

COURSE DESCRIPTIONS

# Course Descriptions

## Course Description Legend

COURSE CODE / COURSE TITLE . . . . . NUMBER OF CREDITS

- cr . . . . . Credit(s)
- OCE . . . . . Oral Communication Emphasis course: SPE1075 or SPE1825 as prerequisite (see page 50)
- PQ . . . . . Prerequisite(s)
- U suffix . . . . . Graduate-level course taken by approved undergraduate students
- WCE . . . . . Written Communication Emphasis course: ENG2205 or ENG2825 as prerequisite (see page 50)
- \* . . . . . Course offered alternate years
- \*\* . . . . . Course offered when feasible
- \$ . . . . . Course has a fee
- #. . . . . Traditional Undergraduate courses also offered through Dual Enrollment
- ##. . . . . Only offered through Dual Enrollment
- + . . . . . Course for which competency may be demonstrated
- ◇ . . . . . Traditional Undergraduate courses also offered through Adult Undergraduate
- ◇◇ . . . . . Only offered through Adult Undergraduate

Directed studies and topics courses are available. See pages 26–27, 29.

## Accounting

**ACC2015 Foundations of Accounting & Finance . . . . . 2 cr**  
 Designed for non-business majors, this class provides an overview of accounting and finance concepts, including financial reporting and analysis, decision making, internal control, and implications for not-for-profits.

**ACC2101 Principles of Financial Accounting# . . . . . 4 cr**  
 (PQ: BUS1115 and MAT1035 recommended or may be taken concurrently) A study of fundamental accounting principles, financial statements, and the analysis and reporting of business transactions.

**ACC2102 Principles of Managerial Accounting . . . . . 4 cr**  
 (PQ: C or better in ACC2101 and C- or better in MAT1035; BUS1115 recommended or may be taken concurrently) An introductory study of managerial accounting concepts, including costing methods, analysis of financial performance, budgeting, and decision making.

**ACC3201 Intermediate Accounting I . . . . . 4 cr**  
 (PQ: C or better in ACC2101 and ACC2102, or concurrently enrolled in ACC2102) A study of accounting theory and techniques as related to revenue recognition, asset and liability valuation and financial reporting.

**ACC3202 Intermediate Accounting II . . . . . 4 cr**  
 (PQ: C or better in ACC3201) A continuation of ACC3201, dealing with accounting for long-term liabilities, stockholders' equity, earnings per share, leases, income taxes, cash flows and financial statement analysis.

**ACC3206 Cost Accounting . . . . . 4 cr**  
 (PQ: C or better in ACC2102) A study of managerial decision making, including consideration of costing techniques, budgeting and control, and strategic planning.

**ACC3235 Accounting Information Systems . . . . . 4 cr**  
 (PQ: C or better in ACC2101 and BUS2011) An exploration of the intersection of accounting and technology. Attention will be given to the accountant's role as business analyst, transaction processing, the function of accounting systems—both manual and electronic—development and analysis of systems, security, internal control, ethics, and emerging issues.

**ACC4205 Corporate and Partnership Income Taxation . . . . . 2 cr**  
 (PQ: C or better in ACC2102 or consent of instructor) Review of the federal income tax laws as they apply to corporations and

partnerships, including the advantages and disadvantages of each business structure. Corporate will focus on tax law creating permanent and temporary book/tax differences and accounting for net operating losses, net capital losses, deductions, and distributions. Partnership will focus on formation, partnership interest, and allocating gains and losses to partners. S corporations are highlighted, including the unique advantages to the tax-paying partners.

**ACC4305 Auditing . . . . . 4 cr**  
 (PQ: C or better in ACC3202 or concurrently enrolled) The objective, standards, ethics, and procedures of auditing and assurance services.

**ACC4306 Individual Income Taxation . . . . . 4 cr**  
 (PQ: C or better in ACC2102, or consent of instructor) Review of the federal income tax laws as they apply to individuals and sole proprietorships, including business and personal deductions, credits, capital gains and losses, property acquisition and disposal, and compensation. Focus will also highlight the tax advantages of home ownership, 401(k) investment plans, IRA plans, and Roth accounts.

**ACC4307 Advanced Accounting . . . . . 4 cr**  
 (PQ: C or better in ACC3202) Special topics in accounting, including business combinations, consolidated statements, foreign currency, and partnerships.

**ACC4308 Governmental and Non-Profit Accounting . . . . . 2 cr**  
 (PQ: C or better in ACC2101 and ACC2102) A study of financial accounting and reporting requirements for governmental and not-for-profit entities and the unique challenges and opportunities faced by each.

**ACC4845 Senior Accounting Project. . . . . 2 cr**  
 (PQ: accounting major with senior standing and consent of instructor) Instructor-directed, individual capstone exploration of a major accounting project. An extensive original model and analysis is required.

**ACC4995 Accounting Internship . . . . . 1 cr**  
 (PQ: BUS3835, consent of faculty supervisor, and internship registration form) Supervised work experience related to student's major. Students may enroll for this course at various times as their schedules permit. **Note:** This course is designated as repeatable and may be repeated three times after the original taking of the course. See page 25 for note regarding internships.

## Ancient & Classical Languages

**ACL2001 Elementary Greek I<sup>#\*</sup>** . . . . . **4 cr**  
The first course in a year-long sequence introducing elements of Classical and Koine Greek morphology, syntax and vocabulary. Emphasis is on reading classical and New Testament Greek.

**ACL2002 Elementary Greek II<sup>#\*</sup>** . . . . . **4 cr**  
(PQ: ACL2001 or consent of instructor) The second course in a year-long sequence introducing elements of Classical and Koine Greek morphology, syntax and vocabulary. Continued emphasis on reading classical and New Testament Greek.

**ACL2011 Classical Hebrew I<sup>\*</sup>** . . . . . **4 cr**  
The first course in a year-long sequence introducing elements of Classical (biblical) Hebrew morphology, syntax and vocabulary. Elements of conversational Modern Hebrew are also included.

**ACL2012 Classical Hebrew II<sup>\*</sup>** . . . . . **4 cr**  
(PQ: ACL2011 or consent of instructor) The second course in a year-long sequence introducing elements of Classical (biblical) Hebrew morphology, syntax and vocabulary. Elements of conversational Modern Hebrew are also included.

**ACL2021 Classical Latin I<sup>#\*\*</sup>** . . . . . **4 cr**  
The first course in a year-long sequence introducing the elements of Classical Latin morphology, syntax and vocabulary. Students read portions of Cicero, Horace and other Latin authors.

**ACL2022 Classical Latin II<sup>#\*\*</sup>** . . . . . **4 cr**  
(PQ: ACL2021 or consent of instructor) The second course in a year-long sequence introducing the elements of Classical Latin morphology, syntax and vocabulary. Students read portions of Cicero, Horace and other Latin authors.

**ACL3201 Intermediate Greek I<sup>#\*</sup>** . . . . . **4 cr**  
(PQ: ACL2002 or consent of instructor) The first course in a year-long sequence to improve students' abilities in Greek grammar and syntax and their application to reading and exegesis.

**ACL3202 Intermediate Greek II<sup>#\*\*</sup>** . . . . . **4 cr**  
(PQ: ACL3201 or consent of instructor) The second course in a year-long sequence to improve students' abilities in Greek grammar and syntax and their application to reading and exegesis.

**ACL4301 Advanced Greek I<sup>\*\*</sup>** . . . . . **1–4 cr**  
(PQ: ACL3202 or consent of instructor) The first course in a year-long sequence devoted to extended reading of Classical and Koine Greek authors and/or detailed exegesis of biblical texts, according to student needs. This course can be taken as a directed study.

**ACL4302 Advanced Greek II<sup>\*\*</sup>** . . . . . **1–4 cr**  
(PQ: ACL4301 or consent of instructor) The second course in a year-long sequence devoted to extended reading of Classical and Koine Greek authors and/or detailed exegesis of biblical texts, according to student needs. May be taken without having completed ACL4301. This course can be taken as a directed study.

**ACL5201U Greek for Biblical Exegesis<sup>\*</sup>** . . . . . **4 cr**  
(PQ: ACL2002 or one year of introductory Greek or consent of the instructor) This course includes a study of intermediate Greek grammar and syntax with the goal of applying this knowledge to reading and exegesis of the New Testament text. Students also apply original language skills to exegetical research.

## Animation & Illustration

**ANI1005 Animation Principles and Trends<sup>§</sup>** . . . . . **2 cr**  
This course is designed to introduce students to the world of animation through lecture and laboratory sessions. Lectures will survey the history of animation and introduce the conceptual framework, as well as the implications of techniques. The laboratory sessions will provide hands-on training on specific software and discuss new developments and future trends in the industry. A \$75 course fee required.

**ANI1105 Animation I<sup>§</sup>** . . . . . **4 cr**  
This course is designed to introduce the techniques, strategies and conceptual approaches to animation that utilize the direct animation techniques. Weekly workshops with different techniques will guide students towards a deeper understanding of the various methods of animation and their processes. A \$75 course fee required.

**ANI2201 Animation II<sup>§</sup>** . . . . . **4 cr**  
(PQ: ANI1105 or consent of instructor) Exploration of the basic principles of movement for the animator, working with the very basic movements to the complex. A \$75 course fee required.

**ANI3015 Illustration<sup>§</sup>** . . . . . **2 cr**  
This is an intermediate course that allows the student to examine and create illustrations focused on character development for animation. Students are encouraged to experiment with a wide variety of software, media, and techniques through concept-driven coursework. A \$75 course fee required.

**ANI3105 Figure Drawing<sup>§</sup>** . . . . . **2 cr**  
(PQ: ART1011) Course content explores human and animal anatomy through gesture studies and finished renderings. Topics include proportion, exaggeration and perspective. A \$75 course fee required.

**ANI3106 Motion Design<sup>§</sup>** . . . . . **4 cr**  
(PQ: ANI1105) Course also listed as DES3106. A course designed to explore the principles and processes of motion design through the use of digital compositing tools. Special attention is given to the design processes used to create and manipulate visual and typographic sequences. Emphasis is placed on the relationship between the production methods and software supporting traditional and digital animation pipelines. A \$75 course fee required.

**ANI3205 CG Production<sup>§</sup>** . . . . . **4 cr**  
(PQ: ANI1105 and ANI2201) This course is designed to assist students in creating an animated short. Students will study all aspects of production from conceptualizing, scripting, storyboarding, production and post-production. Assignments will emphasize shooting style, character development, research and developing a production. A \$75 course fee required.

**ANI3303 3D Modeling<sup>§</sup>** . . . . . **4 cr**  
The objective of this course is to expand the knowledge of hard- and soft-bodied surfaces. Students will learn good edgeflow and topology for animation and will improve the rendering skills needed to showcase their models. Students will learn best practices for 3D modeling as used in animation, films and print. A \$75 course fee required.

**ANI3305 Character Design<sup>§</sup>** . . . . . **2 cr**  
(PQ: ART1011) This course continues material introduced in Drawing I (ART1011) while concentrating on developing aesthetically appealing characters. Complex designs are developed in conjunction with story, animation and cinematic concepts. A \$75 course fee required.

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**ANI4303 Advanced Animation<sup>s</sup>** . . . . . **4 cr**  
**(PQ:** ANI1105 and ANI2201) This course expands the continued study of the principles of motion through the use of computer generated animation. Projects focus on developing sophisticated skills in model building, animation, color and lighting. A \$75 course fee required.

**ANI4835 Portfolio Seminar<sup>s</sup>** . . . . . **2 cr**  
**(PQ:** senior standing) This course continues the study of animation principles with a focus on development of projects suitable for a professional portfolio. Students will develop sophisticated skills in model building, animation, color and design. A \$75 course fee required.

**ANI4855 Senior Capstone<sup>s</sup> <sup>OCE</sup>** . . . . . **2 cr**  
**(PQ:** SPE1075 or SPE1825, and senior standing) A seminar-based production course to prepare for the realities of the professional world. This capstone experience is designed to employ all aspects of preparation for a career in digital media animation. The student will create an original animated sequence using the fundamentals of digital media and work within a collaborative team to finalize their demonstration “reel.” A \$75 course fee required.

**ANI4995 Animation & Illustration Internship** . . . . . **1–2 cr**  
**(PQ:** junior or senior standing, consent of faculty supervisor, and internship registration form) Supervised off-campus work experience in digital media. **Note:** This course is designated as repeatable. See page 25 for note regarding internships.

## Art

**ART1005 Principles of Art** . . . . . **2 cr**  
 An introductory study of art appreciation. The course covers the elements and principles of design as an entry into discussion surrounding the meaning and purpose of visual imagery. Concepts emerge from the content areas of aesthetics, art history and critical inquiry. Equivalent to ART1007 or ART1009 (for ART1009, see College of Graduate, Online, & Adult Learning catalog).

**ART1006 Creative Explorations of Art** . . . . . **2 cr**  
 An introductory study of art concepts and appreciation. The course covers the elements and principles of design as an entry into discussion surrounding the meaning and purpose of visual imagery. Concepts emerge from the content areas of aesthetics, art history, and critical inquiry.

**ART1007 Art Appreciation<sup>##</sup>** . . . . . **3 cr**  
 An introductory study of art appreciation. The course covers art-related vocabulary, focused observation, historical context and the elements and principles of design as an entry into discussion surrounding the meaning and purpose of visual imagery. Concepts emerge from the content areas of aesthetics, art history and critical inquiry. May be taken to count toward the Creative Expression requirement in the core curriculum. Equivalent to ART1005. Only offered through Dual Enrollment.

**ART1011 Drawing I<sup>s</sup>** . . . . . **4 cr**  
 A foundational-level drawing class focusing on landscape, still life and the figure, using traditional materials and techniques. Emphasis is placed on visual sensitivity and basic technique, with specific studies in anatomy. A \$75 course fee required.

**ART1035 Design Concepts<sup>s</sup>** . . . . . **4 cr**  
 An introductory course in understanding and application of principles and elements of two-dimensional and three-dimensional art. A \$75 course fee required.

**ART1825 Honors Topics: Art Appreciation** . . . . . **2 cr**  
**(PQ:** ACT Composite score of 27 or above [SAT score of 1280 or above, or CLT score of 85 or above], or high school cum GPA of 3.7 or higher, or consent of instructor) An in-depth study of a particular historical period or geographic location of visual art. Focus of the course is on descriptive, interpretive and evaluative analysis of art. ART1825 is a repeat of ART1005 and ART1007.

**ART2021 Print I<sup>s</sup>** . . . . . **3 cr**  
**(PQ:** ART1011) This course focuses on contemporary and traditional techniques as they relate to traditional printmaking processes. Students will learn two distinct mediums over the duration of the class. Screen-printing and Relief Printing (aka woodcuts and linoleum) will be the main focus however color theory and ink mixing will be introduced as well. A \$75 course fee required.

**ART2031 Painting I<sup>s</sup>** . . . . . **3 cr**  
 An introductory studio course in acrylic painting that focuses on the visual qualities unique to painting. Basic concepts include designing two-dimensional work, exploring color and creating texture. The history of painting is integrated with an examination of painting styles. A \$75 course fee required.

**ART2048 Ceramics I<sup>s</sup>** . . . . . **3 cr**  
 This course will explore the fundamental methods of making ceramic forms as well as glazing and firing. This course is specially designed to meet the requirements necessary for Visual Art Education students but is open to all students. This course will explore functional ceramics and sculptural forms. A \$125 course fee required.

**ART2081 Photography I<sup>s</sup>** . . . . . **3 cr**  
 Introduction to basic digital camera body, lens functions, exposure and foundational workflow for digital photography, including image editing, file archiving and printing. A \$75 course fee required.

**ART2251 Sculpture I<sup>s</sup>** . . . . . **3 cr**  
 An introductory-level sculpture course exploring the use of sculptural techniques, materials and strategies. Emphasis is placed on understanding the history of and current trends within contemporary sculpture, as well as applying that knowledge in the creation of a variety of sculptural forms. A \$75 course fee required.

