 3133 and admission to the BSW program.

SWK 4013. Social Welfare Policy - 3 hours (Spring)
This course is designed to introduce students to social policy development and policy analysis. Discussion will include the social, political, and economic forces that shape policy. Attention will also be given to major social welfare policies and programs in the United States. Prerequisite: SWK 2003 and admission to the BSW program or a declared social welfare minor.

SWK 4143. Social Work Practice IV: Communities & Organizations - 3 hours (Spring)
This course is the fourth in a series of four social work practice courses. The purpose of this course is continued preparation for generalist social work practice with an emphasis and focus on practice with communities and organizations. Prerequisite: SWK 3113 and admission to the BSW program.

SWK 4256. BSW Seminar and Practicum I - 6 hours (Fall)
This is the first of two seminar and practicum courses designed to assist students to discuss and evaluate their field work experiences. The course will facilitate and reinforce the application of social work values, ethics, knowledge, and skills in field settings. Students will complete 200 hours in their field placement as part of this course. Prerequisite: Admission to the BSW program and completion of SWK 3113, SWK 3123 and SWK 3133 with a minimum of a “C” in each course.
SWK 4266. BSW Seminar and Practicum II - 6 hours  (Spring)
This is the second of two seminar and practicum courses designed to assist students to discuss and evaluate their field work experiences. The course will facilitate and reinforce the application of social work values, ethics, knowledge, and skills in field settings. Students will complete 250 hours in their field placement as part of this course. Program fee $400. Prerequisite: Admission to the BSW program and completion of SWK 3113, SWK 3123, SWK 3133, and SWK 4143 with a minimum of a “C” in each course.

SOCIOLOGY

SOC 1003. Introductory Sociology - 3 hours  (Fall, Spring)
Survey of major subject areas and principles of sociology. Topics of the nature and development of culture; social aspects of personality; population trends, social classes, institutions and social change.

SOC/PSY 2001. Sophomore Seminar - 1 hour (Fall, Spring)
This is a topical course emphasizing the content of the major and the APA (American Psychological Association) style of writing.

SOC 2003. Social Problems - 3 hours  (Fall, Spring)
Study of current social problems of American and world societies. Focus is on the description, causation and solution of these problems. Prerequisite: SOC 1003.

SOC 2012. Human Diversity - 2 hours (Fall, Spring)
This course is designed to expose students to the wide range of diverse human perspectives found in our society. Content will focus on cultural influences, global connectedness, and understanding the universality and diversity that characterize humans. Prerequisites: SOC 1003 or PSY 1013.

SOC/PSY/SWK 2233. Introduction to Research - 3 hours  (Fall, Spring)
This course will provide students with an overview of the various research methods in the behavioral sciences. Specific attention will be given to the different methods of assessment, evaluation, and research inquiry found in the fields of psychology, sociology, and social work. Prerequisites: PSY 1013, SOC 1003 or SWK 2003.

SOC 295(1-3). Special Topics - 1-3 hours (On demand)
A study of critical issues and topics in sociology not covered in other course offerings. Areas of study will vary from year to year. Students may repeat this course once.

SOC 2982. Community Project - 2 hours (On demand)
An experiential course which allows the development of a quasi-volunteer/professional relationship of the student with a local agency, for the purposes of assisting that agency with a specific project related to the mission of that agency. The coordinator of sociology or the department chair will assist with arrangements. Prerequisite: Sociology majors only.

SOC/PSY 3001. Junior Seminar - 1 hour (Fall, Spring)
This is a topical course emphasizing the career opportunities for behavioral science majors and graduate school preparation. Prerequisite: 64 hours completed.

SOC 3003. The Family - 3 hours  (Fall, Spring)
A study of family life, dating, marriage and the family life-course. Attention is given to present day problems and trends. Prerequisite: 32 hours completed.

SOC 3023. Sociology of Gender - 3 hours  (Fall, odd years)
This course is an overview of sociological concepts and perspectives on gender. Prerequisite: 32 hours completed.