**ART3112 Drawing II<sup>s</sup>** . . . . . **2 cr**  
**(PQ:** ART1011) A higher-level, studio-intensive drawing course which explores alternative drawing techniques and materials with the still life and the figure. Specific studies with media include chalk and conte, metalpoint and transfer drawings. Advanced work in gesture and anatomy studies of the human figure are included. **Note:** This course is designated as repeatable and may be repeated two times for credit after the original taking of the course. A \$75 course fee required.

**ART3162 19th and 20th Century Art History** . . . . . **2 cr**  
 A course focusing on the development of art during the 19th and 20th centuries.

**ART3223 Print II, III, IV<sup>s</sup>** . . . . . **3 cr**  
**(PQ:** ART2021) A continuation of printmaking that explores advanced techniques to provide deeper understanding of artistic processes and possibilities of expression. **Note:** This course is designated as repeatable and may be repeated three times after the original taking of the course. A \$75 course fee required.

**ART3233 Painting II, III, IV<sup>S</sup>** . . . . . **3 cr**  
**(PQ: ART2031)** An advanced painting course in oil and water-based media. Emphasis is placed on exploring ideas and concepts integrated with personal expression and critical judgments about art. **Note:** This course is designated as repeatable and may be repeated three times after the original taking of the course. A \$75 course fee required.

**ART3243 Ceramics II<sup>S</sup>** . . . . . **3 cr**  
**(PQ: ART2048)** A continuation of ceramics exploring wheel thrown functional objects, clay forming, handbuilding, and firing techniques. The history of ceramics, glaze formulation, and firing processes also receive attention. A \$125 course fee required.

**ART3253 Sculpture II, III, IV<sup>S</sup>** . . . . . **3 cr**  
**(PQ: ART2251)** A higher-level, studio-intensive course exploring sculptural expression through a variety of techniques and ideas. The course includes instruction in plaster building and casting, stone and wood carving and metal casting. The history of sculpture and its current trends is also incorporated into the making process. **Note:** This course is designated as repeatable and may be repeated three times after the original taking of the course. A \$75 course fee required.

**ART3265 Art Since 1945** . . . . . **2 cr**  
 A survey of contemporary fine art since WWII. Emphasis is placed on learning key artists and art movements, as well as understanding their impact on the history of art and the broader culture. A variety of images and films will be discussed.

**ART3267 Themes in Art History<sup>WCE</sup>** . . . . . **4 cr**  
**(PQ: ENG2205 or ENG2825, and sophomore standing)** A course focusing on the themes and developments of art and culture with a primary focus on western art traditions but will include themes from Asia, India, Africa and South America.

**ART3322 Photography II<sup>S</sup>** . . . . . **3 cr**  
**(PQ: ART2081)** An advanced photography experience with an emphasis placed on exploring ideas and concepts integrated with personal expression as well as an understanding of the historical and critical context of photography. A \$75 course fee required.

**ART3365 Aesthetics** . . . . . **2 cr**  
**(PQ: junior standing or consent of instructor)** A survey of the history of Aesthetics and the philosophy of art. A variety of current and historical topics in the theory and philosophy of art will be explored through studying the works of important artists and philosophers.

**ART4855 Senior Seminar in Art<sup>S OCE</sup>** . . . . . **3 cr**  
**(PQ: SPE1075 or SPE1825, and senior standing in art major)** This capstone course is a directed study with a member of the Art & Design faculty. It is designed to address production and content issues particular to each student. The primary focus of this seminar is to build professional practices related to portfolio creation, thesis exhibition, artist statement, and artist talks—skills that are necessary to apply for grants, graduate school, professional exhibitions, and academic jobs. A \$75 course fee required.

**ART4995 Art Internship** . . . . . **1–4 cr**  
**(PQ: SPE1075 or SPE1825, consent of faculty supervisor, and internship registration form)** Supervised work experience in a real-world setting requiring organizational, administrative, technical, and/or artistic skills in an arts or arts management setting. Forty hours of on-site work is required per credit. **Note:** This course is designated as repeatable. See page 25 for note regarding internships.

## Athletics – Intercollegiate

**Note: Courses in this section are designated as repeatable.**

**ATH2000 Intercollegiate Cross–Country–Men** . . . . . **0–1 cr**  
**ATH2005 Intercollegiate Cross–Country–Women** . . . . . **0–1 cr**  
**ATH2010 Intercollegiate Football–Men** . . . . . **0–1 cr**  
**ATH2020 Intercollegiate Golf–Men** . . . . . **0–1 cr**  
**ATH2025 Intercollegiate Golf–Women** . . . . . **0–1 cr**  
**ATH2030 Intercollegiate Soccer–Men** . . . . . **0–1 cr**  
**ATH2035 Intercollegiate Soccer–Women** . . . . . **0–1 cr**  
**ATH2045 Intercollegiate Volleyball–Women** . . . . . **0–1 cr**  
**ATH2050 Intercollegiate Basketball–Men** . . . . . **0–1 cr**

**ATH2055 Intercollegiate Basketball–Women** . . . . . **0–1 cr**  
**ATH2060 Intercollegiate Baseball–Men** . . . . . **0–1 cr**  
**ATH2065 Intercollegiate Softball–Women** . . . . . **0–1 cr**  
**ATH2070 Intercollegiate Tennis–Men** . . . . . **0–1 cr**  
**ATH2075 Intercollegiate Tennis–Women** . . . . . **0–1 cr**  
**ATH2080 Intercollegiate Track–Men** . . . . . **0–1 cr**  
**ATH2085 Intercollegiate Track–Women** . . . . . **0–1 cr**  
**ATH2090 Intercollegiate Lacrosse–Men** . . . . . **0–1 cr**  
**ATH2095 Intercollegiate Lacrosse–Women** . . . . . **0–1 cr**

## Bible

**BIB2005 Survey of the Old Testament<sup># +</sup>** . . . . . **4 cr**  
 A survey of the 39 books of the Old Testament with emphasis on historical setting and literary features. Equivalent to satisfy BIB1009 (see College of Graduate, Online, & Adult Learning catalog). Credit for the course may be achieved through a locally prepared examination.

**BIB2008 Survey of the New Testament<sup># +</sup>** . . . . . **2 cr**  
 A survey of the 27-books of the New Testament with emphasis on historical setting and literary features. Equivalent to BIB1019 (see College of Graduate, Online, & Adult Learning catalog). Credit for the course may be achieved through a locally prepared examination.

**BIB2826 Honors Survey of the New Testament** . . . . . **2 cr**  
**(PQ: ACT Composite score of 27 or above [SAT score of 1280 or above, or CLT score of 85 or above], or high school cum GPA of 3.7 or higher or consent of instructor)** A study of the socio-historical setting, literary

genres and theological message of the New Testament. Students study the process by which the New Testament was established, the relationship of the Old Testament to the New Testament and critical methods of New Testament scholarship. BIB2826 is a repeat of BIB2008.

**BIB2827 Honors Survey of the Old Testament** . . . . . **4 cr**  
**(PQ: ACT Composite score of 27 or above [SAT score of 1280 or above, or CLT score of 85 or above], or high school cum GPA of 3.7 or higher or consent of instructor)** A survey of the 39 books of the Old Testament with emphasis on historical setting and literary features. BIB2827 is a repeat of BIB2005.

**BIB3015 Matthew<sup>\*\*</sup>** . . . . . **4 cr**  
 An exposition of the Gospel of Matthew, examining the authorship, date, setting, argument and theology of the book.

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**BIB3016 Mark<sup>#</sup>** . . . . . **2 cr**  
An exposition of the Gospel of Mark, examining the authorship, date, setting, argument and theology of the book.

**BIB3017 Luke<sup>#\*\*</sup>** . . . . . **4 cr**  
An exposition of the Gospel of Luke, examining the authorship, date, setting, argument and theology of the book.

**BIB3018 John<sup>\*\*</sup>** . . . . . **4 cr**  
An exposition of the Gospel of John, examining the authorship, date, setting, argument and theology of the book.

**BIB3020 Life of Christ<sup>#</sup>** . . . . . **2 cr**  
A study of the life and teachings of Jesus as found in the four gospels within their historical context. Credit from BIB2229 (see College of Graduate, Online, & Adult Learning catalog) may count toward/for BIB3020.

**BIB3045 Theology for Social Engagement.** . . . . . **2 cr**  
The course will explore how the Scripture informs a Christian understanding of critical social issues. The course will study various systems of theology and their ability to speak effectively into the social issues related to race, economics, and gender. The course will also explore the church's relationship to the state in these areas.

**BIB3115 Romans.** . . . . . **2 cr**  
An exposition of Romans with an emphasis on Paul's theological message.

**BIB3117 Galatians.** . . . . . **2 cr**  
An exposition of Galatians with an emphasis on Paul's theological message.

**BIB3155 The Holy Spirit in the Christian Life.** . . . . . **2 cr**  
This course will examine what the Bible teaches us about the Holy Spirit and his work in our lives. It will pursue understanding of how he functioned in the life and earthly ministry of Jesus; of the fundamental relation between our minds and the work of the Holy Spirit within and among us; and of what it means to "walk in the Spirit."

**BIB3216 1–2 Corinthians<sup>\*\*</sup>** . . . . . **4 cr**  
An expositional study of 1–2 Corinthians, examining the authorship, setting, message and theology of the books.

**BIB3217 Hebrews and General Letters<sup>\*\*</sup>** . . . . . **4 cr**  
A rapid exposition of Hebrews, James, 1–2 Peter and Jude, studying their purposes, unifying principles, theological distinctives and uses of the Old Testament.

**BIB3218 Revelation.** . . . . . **4 cr**  
An exposition of the book of Revelation, studying its authorship, date, setting, literary structure, use of the Old Testament, themes, theology and contribution to biblical prophecy and the plan of God.

**BIB3219 Prison Letters** . . . . . **2 cr**  
An exposition of four New Testament letters written from prison – Ephesians, Philippians, Colossians and Philemon – with attention to their individual messages, themes, theology and unity.

**BIB3221 Gospels.** . . . . . **2 cr**  
An exposition of the four gospels which emphasizes the theological message as discovered in the unfolding of the narrative within its historical context.

**BIB3223 Pauline Epistles<sup>\*\*</sup>** . . . . . **2 cr**  
An exposition of Paul's letters which emphasizes the historical setting and theological message.

**BIB3225 Acts of the Apostles<sup>\*\*</sup>** . . . . . **2 cr**  
An expositional study of the book of Acts, emphasizing the birth and growth of the Church as the gospel message spread through Asia and Europe. Particular attention is devoted to applying principles gleaned from biblical, historical narrative to contemporary Christianity.

**BIB3227 1–2 Thessalonians<sup>\*\*</sup>** . . . . . **2 cr**  
An exposition of 1–2 Thessalonians, studying their purposes, unifying principles and theological distinctives.

**BIB3228 Pastoral Letters<sup>\*\*</sup>** . . . . . **2 cr**  
An exposition of 1–2 Timothy and Titus, addressing both doctrinal and practical elements. Special attention is directed to pastoral and church problems and challenges.

**BIB3231 Pentateuch<sup>\*</sup>** . . . . . **4 cr**  
A rapid exposition of Genesis, Exodus, Leviticus, Numbers and Deuteronomy, examining the authorship, composition, historical setting, theology and unity of the Pentateuch. Later understanding of the Pentateuch by Old and New Testament writers is addressed.

**BIB3234 Minor Prophets** . . . . . **2 cr**  
A rapid exposition of the twelve Minor Prophets, Hosea through Malachi. Attention is directed to each book's authorship, date, historical setting, message and theology.

**BIB3235 Genesis<sup>#</sup>** . . . . . **4 cr**  
An expositional examination of Genesis: its structure, historical background, message and themes. Study of the book's argument and theology addresses topics such as creation, sin, humanity, law and covenant.

**BIB3236 Selected Psalms** . . . . . **2 cr**  
An expositional study of selected types of psalms, with consideration to their poetic forms, figures of speech, theology, interpretive difficulties and messianic significance.

**BIB3237 Isaiah<sup>\*\*</sup>** . . . . . **4 cr**  
An expositional study of Isaiah: its authorship, historical background, structure, message and theology. The study draws out Isaiah's prophetic significance, its use by New Testament authors and its importance for messianic understanding of Jesus.

**BIB3238 Daniel<sup>#</sup>** . . . . . **2 cr**  
An exposition of the book of Daniel, including its authorship, date, historical setting, literary genre, prophetic message and authenticity.

**BIB3245 Proverbs and Song of Solomon** . . . . . **2 cr**  
An expositional study of Proverbs and Song of Solomon. Focus is directed to poetic forms, genres, theology and the practical application of these books.

**BIB3246 Old Testament Historical Writings<sup>\*\*</sup>** . . . . . **4 cr**  
A rapid exposition of Joshua, Judges, 1–2 Samuel and 1–2 Kings: their authorship, dates, historical setting, message and theology. The contribution of Ruth to the period is also studied.

**BIB3825 Honors Topics in Old Testament Exposition<sup>\*\*</sup>** . . . . . **2–4 cr**  
(PQ: ACT Composite score of 27 or above [SAT score of 1280 or above or CLT score of 85 or above], or high school cum GPA of 3.7 or higher, or consent of instructor) Each of the offerings of this course focuses on an Old Testament book or grouping of books; specifically addresses its more specialized, technical and problematic issues; and interacts with the work of scholars who have made special contributions to the field of study.



**BIB3826 Honors Topics in New Testament Exposition\*\*** . . . . . **2–4 cr**  
 (PQ: ACT Composite score of 27 or above [SAT score of 1280 or above or CLT score of 85 or above], or high school cum GPA of 3.7 or higher, or consent of instructor) Each of the offerings of this course focuses on a New Testament book or grouping of books; specifically addresses its more specialized, technical and problematic issues; and interacts with the work of scholars who have made special contributions to the field of study.

**BIB3827 Honors Topics in Old/New Testament Exposition\*\*** . . . . . **2–4 cr**  
 (PQ: ACT Composite score of 27 or above [SAT score of 1280 or above or CLT score of 85 or above], or high school cum GPA of 3.7 or higher, or consent of instructor) Each of the offerings of this course focuses on Old and New Testament books or grouping of books as specified in the class schedule. Each course offering moves quickly through the basic content of the biblical book(s) to focus on more specialized, technical, and problematic issues. Some of the issues that are examined critically include introductory matters (authorship, date, provenance, purpose, and literary background), structure, theology, and use in the Old or New Testament. Emphasis is given to interaction with the work of Old or New Testament scholars who have made special contributions to the book(s) studied.

**BIB4360 Systematic Theology#** . . . . . **4 cr**  
 (PQ: junior standing or consent of instructor) The study of Evangelical Christian beliefs and their relationship to other belief systems as well as their relevance to contemporary discussions both inside and outside of the church.

**BIB4365 Historical Theology#** . . . . . **4 cr**  
 (PQ: junior standing or consent of instructor) The study of theology that examines the development of key doctrines throughout the history of the church.

**BIB4460 Biblical Theology#** . . . . . **4 cr**  
 (PQ: junior standing or consent of instructor) The study of theology that identifies the themes emerging from the various books of the Bible and explains their contribution to the progress of divine revelation.

**BIB4825 Honors Systematic Theology\*** . . . . . **4 cr**  
 (PQ: ACT Composite score of 27 or above [SAT score of 1280 or above or CLT score of 85 or above], or UNW cum GPA of 3.6 or higher, or consent of instructor) The study of Evangelical Christian beliefs and their relationship to other belief systems as well as their relevance to contemporary discussions both inside and outside of the church. BIB4825 is a repeat of BIB4360.

**BIB4835 Seminar in Theological Method\* # OCE** . . . . . **4 cr**  
 (PQ: BIB4360 or BIB4825 or BIB4365 or BIB4460 and SPE1075 or SPE1825; or consent of instructor) An integration of the historical, methodological and hermeneutical aspects of theology as well as a survey of its various methods and trends, enabling the student to begin constructing his/her own theological methods for doing systematic theology within the life and mission of the Church.

**BIB6211U Interpreting the Pentateuch\*** . . . . . **4 cr**  
 (PQ: acceptance into an accelerated graduate program) An exposition of the first five books of the Old Testament, emphasizing the historical setting and theological message.

**BIB6214U Interpreting the Gospels** . . . . . **2 cr**  
 (PQ: acceptance into an accelerated graduate program) A study of the historical, theological, and exegetical issues in the four gospels. The application and assessment of critical methods are emphasized.

**BIB6215U Interpreting Acts\*\*** . . . . . **2 cr**  
 (PQ: acceptance into an accelerated graduate program) An exposition of Acts that emphasizes the historical setting and theological message.

**BIB6216U Interpreting the Pauline Epistles\*\*** . . . . . **2 cr**  
 (PQ: acceptance into an accelerated graduate program) A study of the historical, theological, and exegetical issues in each of Paul's letters. Special attention is given to interpretive problems and contemporary discussions related to the study of Pauline literature.

**BIB6312U Biblical Theology of the Old and New Testaments** . . . . . **4 cr**  
 (PQ: acceptance into an accelerated graduate program) A study of current methods and issues in the field of biblical theology, with emphasis on application to Old and New Testament books. Students will develop theological categories from the text and identify the variety and unity of theological themes.

## Biblical Arts

**BIA1007 Christian Thinking & Living#** . . . . . **2 cr**  
 A study of basic Christian teachings to cultivate a distinctively Christian mindset and godly character including biblical principles of Christian discipleship and moral decision-making.

**BIA1015 Interpreting Scripture#** . . . . . **2 cr**  
 A study of the Bible as the Word of God and of the proper methods of interpretation for spiritual transformation.

**BIA1826 Honors Christian Thinking & Living** . . . . . **2 cr**  
 (PQ: ACT Composite score of 27 or above [SAT score of 1280 or above or CLT score of 85 or above], or high school cum GPA of 3.7 or higher, or consent of instructor) A study of basic Christian beliefs and values in the cultivation of a Christian mindset and character. This includes principles for spiritual growth and moral decision-making. BIA1826 is a repeat of BIA1007.

**BIA1827 Honors Interpreting Scripture** . . . . . **2 cr**  
 (PQ: ACT Composite score of 27 or above [SAT score of 1280 or above or CLT score of 85 or above], or high school cum GPA of 3.7 or higher, or consent of instructor) A study of the Bible as the Word of God and of the proper methods of interpretation for spiritual transformation. BIA1827 is a repeat of BIA1015.

**BIA3235 Second Temple Judaism\* #** . . . . . **4 cr**  
 A study of Jewish civilization from 538 B.C. to A.D. 135 as an aid to understanding both the formation of the Old Testament and the rise of Christianity. Primary emphasis is on political and social history, with considerable attention to the literary materials of the period.

**BIA3236 Biblical Customs and Geography\* #** . . . . . **4 cr**  
 A study of the geography of the Fertile Crescent with special emphasis on Israel and Judah. Selected customs of the ancient Hebrews and surrounding peoples are studied for the light that they shed on Scripture.

**BIA4837 Seminar in Exegetical Method\* # WCE** . . . . . **4 cr**  
 (PQ: ENG2205 or ENG2825; ACL2002; 4-credit Bible exposition course) A senior-level course in exegetical method for Biblical & Theological Studies majors helping them refine their exegetical skills by having them apply those skills to the study of passages from several genre of biblical literature. Students work through the process of exegesis on the assigned passages of Scripture and present the results of their exegesis in exegetical papers.

## COURSE DESCRIPTIONS

**BIA5015U Biblical Hermeneutics\*<sup>WCE</sup>** ..... 4 cr  
 (PQ: ENG2205 or ENG2825, and acceptance into an accelerated graduate program) An advanced course in hermeneutics in which students will learn about the formation of the Bible, the history of biblical interpretation, modern critical methods, and current challenges to biblical interpretation.

**BIA5021U Apologetics** ..... 2 cr  
 (PQ: acceptance into an accelerated graduate program) A rational defense of the Christian faith, with emphasis on critical thinking, theistic arguments, the problem of evil, and other challenges to Christian belief.

## Biology

Directed studies are available. See pages 26–27.

**BIO1007 DNA: The Language of Life\*** ..... 2 cr  
 A survey of the field of genetics for non-biology majors. Students will learn about the structure and function of DNA, how it is passed on from parents to offspring and how it is studied and manipulated for human good. Discussion of the social, legal and ethical implications of the genetics will be included. Lab activities may be included.

**BIO1008 Microbes and Society\*** ..... 2 cr  
 A survey of the field of microbiology for non-science majors. Students learn about microorganisms and viruses and their importance in human health, medicine, industry, food production and the environment. Discussion of societal challenges surrounding the topics is emphasized. Course activities include lecture, discussion, group work, hands-on activities and laboratory experiments.

**BIO1009/1009L Concepts of Biology<sup>§</sup>** ..... 4 cr  
 (NOT available to students who have received a grade of C- or better in any college-level BIO course. Not intended for biology majors.) A survey of the field of biology intended to promote an understanding of basic biological principles and how these principles can be applied in everyday life. Topics covered in the course may include cell structure and function, human anatomy and physiology, genetics, biotechnology, microbiology, ecology, bioethics, evolution and creation. Three lectures and one two-hour lab per week. A \$200 laboratory fee required. Concurrent registration required in lecture and lab.

**BIO1011/1011L Principles of Biology I<sup>§</sup>** ..... 4 cr  
 (PQ: high school biology or C- or better in BIO1009; high school chemistry is strongly recommended) A foundational course for science and preprofessional majors that includes introductory molecular and cellular structure and function, cellular and species continuity and introductory physiology. Intended for biochemistry, biology, engineering, health sciences, kinesiology, mathematics education, nursing or physical education majors or coaching minors. Three lectures and one two-hour lab per week. A \$200 laboratory fee required. Concurrent registration required in lecture and lab.

**BIO1012 Principles of Biology II** ..... 4 cr  
 (PQ: C- or better in BIO1011) A continuation of BIO1011 with an emphasis on organismal biology. This course includes a survey of eukaryotic metazoan animals with a study of anatomical structure and function, taxonomy, reproductive biology and development. Three lectures per week (no laboratory).

**BIO1025 Medical Terminology<sup>##</sup>** ..... 2 cr  
 A concise course that provides practice in the definition and use of medical terms. The course includes the analysis of words based on combining forms, prefixes and suffixes. Intended to fulfill the admission requirement for many health profession graduate programs; also benefits pre-medicine and pre-dentistry students. Only offered through Dual Enrollment. This course does not fulfill the core curriculum Natural Science requirement within the Scientific & Quantitative Literacy section.

**BIO2015 Sustainable Urban Agriculture** ..... 2 cr  
 This course will introduce students to small scale food systems. Students will encounter the interactions between social and biological systems involved in food production. Emphasis will be placed on small scale sustainable agriculture.

**BIO2016 Our Changing Climate** ..... 2 cr  
 This course seeks to help students understand more about the topic of climate change by addressing the following questions: What is global warming all about? Is it real? Are we to blame? How does faith inform our understanding of it? This course will include work in ecology, environmental studies, geology, social science, political science, economics, and other disciplines to give a well-rounded view of the current research and debate on whether our climate is changing, and if so, what are the possible causes. This course is intended to disentangle the complex web of climate change science for informed decision making.

**BIO2113/2113L Principles of Biology III<sup>§</sup>** ..... 4 cr  
 (PQ: C- or better in BIO1011) This course is designed to introduce the student to major concepts of the life sciences with an emphasis in botany, environmental science and ecology. The course includes discussion of basic ecological principle such as the role of natural and sexual selection, discussion on the different theories on the origins of species from various perspectives, species interactions, population dynamics and landscape and community processes. Introduction of plant structure and function, human impact on biodiversity and environmental stewardship are also discussed. Three hours of lecture, one two-hour lab per week. A \$200 laboratory fee required. Concurrent registration required in lecture and lab.

**BIO2116/2116L Animal Biology\*<sup>§</sup>** ..... 4 cr  
 (PQ: C- or better in BIO1012) Comparative study of structure and function of key animal phyla with an overview of the medical, ecological and economic impact of animals. Three lectures and one two-hour lab per week. A \$200 laboratory fee required. Concurrent registration required in lecture and lab.

**BIO2825/2825L Honors Topics in Biology\*<sup>§</sup>** ..... 2 or 4 cr  
 (PQ: ACT Composite score of 27 or above [SAT score of 1280 or above, or CLT score of 85 or above, or high school cum GPA of 3.7 or higher] or consent of instructor) A study of a specialized aspect of biology curriculum that includes contemplation of the natural world. The laboratory component may consist of an intensive field trip to a specialized ecosystem or habitat. For 4 credit course only: \$200 laboratory fee required; concurrent registration required in lecture and lab.

**BIO3015/3015L Field Ornithology<sup>§</sup>** ..... 4 cr  
 This summer course will use time in the field (outdoors) to study the biology, ecology, diversity, behavior and field identification of birds. Laboratory will be integrated into class time. Special attention will be paid to local species of the upper Midwest. Additionally, this course will explore how birds reveal lessons on Christianity and the nature of God. A \$200 laboratory fee required. Concurrent registration required in lecture and lab.

- BI03017 Analysis of Vegetative Communities Lab** . . . . . **2 cr**  
Plant ecology and distribution are integrated into a survey of the plant taxa. Focus of course will be on tree and shrub ID and field research techniques. Meets for one three-hour lab per week.
- BI03145/3145L Microbiology<sup>s</sup>** . . . . . **4 cr**  
(PQ: C- or better in BIO1011) A survey of microorganisms and viruses and their importance to humans in agriculture, medicine, industry and the environment. Lab work emphasizes culture techniques and the characteristics of microorganisms. Three lectures and one two-hour lab per week. A \$200 laboratory fee required. Concurrent registration required in lecture and lab.
- BI03157/3157L Human Anatomy<sup>s</sup>** . . . . . **4 cr**  
(PQ: C- or better in BIO1011 or C- or better in HPE2175) A study of the structure of the cells, tissues and organs of the various organ systems of the human body. Included are the integumentary, skeletal, muscular, respiratory, digestive, circulator, nervous, endocrine, excretory and reproductive systems. Three lectures and one two-hour lab per week. A \$200 laboratory fee required. Concurrent registration required in lecture and lab.
- BI03158/3158L Human Physiology<sup>s</sup>** . . . . . **4 cr**  
(PQ: C- or better in BIO1011) A study of the mechanisms and interrelationships of the following body systems: nervous, endocrine, muscle, circulatory, respiratory, renal, digestive, metabolic, immune and reproductive. Special emphasis is given to those interactions contributing most to homeostasis. Three lectures and one two-hour lab per week. A \$200 laboratory fee required. Concurrent registration required in lecture and lab.
- BI03159 Pathophysiology** . . . . . **4 cr**  
(PQ: C- or better in BIO3158) A focused course that introduces students to the physiology of disease in the human body. The course explores the patterns of disease in the body's major organ systems. Intended to fulfill the admission requirement for Nursing, Physician Assistant, Occupational Therapy and other health care professionals such as Medicine, Dentistry, Pharmacy, Chiropractic, etc.
- BI03175/3175L Ecology\* <sup>s</sup>** . . . . . **4 cr**  
(PQ: C- or better in BIO2113) Basic concepts of ecology of population, communities and ecosystems, Analysis and synthesis of the interrelatedness of the living and non-living factors in the environment. Three lectures and one two-hour lab per week. A \$200 laboratory fee required. Concurrent registration required in lecture and lab.
- BI03231/3231L Biochemistry I<sup>s</sup>** . . . . . **5 cr**  
(PQ: C- or better in BIO1011 and C- or better in CHE3101) Structural and integrated functions of carbohydrates, proteins, lipids and nucleic acids; biosynthesis, biodegradations, metabolic pathways and bioenergetics; quantitation of chemical equilibria. Three lectures and one three-hour lab per week. A \$200 laboratory fee required. Concurrent registration required in lecture and lab.
- BI03232 Biochemistry II\*** . . . . . **4 cr**  
(PQ: C- or better in BIO3231) Builds upon Biochemistry I to describe biological regulatory processes at a greater breadth and depth; mechanisms by which cells store, replicate, repair and express genetic information; recombinant DNA technology. Three lectures per week.
- BI03236 Immunology\*** . . . . . **4 cr**  
(PQ: C- or better in BIO1011 and C- or better in CHE3101; BIO3145 is recommended) Molecular and cellular bases for humoral immune responses: diversity of antibodies, their interactions with antigens and their measurement. Study includes cell-mediated immune responses, including histocompatibility systems, natural immunological tolerance and immune suppression. Three lectures per week.
- BI03246/3246L Genetics<sup>s</sup>** . . . . . **5 cr**  
(PQ: C- or better in BIO1011 and C- or better in CHE3101) A detailed study of molecular genetics and classical Mendelian inheritance. Molecular topics include DNA structure, prokaryotic and eukaryotic gene expression, mutation, recombinant DNA technology and genomics. Three lectures and one three-hour lab per week. A \$200 laboratory fee required. Concurrent registration required in lecture and lab.
- BI03276/3276L Field Biology<sup>s</sup>** . . . . . **4 cr**  
Exploration of techniques and procedures to design field experiments to further study plant biology, animal biology and ecological concepts. Two lectures and two two-hour labs per week. A \$200 laboratory fee required. Concurrent registration required in lecture and lab.
- BI03277/3277L Conservation Biology\* <sup>s</sup>** . . . . . **4 cr**  
(PQ: C- or better in BIO2113) A survey of the distribution and management of natural resources with special emphasis on developing critical thinking skills and developing new solutions to problems of resource scarcity. Topics include: energy, water, air, food and biodiversity and other selected components of the lithosphere and hydrosphere. Economics, demographic, religious and political issues are considered as they affect resources. Three lectures and one two-hour lab per week. A \$200 laboratory fee required. Concurrent registration required in lecture and lab.
- BI03347 Cell Physiology** . . . . . **4 cr**  
(PQ: C- or better in BIO1011 and C- or better in CHE3101) Cell physiology is an in-depth study of the fundamentals of cell biology. This course will investigate the molecules involved in cell structure and function. Each organelle in the cell will be investigated on a physiological and ultrastructural level. Various types of plant and animal cells will be explored for unique functions based on the physiological needs of the organism. An emphasis on the different types of optics used in microscopy will be investigated as well as the primary techniques used in cell biology experiments. In addition, cellular metabolic pathways such as protein synthesis, cell signaling, protein folding, the cell cycle and membrane transport will be studied. This course intends to provide a comprehensive study of the physiological workings of cell and its structures.
- BI03348/3348L Cell Biology\* <sup>s</sup>** . . . . . **5 cr**  
(PQ: C- or better in BIO1011 and C- or better in CHE3101) Cell and organelle organization and function; cellular transport and communication; specialized cell formation. Three lectures and one three-hour lab per week. A \$200 laboratory fee required. Concurrent registration required in lecture and lab.
- BI03835 Career Competencies Seminar** . . . . . **1 cr**  
(PQ: minimum of sophomore standing) Orientation and preparation for an academic internship. To be completed the semester immediately prior to enrolling in the internship course offered by the academic department.
- BI04355 Developmental Biology\*** . . . . . **4 cr**  
(PQ: C- or better in the following: BIO1012 and BIO3145, BIO3231, BIO3246, or BIO3348) Vertebrate embryology including morphogenesis, differentiation and interactive biochemical control mechanisms. Three lectures per week.
- BI04359 Biotechnology Lab\* <sup>s</sup>** . . . . . **2 cr**  
(PQ: C- or better in the following: BIO3145 or BIO3231 or BIO3246 or BIO3348) Practical experiences in molecular biology including DNA isolation and analysis, gene cloning, Southern Blotting, PCR amplification, agarose gels and PAGE, DNA fingerprinting as well as practical medical laboratory diagnostic techniques. Two two-hour labs per week. A \$200 laboratory fee required.