SOC 3033. Family Violence - 3 hours  (Spring)
This course examines the issues of violence in the family and the various implications in both treatment and society’s response. Applications of the law in the State of Missouri will also be addressed. Prerequisite: SOC 1003 or PSY 1013 or CRJ 2313 and 32 hours completed.

SOC 3063. Community Sociology - 3 hours  (Fall, even years)
This course examines the development of the community and community-based problem solving. Included is a study of the changing rural, urban, and global structures, organizations, services, and demographics. Prerequisite: SOC 1003.

SOC/PSY 3073. Social Psychology - 3 hours  (Fall, Spring)
A survey of social psychology theories, research methods, and practical applications focusing on how people influence one another and are influenced by others. Includes topics such as attitudes and persuasion, friendships and romantic relationships, the self and social cognition, helping behavior, and group processes. Prerequisites: PSY 1013 or SOC 1003.
SOC/PSY 3083. Neurodevelopmental Disorders: Psychological and Sociological Implications - 3 hours (Spring)
Definition, diagnosis, classification, perceptual and conceptual evaluation. Multi-disciplinary approach to cognitive impairments. Three hours of credit in either psychology or sociology (not both). Two lectures, one laboratory each week. Prerequisite: PSY 1013 or SOC 1003.

SOC/PSY 3243. Elementary Statistics - 3 hours (Fall, Spring)
Measurement, averages, variability, percentile rank, normal curve, correlation, chi-square and probability related to the behavior sciences. Prerequisites: PSY 1013 or SOC 1003 or EDU 2113 and MAT 1143 or higher (Students with ACT math scores of 24+ may elect to take the courses without the pre-requisite of MAT 1143).

SOC/PSY 4001. Senior Seminar - 1 hour (Fall, Spring)
This a topical course for behavioral sciences majors, which emphasizes professional development and ethics of the profession and also serves as a cap-stone course for the purposes of integration and assessment. Prerequisite: 64 hours completed.

SOC 4033. Criminology - 3 hours (Spring)
A study of sociological theories of crime and delinquency, of crime control including punishment and treatment, and of practices and organizations of police, courts, probation and parole departments and prisons. Prerequisite: SOC 1003 and 64 hours completed.

SOC 4043. Minorities in American Society - 3 hours (Fall)
Provides an overview of majority/minority relations within the United States, including an in-depth examination of current social problems facing America's racial and ethnic minorities. Prerequisite: SOC 1003.

SOC/PSY 4053. Dealing with Death and Dying - 3 hours (Fall, Spring)
An examination of how society and its institutions, the individual and survivors view and are affected by the process of dying and death. Guidelines are provided to enable the students to aid others and themselves in dealing with death and dying. Prerequisite: PSY 1013 or SOC 1003.

SOC 4063. Sociological Theory - 3 hours (Spring)
A seminar approach to the study of the history and development of social thought, including contributions of the basic ideas of the major theorists. Prerequisite: 12 hours of sociology.

SOC 4073. Sociology of Religion – 3 hours (Spring, odd years)
A study of the social and cultural influences on religion in the American and global society. Prerequisite: SOC 1003.

SOC 4083. Gerontology - 3 hours (Fall)
This course is designed to acquaint the student with the theories of aging, the way the aging individual relates to the social systems, adjustment patterns of the aging and societal issues confronting older Americans. Prerequisite: PSY 1013 or SOC 1003.

SOC/PSY 4233. Research Design and Methods - 3 hours (Fall)
Intensive analysis of experimental designs and methods of research including measurement issues, ethical considerations, sampling techniques, data-gathering techniques, data analysis and interpretation, presentations and reporting of results. Lab fee $12. Prerequisites: PSY or SOC 3243.

SOC/PSY 4333. Child Abuse and Neglect - 3 hours (Fall, On demand)
A study of child abuse and neglect with consideration given to causes, symptoms, treatment and prevention. A special section is included dealing with the treatment of adult survivors of child abuse. Prerequisite: SOC 1003 or PSY 1013.

SOC/PSY 4353. Agape Love and Altruism: Perspective of Science and Faith - 3 hours (On demand)
An interdisciplinary approach to the examination of agape and altruistic love. Perspectives from the social and behavioral sciences, natural sciences, philosophy, and religion will be brought to the discussion of agape love, unconditioned love, altruism, prosocial behavior, emergency helping and benevolence. Prerequisites: SOC 1003 or PSY 1013 and 64 hours completed.