## COURSE DESCRIPTIONS

**BI04835 Senior Seminar<sup>OCE WCE</sup> . . . . . 2 cr**  
 (PQ: ENG2205 or ENG2825; SPE1075 or SPE1825; and at least junior standing as a biochemistry or biology major) A capstone course designed to provide an integration of concepts in the biological sciences, biochemistry and the health professions with a discussion of the ethics of applied biology and the health sciences as they pertain to a global and culturally diverse society.

**BI04841 Research<sup>5</sup> . . . . . 0–2 cr**  
 (PQ: completion of at least 24 credits in the biology major) Students work closely with research mentor to learn literature search, proposal preparation for a research project, experimental protocols, data acquisition, statistics, manuscript preparation. Students will sign a

document including the University of Northwestern Policy on Original Research Data in order to register for all research courses. **Note:** This course is designated as repeatable and may be repeated for up to 8 total credits. Only 4 credits may be used toward completion of Biology Major credits. A \$200 research fee required.

**BI04995 Biology Internship . . . . . 1–4 cr**  
 (PQ: completion of at least 24 credits in the biology major; consent of faculty supervisor, and internship registration form) Supervised work experience in a biology lab or area related to career choice. **Note:** This course is designated as repeatable. See page 25 for note regarding internships.

## Business

**BUS1115 Introduction to Spreadsheets<sup>#</sup> . . . . . 2 cr**  
 Students are introduced to spreadsheets through a hands-on experience. Students will learn to create and manipulate spreadsheets, enter formulas, copy and edit cell entries, create graphs, sort data, and print. The spreadsheet skills learned in this course are applicable in other business courses as well as being essential to employment opportunities.

**BUS2011 Introduction to Business Analysis<sup>#</sup> . . . . . 2 cr**  
 (PQ: BUS1115 recommended) This course provides an introduction to frequently used data analysis techniques that can aid business decision making. Data capture, processing, analysis, and presentation techniques will be introduced. Excel and other relevant software tools will be used to perform basic data analysis.

**BUS2131 Business Japanese I<sup>\*\*</sup> . . . . . 4 cr**  
 Intensive study of the Japanese language, specifically pertaining to business operations.

**BUS2132 Business Japanese II<sup>\*\*</sup> . . . . . 4 cr**  
 Continued study of the Japanese language, specifically pertaining to business operations.

**BUS3005 Principles and Practices of Leadership<sup>5</sup> . . . . . 4 cr**  
 An introduction to the best practices, key competencies, strategies, and techniques of exceptional leadership. Students will explore various models and frameworks related to leading both themselves and others, in conjunction with exploration of personal identity and purpose presented through the Christ-centered model of servant leadership. Students will apply learnings in this course to define their unique Personal Leadership Blueprint, through reflection of their values, beliefs, passions, and calling. A \$35 assessment fee required.

**BUS3235 Global Business . . . . . 4 cr**  
 (PQ: MKT1085 and MGT2271 [C or better required in both]) A survey of the complexities, challenges and opportunities of engaging in international business, including consideration of entry strategies and MNC operations.

**BUS3331 Business Law - Contract and Agency . . . . . 3 cr**  
 A study of contracts and sales as the basic laws affecting business transactions. Also, law of principal and agency relationships.

**BUS3835 Professional Skills Seminar<sup>5</sup> . . . . . 2 cr**  
 Students study and practice the professional skills necessary to be successful in business, with strong emphasis on written and oral communication. Additionally, a particular focus is on the skills essential to search for and secure an internship and full time employment. Students will develop and enhance their job acquisition skills, including networking, searching and targeting prospective employers, résumé development, professional communication and

interview skills. Proficiency in these activities are key for both the internship process and career development. This course should be completed in the semester immediately prior to taking ACC4995, BUS4995, BUS4996, FIN4995, or MKT4995. A \$50 course fee required.

**BUS4332 Business Law - Partnerships and Corporations . . . . . 2 cr**  
 (PQ: C or better in BUS3331 and MGT2271) A study of the legal aspects of business relationships pertaining to partnerships and corporations. Law pertaining to negotiable instruments, property and secured transactions.

**BUS4435 Business Ethics<sup>OCE WCE</sup> . . . . . 4 cr**  
 (PQ: junior standing; ENG2205 or ENG2825; SPE1075 or SPE1825; or consent of instructor) An understanding of personal and corporate integrity from a biblical perspective and resolving ethical dilemmas is emphasized. A comprehensive case analysis is required.

**BUS4615 Practicum and Seminar in Leadership . . . . . 4 cr**  
 This course provides students the opportunity to apply key concepts, models, and frameworks of leadership. In this application-focused course, students will interact with and study leadership in practice through leader interviews, guest speakers, case studies, and leading an initiative.

**BUS4665 Global Experience Assessment . . . . . 1 cr**  
 This course guides students through topics of research about global business centered on a short-term, cross-cultural, business-focused study abroad experience.

**BUS4995 Business Administration Internship . . . . . 1 cr**  
 (PQ: BUS3835, consent of faculty supervisor, and internship registration form) Supervised work experience related to student's major. Students may enroll for this course at various times as their schedules permit. **Note:** This course is designated as repeatable and may be repeated three times after the original taking of the course. See page 25 for note regarding internships.

**BUS4996 Global Business Internship . . . . . 1 cr**  
 (PQ: BUS3835, consent of faculty supervisor, and internship registration form) Supervised experience of three to six months' duration in China or another foreign country. **Note:** This course is designated as repeatable and may be repeated three times after the original taking of the course. See page 25 for note regarding internships.

**BUS4998 Professional Experience Assessment . . . . . 1 cr**  
 (PQ: consent of instructor) Students with clear career trajectory and substantial experience, either in an entrepreneurial endeavor or in succession opportunity in the same company, may be eligible to complete a Professional Experience Assessment in lieu of the traditional internship.

## Business Administration

**BUA5220U Human Resource Leadership** . . . . . **2 cr**  
**(PQ:** admission to the B.S./graduate degree program) This course examines the role of the human resource management as a strategic component in managing and developing today's organizations. This course provides a strategic overview of the key concepts and principles of each human resource function, along with their practical implications for organizational development to various types of firms including entrepreneurial and global firms. Key functions such as recruitment, selection, development, appraisal, retention, compensation, and labor relations are examined. Implications of legal and global environments are appraised and current issues such as diversity training, sexual harassment policies, and rising benefit costs are analyzed.

**BUA5420U Business Leadership Ethics<sup>OCE WCE</sup>** . . . . . **4 cr**  
**(PQ:** ENG2205 or ENG2825; SPE1075 or SPE1825; or consent of instructor; and admission to the B.S./graduate degree program) This course provides a well-rounded comprehensive study of industry and personal ethical dilemmas, integrating biblical principles and

perspectives. Using industry case studies, students will engage in background research, alternative analyses comparisons, consequence evaluation, faith integration, and decision justifications. Additional topics include business and personal ethics integration, personal and business ethical leadership, biblical short/long-term consequences evaluations, profit/loss implications, and senior management implementation considerations.

**BUA5720U Managerial Finance** . . . . . **2 cr**  
**(PQ:** C or better in FIN2221; or C or better in ACC2101, ACC2102, and ACC3201; and admission to the B.S./graduate degree program) This course is a study of the economic and financial structures of firms and their impact on the financial and operational requirements of firms. Topics include financial environment, stock and bond valuation, time value of money, capital budgeting, risk and rate of return, analysis of financial statements, project cash flows, cost of capital, financial planning, working capital policy, and managing short-term assets and liabilities.

## Chemistry

**Note: For all natural science courses, the student must earn a "C-" or better in all prerequisite courses.**

**CHE1006/1006L Concepts of Chemistry<sup>#</sup>** . . . . . **5 cr**  
**(PQ:** One year of high school algebra or two years recommended. NOT available to students who have received a grade of C or better in any CHE course) A survey of chemistry and its applications, intended to promote understanding and literacy in the sciences in general and especially in the field of chemistry. Topics studied include the scientific method and its relationship to faith and reason; matter and energy; atomic and molecular structure; chemical bonding and intermolecular forces; chemical formulas and equations; water, acids and bases; oxidation-reduction reactions; and chemistry around the house. Students carry out the experiments at home using a small kit supplied by the campus store and readily available equipment, supplies and chemicals. This course fulfills the core curriculum Natural Science requirement within the Scientific & Quantitative Literacy section. Only offered through Dual Enrollment. Concurrent registration required in CHE1006 and CHE1006L.

**CHE1021/1021L Principles of Chemistry I<sup>§</sup>** . . . . . **4 cr**  
**(PQ:** One year of high school chemistry [or C- or better in CHE1006] and two years of high school algebra; course is intended for biochemistry, biology [major or minor], engineering, health sciences, kinesiology, mathematics, mathematics education and nursing majors only, or by consent of instructor) Fundamentals of measurement, the scientific method and its relationship to faith and reason, nuclear and electronic structure of the atom, chemical bonding, shapes and polarities of molecules, thermochemistry, stoichiometry and types of chemical reactions. The laboratory is integrated with the classroom sessions. Three lectures and one two-hour lab per week. Equivalent to CHE1121. A \$200 laboratory fee required. Concurrent registration required in lecture and lab. A \$75 CHE1021 course fee required.

**CHE1022/1022L Principles of Chemistry II<sup>§</sup>** . . . . . **4 cr**  
**(PQ:** C- or better in CHE1021 or CHE1121) A continuation of CHE1021. Gases, liquids, solids, solutions, solubility, acid-base chemistry, equilibrium, kinetics, thermodynamics and electrochemistry. The laboratory is integrated with the classroom sessions. Three lectures and one two-hour lab per week. A \$200 laboratory fee required. Concurrent registration required in lecture and lab. A \$75 CHE1022 course fee required.

**CHE1121/1121L General Chemistry I<sup>#</sup>** . . . . . **5 cr**  
**(PQ:** One year of high school chemistry [or C- or better in CHE1006] and two years of high school algebra, or consent of instructor.) Fundamentals of measurement, the scientific method and its relationship to faith and reason, nuclear and electronic structure of the atom, chemical bonding, thermochemistry, stoichiometry, types of chemical reactions, states of matter intermolecular forces. The hands-on exercises are integrated with the class topics. Equivalent to CHE1021. This course fulfills the core curriculum Natural Science requirement within the Scientific & Quantitative Literacy section. Only offered through Dual Enrollment. Concurrent registration required in CHE1121 and CHE1121L.

**CHE3101/3101L Organic Chemistry I<sup>§</sup>** . . . . . **5 cr**  
**(PQ:** C- or better in CHE1021) The focus of CHE3101, in one word, is structure. The structures and geometries of carbon-containing molecules, including the topics of isomerism and stereochemistry, are examined in great detail using models and spectroscopic techniques. It is the structure of molecules which enables one to understand chemical reactivity. Types of reactions and mechanisms studied include simple substitution, addition and elimination. Three lectures and one three-hour lab per week. A \$200 laboratory fee required. Concurrent registration required in lecture and lab.

**CHE3102/3102L Organic Chemistry II<sup>§</sup>** . . . . . **5 cr**  
**(PQ:** C- or better in CHE3101) This course is a continuation of the fundamentals of organic chemistry theory and practice introduced in CHE3101. Topics include structure, representation, and reactivity of aromatics, Diels-Alder adducts, carbonyl derivatives, biomolecules, radicals, and others along with corresponding laboratory techniques for preparation, purification, and characterization of the aforementioned, concluding with an introduction to medicinal chemistry and the drug discovery process. Three lectures and one three-hour lab per week. A \$200 laboratory fee required. Concurrent registration required in lecture and lab.

## COURSE DESCRIPTIONS

**CHE3321 Physical Chemistry I\*** . . . . . **4 cr**  
**(PQ:** C- or better in CHE1022 and C- or better in MAT2121) Principles of thermodynamics, physical and chemical equilibria, and kinetics and the applications of these principles to chemical and biochemical systems.

**CHE4841 Chemistry Research<sup>5</sup>** . . . . . **0–2 cr**  
**(PQ:** completion of at least 24 credits in the biology or biochemistry major) Students work closely with research mentor to learn literature search, proposal preparation for a research project, experimental protocols, data acquisition, statistics, manuscript preparation. Students will sign a document including the University of Northwestern Policy on Original Research Data in order to register for all research courses. **Note:** This course is designated as repeatable and may be repeated for up to 8 total credits. Only 4 credits may be used toward completion of Biology Major or Biochemistry Major credits. A \$200 research fee required.

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**Chinese**

**CHN1001 Beginning Chinese I\* \*\*** . . . . . **4 cr**  
 The first of a two-course sequence. An introduction to the Chinese language and culture. Practice in listening, speaking, reading and writing. Emphasis on the development of communicative skills; individual expression within structured groups. No previous study of Chinese required.

**CHN2101 Intermediate Chinese I\*** . . . . . **4 cr**  
**(PQ:** CHN1002) The first of a two-course sequence. This course reviews material and expands skills developed at the introductory level. An emphasis on the development of communicative skills. Class discussions in Chinese on contemporary cultural topics. Three 65-minute periods of lecture and one hour of lab per week.

**CHN1002 Beginning Chinese II\* \*\*** . . . . . **4 cr**  
**(PQ:** CHN1001) The second of a two-course sequence. A continuation of the study of Chinese language and culture. Practice in listening, speaking, reading and writing. Continued emphasis on the development of communicative skills; individual expression within structured groups.

**CHN2102 Intermediate Chinese II\*** . . . . . **4 cr**  
**(PQ:** CHN2101) The second of a two-course sequence. This course continues the development of speaking, listening, reading and writing skills through the study of advanced grammatical topics and the further acquisition of vocabulary. Class discussions in Chinese on contemporary cultural issues. Three 65-minute periods of lecture and one hour of lab per week.

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**Communication** Directed studies are available. See pages 26–27.

**COM2007 Introduction to Film** . . . . . **2 cr**  
 An introduction to the history, theory and aesthetics of motion pictures. Emphasis is on the materials and methods of filmmaking and the criteria for analysis and evaluation of films. The relationships of film to art, literature, historical context, culture and industry are explored.

**COM3106 Organizational Communication\*\*** . . . . . **4 cr**  
 A study of how communication organizes human actions and relationships in organizations. Attention is given to leadership, decision making, collaboration processes, and discussion techniques involving small task-oriented groups. The student studies different organizational structures and management philosophies, considering the role of communication in each. Projects are required to apply concepts studied.

**COM2008 Film Appreciation##** . . . . . **3 cr**  
 Film Appreciation is designed to give an awareness and understanding of motion pictures as a cultural art form. Students will develop a framework from which to analyze films critically, according to specific criteria and understand how film form and film content are interconnected. Students will also be introduced to different genres of movies and movements in film history. May be taken to count toward the Creative Expression requirement in the core curriculum. Equivalent to COM2007. Only offered through Dual Enrollment.

**COM3107 Intercultural Communication** . . . . . **4 cr**  
 An introduction to the practice of intercultural communication. The course is designed to help students develop competence in their interaction with persons from differing cultures. Topics include understanding and explaining diversity, perception, verbal and nonverbal codes, culture shock and ethical standards across cultures.

**COM2107 Communication Theory** . . . . . **4 cr**  
 A comprehensive examination of the theories of human communication, beginning with a review of the metatheoretical traditions informing communication research and progressing through the wide variety of communication theories developed from the 20th century to today. Students write papers, participate in online discussions and produce videos to demonstrate knowledge of theories and to demonstrate the ability to apply the theories to everyday communication and human interactions.

**COM3108 Interpersonal Communication\*\*** . . . . . **2 cr**  
 Understanding and improving interpersonal communication. Theories of interpersonal communication will be explored and areas of competence in communication behavior will be developed.

**COM3105 Gender and Family Communication\*** . . . . . **4 cr**  
 Analysis of marriage and family relationships and how effective communication helps those relationships. The role of gender in relation to communication within families and among family members is also explored. Self-concept, sending and receiving messages, nonverbal messages, decision making, setting and achieving goals, handling conflict and roles in society are some of the matters to be studied.

**COM3135 Business Communication** . . . . . **2 cr**  
**(PQ:** SPE1075 or SPE1825) Development of skills for writing effective business letters, memos and reports, presenting business reports orally, and writing letters of application and résumés.

**COM4105 Mass Media and Society<sup>DCE WCE</sup>** . . . . . **4 cr**  
**(PQ:** SPE1075 or SPE1825; and ENG2205 or ENG2825) Mass communication and the new media technologies of cyberspace have become central to the psychological, social and political realities of the human experience. This course examines the processes and cultural factors which shape the form, content and consequences of communication through the major media, including books, newspapers, magazines, audio recordings, radio, television, film and new digital technologies.

**COM4308 Communication Research Methods . . . . . 4 cr**  
**(PQ:** COM2107 and MAT2055 or PSY3208) Course also listed as PRL4308. A survey and analysis of the most commonly used methods of social science inquiry relating to the communication discipline. Both qualitative and quantitative methods are examined. Students produce and present original research projects.

**COM4841 Research . . . . . 1–2 cr**  
**(PQ:** COM4308 or PRL4308 or consent of instructor) With the goal of presenting findings at a conference or publishing in an academic journal, students work closely with a research mentor faculty member

## Computer Science

**COS1011 Principles of Computing I . . . . . 2 cr**  
 This course provides the student with an introduction to computer hardware, development of computer programs for problem solving through the use of algorithms and pseudocode, data communications, fundamentals of computer security, and use of computer hardware.

**COS2005 Python Programming# . . . . . 4 cr**  
 This course uses a popular computer language for the development of many types of computer applications. Topics include program design, program structure, debugging programs, computer language syntax, computer commands, assignments and expressions, system inputs and outputs, variables, data types, loops and structured control. The course continues with additional topics such as object types, numerical types, strings, lists, using files, data analysis, functions, scope of variables, arguments, modules, object-oriented programming, exceptions, and developing larger applications for data analysis.

**COS2015 Principles of Computing## . . . . . 4 cr**  
 This course provides the student with an introduction to computer hardware, development of computer programs for problem solving through the use of algorithms and pseudocode, data communications, fundamentals of computer security, and use of computer hardware. This course also provides the student with an introduction to data and databases, operating systems (Linux and Windows), and data analytics and data mining. Only offered through Dual Enrollment.

**COS2112 Principles of Computing II . . . . . 2 cr**  
**(PQ:** COS1011) This course is a continuation of Principles of Computing I and provides the student with an introduction to data and databases, operating systems (Linux and Windows), and data analytics and data mining.

**COS3001 C Programming Language . . . . . 2 cr**  
 Fundamental principles of programming in the “C” programming language for those with some programming experience. Programming techniques, language, and vocabulary. In addition, materials cover variables identification, loops, conditionals statements, data transformations, arrays, pointers, and programming functions.

**COS3002 C++ Programming Language . . . . . 2 cr**  
 Fundamental principles of programming in the “C++” programming language. Object-oriented programming, classes, inheritance, and polymorphism. Exploration of algorithms including searching, sorting and optimization. Exploration of libraries for desktop applications, computer graphics, and machine learning.

to learn literature search, proposal preparation for a research project, experimental protocols, Institutional Review Board process (as needed), data acquisition, statistics and/or manuscript preparation. **Note:** This course is designated as repeatable and may be repeated for up to 4 total credits.

**COM4995 Communication Internship . . . . . 1–4 cr**  
**(PQ:** junior or senior standing, consent of faculty supervisor, and internship registration form) Supervised work experience in communication. **Note:** This course is designated as repeatable. See page 25 for note regarding internships.

**COS3222 Digital Systems Design II . . . . . 2 cr**  
**(PQ:** MAT3226) This is the second half of an introduction to digital logic and digital systems design. It is recommended for computer and electrical engineering students and some computer science majors. Topics include sequential logic, design of synchronous sequential logic, VHDL modeling, design of logic circuits. The course includes both lecture and lab components.

**COS3267 Operating Systems Concepts\* . . . . . 4 cr**  
**(PQ:** CYS3065 or consent of instructor) This course provides the student with an overview of the principles upon which all operating systems are built. The concepts of file, processor, input/output and memory management are explored. In addition, higher-level concepts such as security, multiple processors, multitasking, concurrency and transaction processing are covered. Specific instances of popular operating systems are examined and put into context in light of the principles learned.

**COS3271 Programming I – Java# . . . . . 4 cr**  
**(PQ:** COS2005) This course presents sequential, functional, and object-oriented programming using a popular computer language in the context of an open-source community. Topics include classes, objects, events, methods, properties, syntax, program structure, data types, functions, loops, and conditional statements. Investigations of applications in data analysis and artificial intelligence.

**COS3272 Programming II – Mobile Application Development . . . . . 4 cr**  
**(PQ:** COS3271) This course focuses on the development of applications on mobile platforms. Emphasis is placed on the development of applications for current and emerging mobile computing devices. Students include the following factors into their development projects: platform capabilities, user characteristics and networking infrastructure. The course concludes with development of a major application for an off-campus organization.

**COS4855 Senior Capstone\* <sup>OCE WCE</sup> . . . . . 2 cr**  
**(PQ:** C- or better in CYS3065; ENG2205 or ENG2825; and SPE1075 or SPE1825) The presence of information systems has changed the manner in which business is conducted and affects the day-to-day activities of a majority of employees in the workplace. The management of those systems requires an understanding of issues that fall outside the standard realm of management. This course provides the student with an understanding of the key issues related to the management of information systems and those who design and implement them.

**COS4995 Computer Science Internship . . . . . 0–4 cr**  
**(PQ:** consent of faculty supervisor and internship registration form) Supervised work experience in computer science. **Note:** This course is designated as repeatable. See page 25 for note regarding internships.



**COURSE DESCRIPTIONS**

**Criminal Justice**

**CRJ2125 Criminology# . . . . . 4 cr**

An examination of the extent and nature of crime in the United States. Attention is given to theories of crime causation and an analysis of the social processes leading to criminal behavior.

**CRJ3225 Criminal Justice. . . . . 4 cr**

An examination of the philosophies, principles and social dynamics which have led to the current system of law and justice administration in the United States. Special attention is given to law enforcement, the court system, penal institutions and community corrections such as probation and parole.

**CRJ3226 Corrections . . . . . 4 cr**

(PQ: CRJ2125 or CRJ3225 [one required but both recommended]) An examination of the historical development, theories and institutions of punishment, rehabilitation and social control. Special attention is given to jails and prisons, probation and parole and institutional and community corrections in the United States.

**CRJ3228 Deviance<sup>OCE WCE</sup> . . . . . 4 cr**

(PQ: CRJ2125 or CRJ3225 [one required but both recommended]; ENG2205 or ENG2825; and SPE1075 or SPE1825) An examination of the etiology of criminal behavior, with an emphasis on addictions and chemical abuse and how these relate to rehabilitation versus social control. Attention is also given to ways in which social inequality contributes to criminal behavior and its impact on the criminal justice system.

**CRJ4325 Juvenile Delinquency . . . . . 2 cr**

(PQ: CRJ2125 or CRJ3225 [one required but both recommended]) This course examines the extent and nature of juvenile crime in the United States. It includes an overview of the juvenile justice system, the social and institutional contributors to delinquency, the historical foundations of juvenile justice and criminal law as it applies to juveniles. Emphasis is given to crime causation, to the family and to the community in both prevention and treatment of juvenile delinquency.

**CRJ4327 Criminal Law . . . . . 4 cr**

(PQ: CRJ2125 or CRJ3225 [one required but both recommended]) An examination of the sociology of law, definitions of criminal behavior and defenses to criminal prosecution. Special attention is given to substantive law and to procedural law, such as constitutional issues surrounding arrest through incarceration.

**CRJ4335 Police and Community . . . . . 2 cr**

(PQ: CRJ2125 or CRJ3225 [one required but both recommended]) This course addresses the historical, traditional and new order. Community policing, cultural and gender diversity, police ethics, mental illness issues and collaboration with community resources are all stressed as necessary for effective and efficient understanding of the role of law enforcement.

**CRJ4425 Juvenile Procedures. . . . . 2 cr**

(PQ: CRJ4325) This course examines the process and the law of the juvenile justice system in the United States. It includes a brief overview of the causation theories and societal institutions that contribute to the dysfunction of the juvenile delinquent. The main focus is on the legal chronological sequencing of the process and differentiating the juvenile justice system from the adult justice system. It examines the history of juvenile law to the most recent U.S. Supreme Court Ruling on the death penalty for juveniles (March 1, 2005). This course also focuses on school violence and the rights of students. It provides an in depth study of the various phases and complex nuances of juvenile law.

**CRJ4426 Minnesota Criminal and Traffic Code\*. . . . . 4 cr**

(PQ: CRJ4327) This course is designed to give the student an understanding of the Minnesota Criminal and Traffic Codes. Emphasis is on the criteria established in the MNPOST learning objectives. Constitutional law, case law, state statutes and agency regulations will be integrated into lectures. Case studies, situational crises and legal situational dilemmas will be used in small group discussion and other problem solving exercises. The class is structured to help students interpret the law in both general and specific situations and to translate legal concepts into practical applications.

**CRJ4435 Issues in Policing\* . . . . . 2 cr**

(PQ: CRJ4335) This course is designed to bring a critical thinking approach to the current issues in law enforcement. Topics will be added and/or dropped at the discretion of the instructor. Because modern policing issues change rapidly and are often controversial, the focus will be on the “hot issues and trends.” The class is an interactive experience with small group activities, role play, student presentations and guest speakers.

**CRJ4995 Criminal Justice Internship. . . . . 1–8 cr**

(PQ: consent of faculty supervisor and internship registration form) Supervised work experience in criminal justice. **Note:** This course is designated as repeatable. See page 25 for note regarding internships.

**Cybersecurity**

**CYS2081 Data Communications I\* . . . . . 4 cr**

This course provides the student with a comprehensive overview of the broad topic of data communications. The ISO OSI model for data communications is used as a framework. The ideas of LANs, WANs and the World Wide Web are discussed, as are the concepts of security, network architectures and network management and administration. Examples from modern computer networks are utilized.

**CYS2269 Computer Security Fundamentals. . . . . 4 cr**

(PQ: CYS2081) This course covers an introduction to the concepts of security. These concepts are applied to areas such as programming, databases, networks, systems and applications. The course covers general concepts and specific instances of security related threats. In addition, compliance issues are discussed such as Sarbanes-Oxley reporting and the Health Insurance Portability and Accountability Act (HIPAA).

**CYS3065 Systems Analysis and Design. . . . . 4 cr**

This course presents an overview of the systems-development life cycle with emphasis on the analysis and design phases of software development. The student learns to use one of the popular analysis and design methodologies and a software tool supporting the methodology.

**CYS3265 Tools and Techniques in Computer Science and Cybersecurity<sup>§</sup>. . . . . 4 cr**

(PQ: CYS2269) This course will examine tools and techniques used in computer science for software development. The course includes an emphasis on applicability to cybersecurity. Topics include: DevOps (for example CI/CD pipelines and Jenkins), Containerization (for example OpenShift, Kubernetes and Docker), and Cloud-deployment. Discussion of the use of the above methods to deploy in cloud environments, considerations unique to commercial clouds such as resiliency and scaling. We may also look at virtualization and

orchestration tools (for example VMware, Chef, SaltStack, Puppet, and Ansible), and the differences between imperative and declarative approaches. The course includes a substantial lab and hands-on component, which investigates the use of course tools. A \$100 course fee required.

**CYS4245 Cybersecurity: Current Practices and Trends . . . . . 4 cr**  
(PQ: CYS2269) This course examines three broad areas related to cybersecurity: tools, trends, and risk. Exploration of tools will include current tools for: Data Loss Prevention (DLP), Proxy/Decrypt, DNS security, Web Application Firewalls (WAF), Threat Intelligence, and Sandboxing. Trends discussion will look at how enterprises are shifting their investment in security tools, from on-premises gear, towards cloud-based solutions including OpenSource, SASE (Secure Access Service Edge), CASB (Cloud Access Security Broker), and SWG (Secure Web Gateway). Exploration of risk will include tools and methods around security program management, audit, and legal issues.

**CYS4369 Introduction to Cryptography . . . . . 2 cr**  
(PQ: CYS2269) Introduction to Cryptography focuses on the need to provide secure communications through an insecure medium, namely the Internet. Firms and individuals now see the need for anonymity, non-repudiation, traceability, and authenticity. Each of these needs rely on security mechanisms. This course provides the learner with tools and techniques to create a foundation of secure transmissions. Different levels of security, various security objectives, and a variety of cryptographic techniques will be introduced in this course.

## Data Analytics

**DAL2012 Introduction to Data Analysis . . . . . 2 cr**  
(PQ: BUS2011 or MAT2055) This course provides an introduction to simulation and optimization techniques that are foundational to data analysis and real-world decision making. Topics include time series analysis, linear and non-linear optimization, decision analysis and Monte Carlo simulation. Applications in business, sports, medical and other contexts will be included.

**DAL2235 Principles of Data Analytics<sup>§</sup> . . . . . 4 cr**  
(PQ: MAT2055) This course provides an introduction to the field of data analytics, and the development and use of data warehouses and data marts to support business analytics. The use of key performance indicators, dashboards and scorecards for performance management and opportunity assessment are addressed. Text and web mining are discussed, and the application of selected data mining techniques to business decision making situations is illustrated. A \$200 course fee required.

**DAL3025 Data Visualization . . . . . 2 cr**  
This course uses a popular data visualization system for developing data presentation skills. The material uses primarily dashboards for information monitoring, analyzes and providing a visual display of key performance indicators (KPIs). Topics include web-based data acquisition, text mining, using data dashboards, tracking important data (KPIs) for specific processes, storytelling, and using data to drive decisions.

**DAL3255 Data Mining<sup>§</sup> . . . . . 4 cr**  
(PQ: DAL2235) The data mining course presents methods and systems for mining varied data and discovering knowledge from data. After detailing a data mining system architecture and tasks, the course examines and compares specific methods in data mining, such as data preparation, classification, clustering, and text mining. Several applications are detailed, and tools to build new applications are provided. The task of knowledge discovery is then outlined as

**CYS4465 Computer Firewalls and Penetration Testing\*\* . . . . . 2 cr**  
(PQ: CYS2269) This course presents the basics of VPN security and network firewalls. Basic installation techniques are covered along with how to make an intelligent choice of firewall technology. Basic firewall troubleshooting is also presented. This course aligns with the CheckPoint CCSA Certification outline.

**CYS4466 Digital Forensics . . . . . 2 cr**  
(PQ: CYS2269) An introductory course that provides the student with methods for conducting a computer forensics investigation including procedures, tools, ethics and analysis. This course maps to the objectives of the International Association of Computer Investigative Specialists (IACIS) certification.

**CYS4855 Senior Capstone\* OCE WCE . . . . . 2 cr**  
(PQ: C- or better in MGT2271, CYS3065 or DAL2235; ENG2205 or ENG2825; and SPE1075 or SPE1825) The presence of information systems has changed the manner in which business is conducted and affects the day-to-day activities of a majority of employees in the workplace. The management of those systems requires an understanding of issues that fall outside the standard realm of management. This course provides the student with an understanding of the key issues related to the management of information systems and those who design and implement them.

**CYS4995 Cybersecurity & Information Systems Internship . . . . . 0–4 cr**  
(PQ: consent of faculty supervisor, and internship registration form) Supervised work experience in information systems. **Note:** See page 25 for note regarding internships.

a higher-level goal of data mining. Familiarity with statistics, and database systems, in particular database design, is expected. A \$200 course fee required.