SOC/PSY 4373. Being Human and Addicted (Addictionology) - 3 hours (Fall)
A study of the effects of drugs on the human being, issues of physiology, psychology, sociology and religion will be addressed as they relate to chemical dependency. An overview of treatment methods and therapy will be included. Prerequisite: 64 hours completed.

SOC 495(1-4). Intensive Studies - 1-4 hours (On demand)
A study of critical issues in sociology that are not covered in other course offerings. Areas of study will vary from year to year. Students may elect to repeat this course. Prerequisite: 12 hours of sociology and 64 hours completed.

SOC 4963. Field Experience in Gerontology (On demand)
Involves field experience in an agency that focuses on senior adult related activities and/or service delivery. It is provided to integrate classroom knowledge with hands on activities. Settings are determined according to individual needs and circumstances. Prerequisite: Minimum of C in SOC 4083 Gerontology, 3.00 GPA and 64 hours completed. Note: All Gerontology minor course work must be completed prior to enrolling in this course.
SOC 498(3-6).  Internship - 3-6 hours (On demand)
Internship is designed to provide the upper-level sociology major with supervised field experience in a social services or related area.  Prerequisites: 64 hours completed, at least 15 hours of the major, minimum 3.00 GPA.  Graded Pass/Fail.

SOC 499(1-3).  Independent Studies - 1-3 hours (On demand)
Advanced studies of specific topics arranged by department chair.

SPANISH

SPA 1114.  Elementary Spanish I - 4 hours  (Fall)
Pronunciation, grammar, reading of simple prose, aural-oral practice.

SPA 1124.  Elementary Spanish II - 4 hours  (Spring)
Continuation of SPA 1114. Prerequisite: SPA 1114.

SPA 2213.  Intermediate Spanish I - 3 hours  (Fall)
Grammar review, simple composition and conversation, and the reading of short narratives.  Prerequisite: SPA 1124 or satisfactory placement score.

SPA 2223.  Intermediate Spanish II - 3 hours  (Spring)
Continuation of SPA 2213 with emphasis on reading. Prerequisite: SPA 2213 or satisfactory placement score or two years of high school Spanish.

SPA 293(1-3).  Special Reading in Spanish - 1-3 hours (On demand)
Readings on specific subjects. A theme will be chosen for study.  (TBA with instructor). Prerequisite: SPA 2223.

SPA 295(1-4).  Special Topics - 1-4 hours  (On demand)

SPA 3313.  Advanced Spanish Composition and Conversation - 3 hours  (Fall, even years)
The writing of themes and practice in grammar, idioms and everyday conversation.  Prerequisite: SPA 2223.

SPA 3323.  Hispanic Culture and Civilization - 3 hours  (Spring, odd years)
Spanish and Latin American civilization, customs and culture from its beginning to present times.

SPA 3333.  Survey of Early Spanish Literature - 3 hours  (Fall, odd years)
Spanish literature from the beginning to the eighteenth century.  Prerequisite: SPA 3313 or 3323.

SPA 3343.  Survey of Later Spanish Literature - 3 hours  (Spring, even years)
Spanish literature from the eighteenth century to the present.  Prerequisite: SPA 3313, 3323 or 3333.

SPA 495(1-4).  Intensive Studies - 1-4 hours

SPA 497(1-3).  Symposia - 1-3 hours

SPA 499(1-3).  Independent Studies - 1-3 hours
Methods of Teaching Foreign Language
(See EDU 4563).

SPIRITUAL FORMATION

SPF 2012.  Introduction to Spiritual Formation - 2 hours  (Fall, Spring)
An exploration of what it means to be a Christ-follower: biblically, historically, and in the contemporary context.

SPF 295(1-3).  Special Topics in Spiritual Formation - 1-3 hours  (On demand)
A focus on special topics in the field of spiritual formation.

SPF 495(1-4).  Intensive Studies in Spiritual Formation - 1-4 hours
A focus on a special area of interest in the field of spiritual formation or missions. Topics will vary from year to year.  (May be taken more than once).