**DAL4235 Big Data Analytics and Applications<sup>§</sup> . . . . . 4 cr**  
(PQ: DAL2235) This course is designed to expose participants to the core concepts and topics of Big Data, to teach the trends and evolution in the field, expose learners to visualization tools, and to give recommendations to software, relevant articles, and research material. A \$200 course fee required.

**DAL4275 Business and Economic Forecasting<sup>§</sup> . . . . . 4 cr**  
(PQ: DAL2235) This course is designed to expose participants to the development and utilization of forecasts. Emphasis on statistical methods (time series, regression, Monte Carlo simulation etc.) and software applied to quantitative forecasting. Specific applications include forecasting sales, market prices, inventory, and macroeconomic factors. A \$200 course fee required.

**DAL4855 Senior Capstone\* OCE WCE . . . . . 2 cr**  
(PQ: C- or better in MGT2271, CYS3065 or DAL2235; ENG2205 or ENG2825; and SPE1075 or SPE1825) The presence of information systems has changed the manner in which business is conducted and affects the day-to-day activities of a majority of employees in the workplace. The management of those systems requires an understanding of issues that fall outside the standard realm of management. This course provides the student with an understanding of the key issues related to the management of information systems and those who design and implement them.

**DAL4995 Data Analytics Internship . . . . . 0–4 cr**  
(PQ: consent of faculty supervisor, and internship registration form) Supervised work experience in data analytics. **Note:** This course is designated as repeatable. See page 25 for note regarding internships.

## COURSE DESCRIPTIONS

## Design

**DES1031 Introduction to Layout<sup>§</sup> . . . . . 2 cr**  
A course introducing and refining skills in design software. Practical applications are explored in the areas of page layout, design and typography. Through a series of structured projects, students gain depth in understanding and using InDesign. Emphasis is placed upon technical proficiency. A \$75 course fee required.

**DES2111 Introduction to Graphic Design<sup>§</sup> . . . . . 2 cr**  
(PQ: DES1031 or consent of instructor) An introductory overview of the design field with an emphasis on conceptual thinking and problem solving. Students gain experience in understanding the principles, theories and skills of design. This course employs the computer as a link between design and technology. A \$75 course fee required.

**DES2235 Digital Illustration<sup>§</sup> . . . . . 2 cr**  
(PQ: DES1031 and DES2111) Digital illustration focuses on the use of digital tools to produce images under the direct manipulation of the artist, usually through a pointing device such as a tablet or a mouse. It is distinguished from computer-generated art, which is produced by a computer using mathematical models created by the artist. It is also distinct from digital manipulation of photographs, in that it is an original construction "from scratch." (Photographic elements may be incorporated into such works, but they are not the primary basis or source for them.) A \$75 course fee required.

**DES2236 Digital Imaging<sup>§</sup> . . . . . 2 cr**  
(PQ: ART1011 or ART1035; DES1031 and DES2111) Digital imaging focuses on the creation of digital images, typically using a camera, scanner or other physical input device to capture from the analog world. Course focuses on workflow, software and hardware, include the processing, compression, storage, printing and display of such images. A \$75 course fee required.

**DES3069 Design History . . . . . 2 cr**  
This course provides a survey of the development of graphic and interface design, with particular attention focused on the relationship of design to other major art and cultural movements of the 19th through 21st centuries. These are viewed in the context of political, technological, scientific and cultural developments that occurred throughout modern history. Architecture, graphic design, industrial design, interior design, interface design, photography, painting, television, film, urban planning, web design and new technologies all affect each other in fluid and often unpredictable ways. We will observe and compare these relationships with respect to the growth of these disciplines and their roles in society and popular culture.

**DES3106 Motion Design<sup>§</sup> . . . . . 4 cr**  
Course also listed as ANI3106. A course designed to explore the principles and processes of motion design through the use of digital compositing tools. Special attention is given to the design processes used to create and manipulate visual and typographic sequences. Emphasis is placed on the relationship between the production methods and software supporting traditional and digital animation pipelines. A \$75 course fee required.

**DES3212 Graphic Design II<sup>§</sup> . . . . . 4 cr**  
(PQ: DES2111, DES2235 and DES2236) An advanced course exploring new ways of combining words and images for effective communication. Students develop design solutions for specific projects by integrating images and text while exploring design history, the dynamics of typography and print production which are directly applicable to professional practice. A \$75 course fee required.

**DES3215 Interactive Design<sup>§</sup> . . . . . 4 cr**  
(PQ: DES2235 and DES2236 or concurrently enrolled) A study of the process and principles driving web/app creation with time-based projects focusing on industry standard applications. A \$75 course fee required.

**DES3271 Typography<sup>§</sup> . . . . . 2 cr**  
(PQ: DES2235) This course will explore both the history and contemporary practice of typography and type design from a designer's point of view. Emphasis will be placed on investigating the processes followed by noted designers in order to inform and illuminate student's personal work. A \$75 course fee required.

**DES4313 Graphic Design III<sup>§ OCE</sup> . . . . . 4 cr**  
(PQ: DES3212, and DES3215 or concurrently enrolled; and SPE1075 or SPE1825) An advanced course designed to provide several research-based professional level projects. Emphasis is placed upon personal portfolio development, refinement and career preparation. A \$75 course fee required.

**DES4845 Senior Project in Graphic Design<sup>§</sup> . . . . . 4 cr**  
(PQ: DES4313) As the second semester of a year-long capstone experience, this advanced course provides students with extended studio investigation in faculty-guided research in an area of the student's choosing. This course may be used in substitution of an internship. A \$75 course fee required.

**DES4995 Graphic Design Internship . . . . . 4 cr**  
(PQ: DES4313 and senior standing, consent of faculty supervisor, and internship registration form) A field-based learning opportunity for professional work experience outside the classroom. Students choose part- or full-time work in an area of specific interest as a link to the professional world of design. Required 160 hours. **Note:** See page 25 for note regarding internships.

## Economics

Directed studies are available. See pages 26–27.

**ECO2201 Principles of Economics I<sup>##</sup> . . . . . 4 cr**  
An introduction to macroeconomic concepts including demand, supply, full employment, money, fiscal policy and monetary policy. Economic history from Adam Smith through communism, socialism and the expansion of capitalism is also studied. The role of public policy is investigated. Equivalent to ECO2211 and ECO2212. Only offered through Dual Enrollment.

**ECO2202 Principles of Economics II<sup>##</sup> . . . . . 4 cr**  
An introduction to microeconomic concepts emphasizing marginal analysis, the role of the firm, pure competition, monopolies and the role of government. Also included are income distribution, investment, labor economics and a large section of international economics. This course will also include a section of "Personal Financial Responsibility" (PFR). Equivalent to ECO2213. Only offered through Dual Enrollment.

**ECO2211 Introduction to Economics . . . . . 2 cr**

This is an introductory course highlighting economic thinking. This course includes learning about scarcity and tradeoffs, economization, incentives, marginal decision making, uncertainty, secondary effects, subjective value, and basic economic theory. Differentiating between positive and normative thinking is emphasized. The basic supply-demand model is introduced and evaluated. The economics of political action is also introduced.

**ECO2212 Principles of Macroeconomics. . . . . 2 cr**

(PQ: ECO2211) This is an introductory course in Macroeconomics. This course includes learning about national income accounts, the

business cycle, the aggregate supply-demand model, employment theory, economic growth, fiscal and monetary policy, money and banking, inflation and international trade. Policy issues are also discussed.

**ECO2213 Principles of Microeconomics . . . . . 2 cr**

(PQ: ECO2212) This is an introductory course in Microeconomics. This course includes learning about price and income elasticity, short run versus long run cost and revenues, economies of scale, price takers, price searchers, and profit maximization. The use of resources by households, firms, and industries is also discussed.

**Education** Directed studies are available. See pages 26–27.**EDU2215 Educational Foundations . . . . . 2 cr**

(PQ: sophomore standing and must be taken concurrently with EDU2215L) Study of the history, philosophy and sociology of American education; administration and organization of schools; teachers' organizations; teacher roles; rewards and frustrations of teaching; influences on instructional decisions; rights and responsibilities of students and teachers; research on teaching and resources for professional growth. Course is taught with a decision-making perspective which encourages self-reflection about the professional fit with teaching. Pre-student teaching required.

**EDU2215L Educational Foundations Lab. . . . . 0 cr**

(PQ: Must be taken concurrently with EDU2215) Pre-student teaching field experience consisting of 20 hours in a school classroom.

**EDU3209 Human Relations in a Cross-Culturally Diverse World . . . . 2 cr**

(PQ: admission to a teacher education program and must be taken concurrently with EDU3209L.) The course is structured with the assumption that pre-service teachers enter the course with a basic understanding of the concepts associated with a solid biblical worldview and prior assumptions based on personal cultural experiences. The course design supports the process of advancing the personal, professional, cultural, historical, spiritual and experiential journey of pre-service teachers as they move from cultural awareness to cultural competence. The course design further supports pre-service teachers in gaining an understanding of how faith applies to embracing cultural diversity and building an inclusive learning environment for all students. The structure of the course is to support deep personal understanding of how faith formation influences the application of best practices in the field of teaching. The goal of the course is to provide pre-service teachers with methods for approaching educational topics from a biblical worldview in ways that are culturally relevant and that contribute to self-esteem and relationship-building of all students, thereby, promoting and building positive interpersonal experiences while avoiding dehumanizing biases, discrimination, marginalization and systemic prejudices sometimes found in the American educational system. Concurrent registration with EDU3285 and EDU3285L is recommended. Pre-student teaching field experience required (20 hours classroom and 30 hours community-based).

**EDU3209L Human Relations Lab. . . . . 0 cr**

(PQ: admission to a teacher education program or consent of the School of Education. Must be taken concurrently with EDU3209.) This lab experience consists of two field experience components that support the learning in EDU3209. Students complete a 20-hour field experience in a diverse school setting. In addition, students complete a 30-hour field-based experience that includes direct involvement with an ethnic or cultural group other than the student's own within the continental United States. The service opportunities allow students to develop an understanding and respect for cultural differences. Concurrent registration with EDU3285 and EDU3285L is recommended.

**EDU3215 Educational Psychology . . . . . 2 cr**

(PQ: admission to a teacher education program or consent of the School of Education, EDU2215 and PSY2108) This course is designed primarily for teacher education students to introduce them to research and theory from psychology that bears on the teaching discipline, including individual differences, intelligence, human growth and development, learning, cognition, motivation, and evaluation.

**EDU3217 School Health and Drug Problems . . . . . 2 cr**

(PQ: sophomore standing) A study of the basic principles of health with an emphasis upon safety, personal hygiene and the use and misuse of chemicals. The approach is from the standpoint of personal prevention, need and responsibility in transferring these principles and biblical values to the school and community health programs. Mandatory reporting laws related to child abuse and neglect and other health issues are addressed.

**EDU3225 Educating Multilingual Learners . . . . . 2 cr**

(PQ: admission to a teacher education program) This course supports the process of advancing the personal, professional, cultural, linguistic, spiritual and experiential journey of pre-service teachers as they move from linguistically proficient communicators to being able to support the development of multilingual student competencies. The course design further supports pre-service teachers in gaining an understanding of how faith applies to embracing language and building an inclusive language learning environment for all students. The structure of the course is to support deep personal understanding of how faith-based dispositions influence the application of best practices in the field of teaching. The goal of the course is to provide pre-service teachers with methods and resources for approaching educational topics with understandings of cognitive and metacognitive language required for strategic support of academic language success for all students, regardless of language proficiency level and prior academic experiences.

**EDU3235 Instructional Foundations<sup>WCE</sup> . . . . . 3 cr**

(PQ: admission to a teacher education program or consent of the School of Education; EDU2215; ENG2205 or ENG2825; and must be taken concurrently with EDU3301.) A study of the foundations and trends in curriculum development in grades PK–12 including: organizational patterns; planning, implementing and evaluating of daily lessons and integrated units; foundations of instructional methodology; classroom management and conflict resolution; and use of technology as an instructional tool.



**COURSE DESCRIPTIONS**

**EDU3255 Content Area Reading . . . . . 2 cr**  
**(PQ:** admission to a teacher education program or consent of the School of Education) This course is designed to provide secondary education and K–12 education majors with an understanding of how to teach reading with and through content texts. The course introduces candidates to reading processes and instructional strategies that promote fluency, vocabulary development, comprehension of text and application of critical thinking skills. Candidates will apply course content by planning learning experiences that establish a purpose for reading, utilize appropriate reading strategies and extend and/or apply knowledge gained from reading.

**EDU3285 Educating Diverse Learners . . . . . 2 cr**  
**(PQ:** EDU2215 and admission to a teacher education program or consent of the School of Education. Must be taken concurrently with EDU3285L.) A foundational course for understanding the complex and diverse learning styles found within the PK–12 system of education with a focus on the PK–12 levels. Topics for the course include the nature of learning, the influence of culture on learning and teaching strategies identified as “best practices.” An introduction to populations labeled at-risk, under-achiever and exceptional comprises a core segment of the course. Historical and contemporary perspectives on special populations within the PK–12 system are included, with an introduction to various types of formal and informal classroom assessments that can aid the classroom teacher in the intervention process. Ten hour field experience required.

**EDU3285L Educating Diverse Learners . . . . . 0 cr**  
**(PQ:** Must be taken concurrently with EDU3285) This lab experience consists of 10 hours of observation and supervised assistance in a PK–12 setting that is designated to meet the needs of students receiving services under IDEA.

**EDU3301 Instructional Technology I: Foundations of Instructional Technology . . . . . 1 cr**  
**(PQ:** admission to a teacher education program or consent of the School of Education. Must be taken concurrently with EDU3235.) In this course, students will develop knowledge and understanding of concepts related to technology and learning, technology applications of education, the role of continuous development of technology, knowledge and skills and the social, ethical, legal and human issues surrounding the use of information and technology in schools. This course will also provide students with skills and experiences of identifying technology resources for diverse learners, applying instructional media and technology and using technology resources of assessment to maximize student learning.

**EDU3302 Instructional Technology II: Applications of Instructional Technology . . . . . 1 cr**  
**(PQ:** EDU3301; concurrent registration in a methods course strongly recommended) This course provides students with skills and experiences for identifying and applying technology resources to meet the needs of diverse learners, using a variety of media and educational technology to enrich learning opportunities; managing technology resources and student learning in technology integrated environments, using appropriate assessment strategies; instruments and technologies to improve instruction and maximize student learning, continuing professional development in technology knowledge and skills; and applying their understanding of the social ethical, legal and human issues regarding technology use in PK–12 classrooms. Students have opportunities to apply and evaluate their understanding of concepts related to technology and learning and reflect on their practices of using technology to enhance teaching and learning.

**EDU4415 Education Ethics<sup>OCE</sup> . . . . . 2 cr**  
**(PQ:** admission to a teacher education program and SPE1075 or SPE1825) A study of legal and ethical issues confronted by teachers within public and private school settings. Emphasis is on the development of decision-making skills which are biblically based and consistent with ethical codes recognized within the profession. A case study approach is used throughout the course.

**EDU4835 Seminar in Professional Issues . . . . . 1 cr**  
**(PQ:** admission to student teaching. To be taken concurrently with student teaching.) A study of PK–12 teachers as professionals with an emphasis on the relationship between theory and practice. Topics include the development of effective home-school-community relationships, behavior management, conflict resolution, professional development and job search skills. Students meet weekly to discuss accomplishments, progress and challenges arising within the student teaching experience.

**EDU4995 Education Internship\*\* . . . . . 1–8 cr**  
**(PQ:** admission to educational studies major and consent of the School of Education and faculty supervisor, and internship registration form) Supervised work experience in an education-related field outside of the traditional classroom. **Note:** See page 25 for note regarding internships (professional experiences).

**Education – Child and Family Development**

**CFD3205 Child Development . . . . . 4 cr**  
**(Must be taken concurrently with CFD3205L)** An overview of the growth and development of children from birth through age twelve years. Topics covered include: current research and major theories of child development, personality and temperament. Special attention is given to physical, social, emotional, cognitive and spiritual development. Field experience in conducting observations of children from infancy through twelve years is an integral part of the course. Observations at approved sites are required.