SPORT MANAGEMENT

SPM 1113.  Introduction to Sport Management - 3 hours  (Fall)
The course is designed to provide the student with the overview of a career in sport management including areas of professional endeavors which cover a wide variety of sport and fitness related occupations. The course will also provide an academic perspective of the professional preparation necessary to achieve employment in the profession.

SPM 3963.  Sport Management Practicum - 3 hours  (Fall, Winterfest, Spring, Summer)
Credit given for on-the-field experience gained in the practice of sport management specified related duties. Settings are determined according to individual circumstances.  Prerequisite: 64 hours completed. (Restricted to Sport Management majors.)
SPM 498(3-6). Internship in Sport Management - 3-6 hours (Fall, Spring, Summer, Winterfest)
A fulltime residency for on-the-job training under the supervision of a sport management professional. Includes observation, supervision, planning, instruction, direct leadership and evaluation. Minimum requirement-240 hours. Prerequisites: A minimum grade of "C" in all sport management courses; a minimum overall GPA of 2.00 in all course work taken at SBU prior to application for internship and prior to internship itself; restricted to Sport Management majors of senior standing; advanced application no later than September or February of preceding semester. Course fee $100.

THEATRE
THR 1023. Acting I - 3 hours (Fall)
Fundamentals of acting techniques.

THR/FAR 1033. Introduction to Theatre - 3 hours (Fall)
A study of the history and literature of the theatre with introductory participation in the areas of acting and stagecraft. Emphasis on reading and attending plays. Lab fee $30.

THR 1053. Stagecraft - 3 hours (Fall)
Basic principles of scenic construction, scenic painting, and lighting and sound techniques.

THR 2013. Script Analysis - 3 hours (Fall, odd years)
An investigation of dramatic structure and analysis from the perspective of the director, the actor, and the designer. This course is also designed to introduce students to several major plays in the history of dramatic literature.

THR 2031. Makeup - 1 hour (Spring)
Laboratory exercises in the basic fundamentals of stage makeup. Lab fee: $75.

THR 2043. Introduction to Film - 3 hours (On demand)
An introduction to experiencing and understanding the cinematic arts. Upon successful completion, students will possess a conceptual framework and vocabulary that enhances their enjoyment of and ability to evaluate a film.

THR 3013. Stage Management - 3 hours (Spring, odd years)
A thorough analysis of the technical and organizational aspects of stage management. Emphasis on the stage manager’s process, including an overview of general responsibilities and basic conflict resolution concepts.

THR 3033. Acting II - 3 hours (Spring, even years)
Advanced acting techniques. Emphasis on motivation, characterization and showmanship. Prerequisite: THR 1023.

THR 3053. Scene Design - 3 hours (Spring, even years)
Basic concepts of scene design for the stage. Exploration of scene design and the theatre, scene design as a visual art as well as technical production. Prerequisite: THR 1053 and THR 2013.

THR 3063. Costume Design - 3 hours (Spring, odd years)
A study of the costume design process: research, direction, and rendering of ideas. Emphasis on character analysis. This course also offers a basic exposure to costume construction techniques. Prerequisite: THR 2013. Lab fee: $35.

THR 4003. Lighting and Sound Design - 3 hours (Spring, odd years)
A study of the process of lighting and sound design. Emphasis on hands-on experience with lighting instruments, and lighting and sound systems. Prerequisite: THR 1053 and THR 2013.

THR 4013. Theatre Management - 3 hours (Spring, even years)
A study of the theory and practice of theatre management in areas of commercial, non-profit, college, and community theatre. Theory and practice of administration for non-profit and commercial theatres.

THR 4023. Directing of Plays - 3 hours (Fall, even years)
Principles of directing the various steps of a production, and practice in rehearsing and presenting plays. Prerequisite: THR 1023, THR 1033, THR 1053, and THR 2013.

THR 4033. American Theatre History - 3 hours (On demand)
A survey of the history of the American theatre, from the 18th century to the present.