**CFD3205L Child Development Lab . . . . . 0 cr**  
**(Must be taken concurrently with CFD3205)** Observation in early childhood settings.

**CFD3207 Adolescent Development and the Middle Level Learner . . . 2 cr**  
**(PQ:** sophomore standing) A study of the growth and development of adolescents (ages 11–18 years). Attention is given to physical, social,

emotional, cognitive, and spiritual development. Topics covered include current issues faced by adolescents: social networks, peer relations, sexuality, identity formation, and cultural contexts. The course examines the varying models of middle level education and developmentally appropriate practice for fostering the growth and development of adolescents.

**CFD3309 Facilitating Learning and Development in Young Children. . . 4 cr**  
**(PQ:** CFD3205, CFD3205L, PSY2108, or concurrently enrolled, and sophomore standing) This course is an in-depth study of the growth and development of children 0–8 years with a focus on the following domains: physical, social and emotional, cognitive and literacy and language. With a focus on research and effective practice, students learn to identify milestones of development, conduct assessments and select strategies to facilitate development and learning for infants and toddlers, preprimary children, children in Kindergarten and children in the primary grades (Grades 1–3).

**EDU49XX Student Teaching in Elementary Education (see specific numbers below)**

(PQ: admission to student teaching; to be taken concurrently with EDU4835) Student teaching as a concentrated teaching experience in preparation for full-time employment.

**Communication Arts & Literature Education (CALE)**

Course Number	Title	Credits	Major or Endorsement Field
EDU4912I	Student Teaching in Communication Arts & Literature Education – Middle School	10	Communication Arts & Literature Major
EDU4913I	Student Teaching in Communication Arts & Literature Education – High School	10	Communication Arts & Literature Major
EDU4914I	Student Teaching in Communication Arts & Literature Education – International	4	Communication Arts & Literature Major
EDU4914D	Student Teaching in Communication Arts & Literature Education – Dual Licensure	12	Communication Arts & Literature Major
EDU4915E	Student Teaching in Communication Arts & Literature Education - Endorsement	5	Communication Arts & Literature Education (CALE) Endorsement for Grades 5-8
EDU4916M	Student Teaching in Communication Arts & Literature Education - Middle School	14	Communication Arts & Literature Major
EDU4916H	Student Teaching in Communication Arts & Literature Education - High School	14	Communication Arts & Literature Major
EDU4916D	Student Teaching in Communication Arts & Literature Education - Dual Licensure	6	Dual Licensure ESL Education/ Communication Arts & Literature Education

**Early Childhood Education**

EDU4973I	Student Teaching in Early Childhood Education	10	Early Childhood Major
EDU4974I	Student Teaching in Early Childhood Education: International	4	Early Childhood Major
EDU4976	Student Teaching in Early Childhood Education: Preprimary	7	Early Childhood Major
EDU4976E	Student Teaching in Early Childhood Education: Preprimary Endorsement	5	Early Childhood Education Preprimary Endorsement
EDU4977	Student Teaching in Early Childhood Education: Elementary K - 3	8	Early Childhood Major

## COURSE DESCRIPTIONS

**Elementary Education**

EDU4904I	Student Teaching in Elementary Education – International	4	Elementary Education Major
EDU4904D	Student Teaching in Elementary Education – Dual Licensure	6	Elementary Education Major
EDU4906I	Student Teaching in Elementary Education	10	Elementary Education Major
EDU4906	Student Teaching in Elementary Education	14	Elementary Education Major with Emphasis
EDU4907	Student Teaching in Kindergarten Education	5-7	Kindergarten Education Post-Baccalaureate Licensure - Only Program
EDU4908	Student Teaching in Elementary Education	12	Elementary Education Major with Endorsement
EDU4908D	Student Teaching in Elementary Education – Dual Licensure	12	Dual Licensure Programs Elementary/Spanish Education Elementary/ESL Education

**English as a Second Language Education**

EDU4917	Student Teaching in ESL – Elementary	7	English as a Second Language Major
EDU4917D	Student Teaching in ESL – Dual Licensure	12	Dual Licensure ESL/Communication Arts & Literature Education ESL/Spanish Education
EDU4918	Student Teaching in ESL – Secondary	7	English as a Second Language Major
EDU4918D	Student Teaching in ESL – Dual Licensure	6	Dual Licensure Elementary/ESL Education
EDU4919I	Student Teaching in ESL Education	10	English as a Second Language Major
EDU4920I	Student Teaching in ESL Education – International	4	English as a Second Language Major

**Mathematics Education**

EDU4922I	Student Teaching in Mathematics Education – Middle School	10	Mathematics Education Major
EDU4923I	Student Teaching in Mathematics Education – High School	10	Mathematics Education Major
EDU4924I	Student Teaching in Mathematics Education – International	4	Mathematics Education Major
EDU4925E	Student Teaching in Mathematics Education – Endorsement	5	Mathematics Education Endorsement for Grades 5–8
EDU4926M	Student Teaching in Mathematics Education – Middle School	14	Mathematics Education Major
EDU4926H	Student Teaching in Mathematics Education – High School	14	Mathematics Education Major

**Music Education**

EDU4932I	Student Teaching in Music Education – Vocal & Classroom	10	Music Education Major
EDU4933I	Student Teaching in Music Education – Instrumental & Classroom	10	Music Education Major
EDU4934I	Student Teaching in Music Education – International	4	Music Education Major
EDU4935	Student Teaching in Music Education – Elementary – Vocal & Classroom	7	Music Education Major - Vocal & Classroom
EDU4936	Student Teaching in Music Education – Secondary – Vocal & Classroom	7	Music Education Major - Vocal & Classroom
EDU4937	Student Teaching in Music Education – Elementary – Instrumental & Classroom	7	Music Education Major - Instrumental & Classroom
EDU4938	Student Teaching in Music Education – Secondary – Instrumental & Classroom	7	Music Education Major - Instrumental & Classroom

## Physical Education & Health Education

EDU4943I	Student Teaching in Physical Education & Health Education	13	Physical Education & Health Major
EDU4944I	Student Teaching in Physical Education & Health Education – International	4	Physical Education & Health Major
EDU4945	Student Teaching in Physical Education – Elementary	7	Physical Education & Health Major
EDU4946	Student Teaching in Physical Education – Secondary	5	Physical Education & Health Major
EDU4947	Student Teaching in Secondary Health Education	5	Physical Education & Health Major

## Social Studies Education

EDU4952I	Student Teaching in Social Studies Education – Middle School	10	Social Studies Education Major
EDU4953I	Student Teaching in Social Studies Education – High School	10	Social Studies Education Major
EDU4954I	Student Teaching in Social Studies Education – International	4	Social Studies Education Major
EDU4955E	Student Teaching in Social Studies Education – Endorsement	5	Social Studies Education Endorsement for Grades 5-8
EDU4956M	Student Teaching in Social Studies Education – Middle School	14	Social Studies Education Major
EDU4956H	Student Teaching in Social Studies Education – High School	14	Social Studies Education Major

## Visual Arts Education

EDU4963I	Student Teaching in Visual Arts Education	10	Visual Arts Education Major
EDU4964I	Student Teaching in Visual Arts Education – International	4	Visual Arts Education Major
EDU4965	Student Teaching in Visual Arts Education Elementary	7	Visual Arts Education Major
EDU4966	Student Teaching in Visual Arts Education Secondary	7	Visual Arts Education Major

## World Languages & Cultures

EDU4983I	Student Teaching in World Languages & Cultures: Spanish Education	10	Spanish Education Major
EDU4984I	Student Teaching in World Languages & Cultures: Spanish Education – International	4	Spanish Education Major
EDU4984D	Student Teaching in World Languages & Cultures: Spanish Education – Dual Licensure	12	Spanish Education Major
EDU4986	Student Teaching in World Languages and Cultures: Spanish Education – Elementary	7	Spanish Education Major
EDU4987	Student Teaching in World Languages and Cultures: Spanish Education – Secondary	7	Spanish Education Major
EDU4987D	Student Teaching in World Languages and Cultures: Spanish Education Secondary – Dual Licensure	6	Dual Licensure ESL/Spanish Education Elementary/Spanish Education



**COURSE DESCRIPTIONS**

**Education – Communication Arts/Literature**

**Note: PQ for the following upper-level (3000–4999) education courses include admission to a teacher education program.**

**EDE3306 Communication Arts and Literature Education: Content and Standards\*** . . . . . **2 cr**  
**(PQ:** Admission to a teacher education program) A study of content and strategies regarding relationships among the elements of the communication process; effects of the various types of print and digital media on the communication process; competent participation with information literacy. Content and strategies related to debate, theatre, journalism and professional mentoring of extra-curricular activities will be explored.

**EDE4100M Teaching Secondary Reading and Literature Lab - Middle School** . . . . . **0 cr**  
**(PQ:** EDU3235, SPE1075 or SPE1825 and admission to communication arts/literature education [grades 5–12] teacher education program. Must be taken concurrently with EDE4366 and EDE4367.) Observation and teaching in a grade 5–8 language arts classroom.

**EDE4200H Teaching Secondary Reading and Literature Lab - High School** . . . . . **0 cr**  
**(PQ:** EDU3235, SPE1075 or SPE1825 and admission to communication arts/literature education [grades 5–12] teacher education program. Must be taken concurrently with EDE4366 and EDE4367.) Observation and teaching in a grade 9–12 language arts classroom.

**EDE4356 Teaching Language and Communication in Grades 5–8 . . . 2 cr**  
**(PQ:** EDU3235, SPE1075 or SPE1825 and admission to the communication arts/literature [grades 5–8] endorsement program. Must be taken concurrently with EDE4356L.) A study of the

purposes, methods, instructional materials and evaluation techniques for teaching middle school communication and language usage. Pre-student teaching required.

**EDE4356E Teaching Language and Communication Grades 5–8 Lab . . . 0 cr**  
**(PQ:** EDU3235; SPE1075 or SPE1825; and admission to communication arts/literature [grades 5–8] endorsement teacher education program. Must be taken concurrently with EDE4356.) Observation and teaching in a middle school languages arts classroom.

**EDE4366 Teaching Language and Communication in Grades 5–12<sup>OCE</sup> . . 4 cr**  
**(PQ:** EDU3235; SPE1075 or SPE1825; and admission to the communication arts/literature [grades 5–12] teacher education program. Must be taken concurrently with EDE4367, EDE4100M and EDE4200H.) A study of the purposes, methods, instructional materials and evaluation techniques for teaching communication and language usage in grades 5–12. Pre-student teaching required.

**EDE4367 Teaching Secondary Reading and Literature Methods<sup>OCE</sup> . . 4 cr**  
**(PQ:** EDU3235; SPE1075 or SPE1825; and admission to the communication arts/literature [grades 5–12] teacher education program. Must be taken concurrently with EDE4366, EDE4100M and EDE4200H.) A study of the purposes, methods, instructional materials and evaluation techniques in the teaching of secondary reading and literature. The course provides theory, modeling and application of instructional strategies for enhancing students' ability to read various texts and for analyzing literature within middle school and high school classrooms. Pre-student teaching required.

**Education – Early Childhood**

**Note: PQ for the following upper-level (3000–4999) Education courses include admission to a teacher education program.**

Students enrolling in Early Childhood Education courses requiring field experiences must have clearance from the Minnesota State Department of Human Services Background Study.

**ECE2216 Foundations of Early Childhood Education** . . . . . **2 cr**  
**(PQ:** sophomore standing. Must be taken concurrently with ECE2216L.) The first course in the early childhood program sequence. Students study the rationale of the early childhood education teacher education program and explore developmentally appropriate practice (DAP) and its implications for early childhood programs. An introduction to play theory as the center of DAP in early childhood curriculum is also included. Pre-student teaching required.

**ECE2216L Foundations of Early Childhood Education Lab** . . . . . **0 cr**  
**(PQ:** must be taken concurrently with ECE2216) Observation in an early childhood setting for a minimum of 20 hours.

**ECE3306 Infant/Toddler Methods** . . . . . **4 cr**  
**(PQ:** admission to the early childhood education teacher education program; or consent of the School of Education, PSY2108, EDU3235, and CFD3205. Must be taken concurrently with ECE4835, ECE3306L and ECE3307L) A study of developmentally appropriate practice for nurturing the growth and development of infants through toddlers, including the interrelatedness of learning environments, materials and behavior guidance techniques. Pre-student teaching required.

**ECE3306L Infant Methods Lab** . . . . . **0 cr**  
**(PQ:** admission to the early childhood education teacher education program; or consent of the School of Education. PSY2108, EDU3235, and CFD3205. Must be taken concurrently with ECE3306) Observation and teaching in infant classroom.

**ECE3307L Toddler Methods Lab** . . . . . **0 cr**  
**(PQ:** admission to the early childhood education teacher education program; or consent of the School of Education. PSY2108, EDU3235, and CFD3205. Must be taken concurrently with ECE3306.) Observation and teaching in toddler classroom.

**ECE4215 Early Childhood Visual Arts Methods and Strategies . . . . 2 cr**  
**(PQ:** admission to the early childhood education teacher education program; or consent of the School of Education) A study of the purposes, methods, instructional materials, and evaluation techniques for guiding children's visual arts development in class settings from birth through grade 3. Students will develop skills in visual arts production (drawing, painting, clay & dough sculpture, manipulation of art materials & processes), planning and leading lessons, integrating visual arts and other academic subjects, evaluating children's visual arts development, and demonstration of visual arts teaching techniques through peer group exchange overseen by the course instructor. Pre-student teaching required.

**ECE4217 Early Childhood Music Methods and Strategies** . . . . . **2 cr**  
**(PQ:** admission to the early childhood education teacher education program; or consent of the School of Education) A study of the purposes, methods, instructional materials, and evaluation techniques for guiding children's music development in class settings from birth through grade 3. Students will develop skills in music performance (singing, chanting, moving, playing instruments), planning and leading lessons, integrating music with other academic subjects, and evaluating children's music development. Pre-student teaching required.

**ECE4316 Pre-primary Methods . . . . . 4 cr**  
**(PQ:** admission to the early childhood or elementary education teacher education program; or consent of the School of Education, PSY2108, EDU3235; and CFD3205, CFD3205L. Must be taken concurrently with ECE4316L, ECE4835 or ECE4836) A study of the interrelatedness of developmentally appropriate practice, learning environments, materials and behavior guidance techniques. The study of current curriculum models and how curriculum can be used to enhance play.

**ECE4316L Pre-primary Methods Lab–ECE . . . . . 0 cr**  
**(PQ:** admission to the early childhood teacher education program; or consent of the School of Education. PSY2108 and EDU3235. Must be taken concurrently with ECE4316) Observation and teaching in a pre-primary (ages 3–5) classroom.

**ECE4317E Pre-primary Methods Lab–Endorsement . . . . . 0 cr**  
**(PQ:** admission to the pre-primary teacher education endorsement program; or consent of the School of Education. PSY2108 and EDU3235. Must be taken concurrently with ECE4316) Observation and teaching in a pre-primary (ages 3–5) classroom.

**ECE4835 Early Childhood Seminar I . . . . . 0–1 cr**  
**(PQ:** admission to the early childhood education teacher education program and concurrently enrolled in ECE4316 or ECE3306) This course is an opportunity to relate theory to practice; deal with issues arising from field placement experiences, discuss topics applicable to all curricular areas, discuss professionalism in the field of early childhood education, work on professional portfolio development, discuss issues and current trends in early childhood education and prepare for the Teacher Performance Assessment Early Childhood Education. To be taken concurrently with the enrollment in early childhood core courses and field experiences.