THR 4043. Acting III – 3 hour (Spring, odd years)
Actors will learn to use their physical instrument through movement, vocal techniques, and non-realistic acting styles. Styles and techniques used in this class may include Grotowski, clowning, physical ensemble creation, mask work, Solo-Performance/Performance Ethnography, BodyWorks, Viewpoints, Alexander Technique, period movement styles, and others.

THR/WRT 4053. The Art and Craft of Playwriting - 3 hours (On demand)
A study and practicum of the art of playwriting. Emphasis on reading and writing plays.
THR 4203. The History and Literature of Theatre I - 3 hours (Fall, even years)
An overview of theatrical practices, innovations, and literature from 2000 BC through the 18th century. Emphasis will be placed on an examination of dramatic scripts, primary sources, and received historical narratives as a means for exploring the cultural significance of theatre and performance. Prerequisite: FAR/THR 1033.

THR 4213. The History and Literature of Theatre II - 3 hours (Spring, odd years)
An overview of theatrical practices, innovations, and literature from the 18th century through the present. Emphasis will be placed on an examination of dramatic scripts, primary sources, and received historical narratives as a means for exploring the cultural significance of theatre and performance. Prerequisite: FAR/THR 1033.

THR 4311. Senior Capstone - 1 hour (Fall)
Senior Capstone provides an intensive audition and/or portfolio development workshop for theatre majors. The course is meant to be taken during the Fall semester of the student’s last year at SBU.

THR/ENG 4413. Shakespeare - 3 hours (Spring, odd years)
Tragedies, histories and comedies of Shakespeare. Prerequisite: Completion of the general education requirement in composition

THR 495(1-3). Intensive Studies - 1-3 hours (On demand)

THR 4963. Practicum - 3 hours (On demand)
A synthesis experience allowing the student the opportunity to direct or design and construct technical elements for a production of his or her choosing. Prerequisite: THR 1053 or THR 3033 and THR 4023.

THR 499(1-3). Independent Studies - 1-3 hours (Fall, Spring)
Advanced studies of specific topics arranged by department chair.

THEATRE - WORKSHOP COURSES
Only four (4) credit hours in any one workshop may be earned toward a major. Students enroll in workshops according to classification: (1) Freshman (2) Sophomore (3) Junior (4) Senior.

THR (1,2,3,4)001. Theatre Performance Workshop - 1 hour (Fall, Spring)
Open to all students by audition. Rehearsal and performance of a major drama production. Grade is based on attendance, professional attitude and conduct, and performance evaluation.

THR (1,2,3,4)011. Theatre Production Workshop - 1 hour (Fall, Spring)
Open to all students. Thirty (30) hours of work on backstage duties and/or technical crews for major drama production is required. Grade is based on successful completion of assigned work, professional attitude and conduct, and evaluation by instructor.

THR/MUS (1,2,3,4)041. Opera Theatre - 1 hour (Fall, Spring)
Open to all students by audition. Laboratory for study and performance of operatic solos and ensembles. One major production per semester. Two rehearsals per week.

Methods of Teaching Theatre in the Middle and Secondary Schools
(See EDU 4502).

Methods of Teaching Speech in the Middle and Secondary Schools
(See EDU 4552).

THEOLOGY

THE 3023. The Baptist Denomination - 3 hours (Fall, Spring)
Study of the history, beliefs and denominational programs of Baptists. Prerequisites: BIB 1013/1213, 1023/1223, SPF 2012.

THE 3113. Christian Doctrine - 3 hours (Fall)
Analysis and interpretation of the major doctrines of the Christian religion. Prerequisites: BIB 1013/1213, 1023/1223, SPF 2012.

THE 3463. History of Christianity I - 3 hours (Fall, even years)
Survey of early and medieval Christianity up to the eve of the Reformation. Prerequisites: BIB 1013/1213, 1023/1223, SPF 2012.

THE 3673. History of Christianity II - 3 hours (Spring, odd years)
Survey of the history of Christianity from the Reformation to the present. Prerequisites: BIB 1013/1213, 1023/1223, SPF 2012.

THE 4003. Theological Method – 3 hours
An introduction to issues in the method of a constructive Christian theology, including but not limited to issues in religious epistemology, religious language and theological hermeneutics.
THE 4033. God and Humanity – 3 hours
A survey of Christian understanding of God and humanity in their biblical, historical and contemporary expressions, including revelation, scripture, Trinity, creation, providence, humanity in God’s image, human nature and sin. Prerequisite: THE 3113.

THE 4043. Christ and Salvation – 3 hours
A survey of Christian understandings of Christ and salvation in their biblical, historical and contemporary expressions, including the person of Christ, atonement, justification and other dimensions of salvation. Prerequisite: THE 3113.

THE 4053. Church and Last Things – 3 hours
A survey of Christian understandings of the church and last things in their biblical, historical and contemporary expressions, including the nature and mission of the church, the ordinances/sacraments, death, resurrection and eternal life. Prerequisites: THE 3113.

THE/BIB 4073. New Testament Theology – 3 hours
An introduction to the discipline of biblical theology as it is undertaken in relation to the New Testament. Included is a discussion of methods, attendant methodological and hermeneutical problems, and possible results in a survey of the theology of the New Testament. Can also be taken for biblical studies credit. Prerequisite: BIB 2093.

THE 495(1-4). Intensive Studies in Theology - 1-4 hours
A focus on a special topic, theme or issue in the area of theology. Topics will vary from year to year. (May be taken more than once). Prerequisites: 64 hours completed. (Depending on the topics, there may be a fee.)

UNIVERSITY STUDIES

UNI 0111. Cornerstone – 1 hour (Fall, Spring)
Cornerstone is designed to promote success in students who have demonstrated the need for additional support in their transition to SBU. Cornerstone encourages and cultivates academic and practical skills, connects students with academic assistance, and engages students in the SBU community.

UNI 1111. University Seminar - 1 hour (Fall, Spring)
This course is designed to acclimate students to college coursework by promoting processes that lead to success such as effective time management and research-based study strategies. Examining these processes provides an understanding of the individual student’s strengths and weaknesses related to studying and learning. Additionally, the course acclimates students to SBU and SBU’s mission while considering the relationship between an individual’s values and goals and his or her academic performance and future direction. This course must be taken during the first semester a student attends SBU. Course fee: $12.

UNI 1121. Introduction to Critical Thinking - 1 hour (Fall, Spring)
This course is designed to promote awareness of a personal value system as well as to promote the use of critical thinking skills in the study of issues in today's society. This course must be taken during the first year a student attends SBU. Prerequisite: UNI 1111.

UNI 2110. Cornerstone Peer Leadership – 0 hour (Fall, Spring)
Cornerstone Peer Leadership develops leaders in the second-year and promotes achievement for first-year students through mentoring, networking, and skill building.

WRITING

WRT/ENG 3013. Writing Poetry - 3 hours (Spring, odd years)
A workshop in the writing of original poetry, based on a study of poetic characteristics and genres. Prerequisite: Completion of the general education requirement in composition.

WRT/ENG 3023. Writing Creative Nonfiction—3 hours (Fall, even years)
A workshop in creative nonfiction utilizing readings from varying genres and peer/instructor feedback. Prerequisite: Completion of the general education requirement in composition.

WRT/ENG 3033. Writing Creatively for Young Adults—3 hours (Spring, even years)
A workshop in learning to write creatively for young adults in a variety of genres. Prerequisite: Completion of the general education requirement in composition.

WRT/ENG 3353. Advanced Composition - 3 hours (Fall, Spring)
Advanced expository writing, based on a study of contemporary prose. Prerequisite: Completion of the general education requirement in composition.

WRT/ENG 4003. Technical Writing - 3 hours (Fall, even years)
The application of rhetorical principles to the writing of investigative and descriptive reports on scientific and technological subjects. Prerequisite: Completion of the general education requirement in composition.
WRT/ENG 4013. Writing Short Fiction - 3 hours (Fall, odd years)
   A workshop in short fiction writing utilizing readings from varying fiction genres and peer/instructor feedback.
   Prerequisite: Completion of the general education requirement in composition.

WRT/THR 4053. The Art and Craft of Playwriting - 3 hours (On demand)
   A study and practicum of the art of playwriting. Emphasis on reading and writing plays.