**ECE4836 Early Childhood Seminar II . . . . . 0–1 cr**  
**(PQ:** admission to the early childhood education teacher education program and concurrently enrolled in ECE4316 or ECE3306) This course is an opportunity to relate theory to practice; deal with issues arising from field placement experiences, discuss topics applicable to all curricular areas, discuss professionalism in the field of early childhood education, work on professional portfolio development, discuss issues and current trends in early childhood education and prepare for the Teacher Performance Assessment Early Childhood Education. To be taken concurrently with the enrollment in early childhood core courses and field experiences.

## Education – Elementary

**Note:** (PQ for the following upper-level (3000–4999) Education courses include admission to a teacher education program.

**EEL4307 Language Arts and Literature in the Elementary School . . . 4 cr**  
**(PQ:** PSY2108, EDU3235 and admission to the early childhood education teacher education program) This course presents language arts and children's literature as an integrated part of an educational program. Extensive reading of children's literature, development of instructional techniques that utilize good quality literature throughout the elementary curriculum and criteria for the selection of literature for the classroom are included. Understanding the language arts to include reading, writing, listening, speaking, viewing and visually representing, pre-service teachers will become familiar with comprehensive, scientifically based reading instruction programs, practices and methods as they apply to reading and writing instruction within the language arts. Pre-service teachers will understand how language arts and children's literature are used to assist children in reading for both efferent and aesthetic purposes in communication arts, as well as in the content areas through selection of quality literature and knowledge of literary text structures, genres and perspectives. Pre-service teachers will understand the role of oral language, spelling and writing in supporting the literacy development of all student including English language learners, in the elementary classroom.

**EEL4317 Mathematics Methods and Strategies (K–3) . . . . . 2 cr**  
**(PQ:** Admission to the early childhood education teacher education program; or consent of the School of Education, PSY2108 and EDU3235. Minimum grade of C in MAT1006. Must be taken concurrently with EEL4318, EEL4319, EEL4835 and EEL4837L.) A study of the purposes, methods, instructional materials and evaluation techniques in the teaching of mathematics at the K–3 level. The course provides theory, modeling and application of instructional strategies for developing mathematical literacy using developmentally appropriate practice with children in grades K–3. The development of instructional skills to support mathematical reasoning, communication and problem solving across the curriculum is emphasized. Pre-student teaching required.

**EEL4318 Science and Social Studies Methods and Strategies (K–3) . . 2 cr**  
**(PQ:** Admission to the early childhood education teacher education program; or consent of the School of Education, PSY2108 and EDU3235. Must be taken concurrently with EEL4317, EEL4319, EEL4835 and EEL4837L.) A study of the purposes, methods, instructional materials and evaluation techniques in the teaching of physical, life and environmental sciences and social sciences using developmentally appropriate practices with children in grades K–3. Pre-student teaching is required.

**EEL4319 Physical Education and Health Methods and Strategies (K–3) . . . . . 2 cr**  
**(PQ:** Admission to the early childhood education teacher education program; or consent of the School of Education, PSY2108 and EDU3235. Must be taken concurrently with EEL4317, EEL4318 and EEL4835 and EEL4837L.) A study of the purposes, methods, instructional materials and evaluation techniques in the teaching of physical education and health using developmentally appropriate practices with children in grades K–3. Pre-student teaching required.

**EEL4327 Kindergarten Methods and the Primary Learner . . . . . 2 cr**  
**(PQ:** Admission to the early childhood or elementary education teacher education program; or consent of the School of Education, PSY2108, EDU3301, EDU3235. Must be concurrently enrolled in EEL4327L and Elementary Methods Block.) A study of developmentally appropriate practice for nurturing the growth and development of children ages five through nine years including the interrelatedness of learning environments, classroom community, classroom structure, family-school partnerships and assessment. Strategies for the instruction of different curricular areas are included. Attention is given to the physical, social, emotional, cognitive and spiritual development of children. Field experience in conducting observations and making assessments of children ages five through nine years is an integral part of the course. Pre-student teaching is required.

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**EEL4327L Kindergarten Methods and the Primary Learner Lab . . . . . 0 cr**  
(PQ: Admission to the early childhood or elementary education teacher education program; or consent of the School of Education, PSY2108, EDU3301, EDU3235. Must be concurrently enrolled in EEL4327.) Observation and teaching in a kindergarten classroom required.

**EEL4335 Mathematics Methods for Elementary Teachers K–6 . . . . . 3 cr**  
(PQ: PSY2108, EDU3235; admission to a teacher education program; and a minimum grade of C in MAT1006. Must be taken concurrently with EEL4336, EEL4337, EEL4338 and EEL4835/4835L or EEL4836/4836L.) A study of the purposes, methods, instructional materials and evaluation techniques in the teaching of elementary mathematics. The course provides theory, modeling and application of instructional strategies for developing mathematical literacy with elementary learners. The development of instructional skills to support mathematical reasoning, communication and problem solving across the mathematics curriculum is emphasized. Pre-student teaching required.

**EEL4336 Physical Education and Health Methods for Elementary Teachers K–6 . . . . . 2 cr**  
(PQ: PSY2108; EDU3235; and admission to the elementary education teacher education program. Must be taken concurrently with EEL4335, EEL4337, EEL4338 and EEL4835/4835L or EEL4836/4836L.) A study of the purposes, methods, instructional materials and evaluation techniques in the teaching of elementary physical education and health in grades K–6. The course provides theory, modeling and application of instructional strategies to support the healthful living and physical development of elementary students. Content related to basic movement education, games, rhythms, sport skills and decision-making for health are included. Pre-student teaching required.

**EEL4337 Social Studies Methods for Elementary Teachers K–6 . . . . . 2 cr**  
(PQ: PSY2108; EDU3235; and admission to a teacher education program. Must be taken concurrently with EEL4335, EEL4336, EEL4338 and EEL4835/4835L or EEL4836/4836L.) Study of the purposes, methods, instructional materials and evaluation techniques in the teaching of social studies in the elementary school. The course provides theory, modeling and application of instructional strategies to support social studies teaching and learning at the elementary level. The course emphasizes the process skills of gathering, organizing, reporting and interpreting social studies data. Pre-student teaching required.

**EEL4338 Science Methods for Elementary Teachers K–6 . . . . . 3 cr**  
(PQ: PSY2108; EDU3235; and admission to the elementary education teacher education program. Must be taken concurrently with EEL4335, EEL4336, EEL4337 and EEL4835/4835L or EEL4836/4836L.) Study of purposes, methods, instructional materials and evaluation techniques in teaching physical, life and environmental sciences at the elementary level. Emphasis on process skills. Pre-student teaching required.

**EEL4345 Language Arts Content and Teaching Strategies K–6 . . . . . 4 cr**  
(PQ: PSY2108; EDU3235; and admission to the elementary education teacher education program. Must be taken concurrently with EEL4346, EEL4347, MUE4345, EAR4345 and EEL4835/4835L or EEL4836/4836L.) A course designed to help students understand how and why the elementary language arts (listening, speaking, reading, writing, thinking, acting, etc.) should be naturally integrated into all aspects of the school curriculum. The focus is on language as a tool for communicating, for sharing, for exploring knowledge and ideas and for self-expression. The course is structured to demonstrate the purposes, methods, instructional resources and evaluation strategies for teaching the language arts in the elementary classroom. Pre-student teaching required.

**EEL4346 Reading Methods and Strategies K–6 . . . . . 4 cr**  
(PQ: PSY2108; EDU3235; and admission to the early childhood or elementary education teacher education program. Must be taken concurrently with EEL4345, EEL4347, MUE4345, EAR4345 and EEL4835/4835L or EEL4836/4836L.) A course which focuses on the components essential to establishing reading programs that foster a love of reading in students and assist them in acquiring the skills essential to becoming lifelong readers. The course will provide theory, modeling and application for K–6 teachers essential for developing and implementing successful reading instruction. Strategies for monitoring and assessing student performance and application of alternative classroom instructional methods are included. Pre-student teaching required.

**EEL4347 Children's Literature K–6 . . . . . 2 cr**  
(PQ: PSY2108; EDU3235; and admission to the early childhood or elementary education teacher education program. Must be taken concurrently with EEL4345, EEL4346, MUE4345, EAR4345 and EEL4835/4835L or EEL4836/4836L.) A course which presents children's literature as an integrated part of an educational program. Extensive reading of children's literature, development of instructional techniques to utilize good quality literature throughout the elementary curriculum and criteria for the selection of literature for the classroom are included. Emphasis is placed on encouraging students to appreciate literature and the contributions it can make to the culture. Pre-student teaching required.

**EEL4835 Elementary Methods Seminar I . . . . . 0–1 cr**  
(PQ: Must be taken concurrently with EEL4835L, EEL4837L, and the first semester of enrollment in elementary methods courses and the first 160 hours of pre-student teaching.) Opportunity to relate theory to practice, deal with issues arising from field placement experiences, discuss topics applicable to all curricular areas and work on professional portfolio development.

**EEL4835L Elementary Methods Lab I . . . . . 0 cr**  
(PQ: Must be taken concurrently with EEL4835 and first methods block) Observation and teaching in an elementary classroom.

**EEL4836 Elementary Methods Seminar II . . . . . 0–1 cr**  
(PQ: EEL4835. Must be taken concurrently with EEL4836L and the second semester of enrollment in elementary methods courses and the second 160 hours of pre-student teaching. Opportunity to relate theory to practice, deal with issues arising from field placement experiences, discuss topics applicable to all curricular areas and work on professional portfolio development.

**EEL4836L Elementary Methods Lab II . . . . . 0 cr**  
(PQ: EEL4835L. Must be taken concurrently with EEL4836 and second elementary methods block) Observation and teaching in an elementary classroom.

**EEL4837L Elementary Methods Lab for ECE . . . . . 0 cr**  
Observation and teaching in a primary (Grades K–3) classroom. **Note:** This course is designated as repeatable and may be repeated one time after the original taking of the course.

## Education – English as a Second Language (ESL)

**Note:** PQ for the following upper-level (3000–4999) Education courses include admission to a teacher education program.

**EDL4325 Teaching Grammar for ESL . . . . . 2 cr**  
(PQ: ENG3125, LIN2226, and admission to the ESL teacher education program. Must be taken concurrently with EDL4461, EDL4461L, EDL4462 and EDL4462L.) Study of English grammar with emphasis on how to effectively present English grammatical points to ESL students in K–12 school settings.

**EDL4326 Curriculum and Assessment for Language Learning . . . . . 2 cr**  
(PQ: ENG3125, LIN2226 and admission to the ESL or Spanish teacher education program. Must be taken concurrently with EDL4461, EDL4461L, EDL4462 and EDL4462L or WLE4415/L, or WLE4416, or WLE4417/L.) Study and practice of language curriculum development. Study and practice of formal and informal second language assessment techniques to determine appropriate placement and to evaluate the progress of ESL students in K–12 school settings.

**EDL4461 ESL K–12 Methods and Materials I . . . . . 4 cr**  
(PQ: ENG3125, ESL3315, LIN2226, admission to the ESL education teacher education program and senior status. Must be taken concurrently with EDL4325, EDL4326 and EDL4461L.) A study of the purposes, methods, instructional materials and evaluation techniques in the teaching of English as a second language in grades K–12. The course provides theory, modeling and application of instructional strategies for developing English language skills in listening, speaking and pronunciation. An introduction to ESL curriculum resources for

teaching listening, speaking and pronunciation is also included. Pre-student teaching required.

**EDL4461L ESL K–12 Methods Lab I . . . . . 0 cr**  
(PQ: admission to the ESL education teacher education program or consent of the School of Education and senior status. Must be taken concurrently with EDL4461) Observation and teaching in a secondary ESL classroom.

**EDL4462 ESL K–12 Methods and Materials II . . . . . 2 cr**  
(PQ: ENG3125, ESL3315, LIN2226, admission to the ESL education teacher education program and senior status. Must be taken concurrently with EDL4325, EDL4326 and EDL4462L.) A study of the purposes, methods, instructional materials and evaluation techniques in the teaching of English as a second language in grades K–12. The course provides theory, modeling and application of instructional strategies for developing English language skills in reading and writing. An introduction to ESL curriculum resources for teaching reading and writing is also included. Pre-student teaching required.

**EDL4462L ESL K–12 Methods Lab II . . . . . 0 cr**  
(PQ: admission to the ESL teacher education program or consent of the School of Education and senior status. Must be taken concurrently with EDL4462) Observation and teaching in an elementary ESL classroom.

## Education – Mathematics

**Note:** PQ for the following upper-level (3000–4999) Education courses include admission to a teacher education program.

**MAE4100M Math Methods Lab II (Grades 5–12) – Middle School . . 0 cr**  
(PQ: admission to the mathematics education [grades 5–12] teacher education program or consent of the School of Education. Must be taken concurrently with MAE4467) Observation and teaching in a middle school math classroom.

**MAE4200H Math Methods Lab II (Grades 5–12) – High School . . . 0 cr**  
(PQ: admission to the mathematics education [grades 5–12] teacher education program or consent of the School of Education. Must be taken concurrently with MAE4467) Observation and teaching in a high school math classroom.

**MAE4456 Methods of Teaching Mathematics in the Middle School (Grades 5–8) . . . . . 2 cr**  
(PQ: EDU3235, MAT3255, and admission to the elementary or mathematics education teacher education program. Must be taken concurrently with MAE4456E, MAE4100M or MAE4200H.) A study of the principles, methods, instructional materials and assessment techniques in the teaching of middle school mathematics. The course provides theory, modeling and application in instructional strategies for developing mathematical literacy with middle school learners.

An introduction to mathematics resources, including technology appropriate for grades 5–8, is included. Pre-student teaching required.

**MAE4456E Math Methods Lab (Grades 5–8) . . . . . 0 cr**  
(PQ: admission to the mathematics teacher education endorsement program or consent of the School of Education. Must be taken concurrently with MAE4456) Observation and teaching in a middle school math classroom.

**MAE4467 Methods of Teaching Mathematics in the High School (Grades 9–12) . . . . . 2 cr**  
(PQ: EDU3235, MAT3265, and admission to the mathematics education teacher education program. Must be taken concurrently with MAE4100M or MAE4200H.) A study of the principles, methods, instructional materials and assessment techniques in the teaching of high school mathematics. The course provides theory, modeling and application of instructional strategies for developing mathematical literacy with learners in grades 9–12. An introduction to mathematics resources, including technology appropriate for grades 9–12, is included. Pre-student teaching required.

## COURSE DESCRIPTIONS

**Education – Music**

**Note: PQ for the following upper-level (3000–4999) Education courses include admission to a teacher education program.**

**MUE3270 Instrumental Methods Overview\* . . . . . 1 cr**  
(PQ: sophomore standing) The course presents essential basic principles and practices of instrumental performance. Emphasis will be more on pedagogy than performance. Students will select one instrument for proficiency performance and have hands-on experience with instruments in each family group.

**MUE3601I Music Education Field Experience - Elementary Instrumental . . . 0 cr**  
(PQ: admission to the music teacher education program and completion of or concurrent enrollment in MUE4355 or permission of the School of Education) Supervised school-based field experience in preparation for student teaching.

**MUE3601V Music Education Field Experience - Elementary Vocal. . . 0 cr**  
(PQ: admission to the music teacher education program and completion of or concurrent enrollment in MUE4355 or permission of the School of Education) Supervised school-based field experience in preparation for student teaching.

**MUE3602I Music Education Field Experience - Secondary Instrumental . . . 0 cr**  
(PQ: admission to the music teacher education program and completion of or concurrent enrollment in MUE4365 or MUE4379, or permission of the School of Education) Supervised school-based field experience in preparation for student teaching.

**MUE3602V Music Education Field Experience - Secondary Vocal. . . 0 cr**  
(PQ: admission to the music teacher education program and completion of or concurrent enrollment in MUE4365 or MUE4379, or permission of the School of Education) Supervised school-based field experience in preparation for student teaching.

**MUE4345 Music Methods for Elementary Teachers (Grades K–6) . . . 2 cr**  
(PQ: MUS1075 and EDU3235 and admission to the elementary education teacher education program. Must be taken concurrently with EEL4345, EEL4346, EEL4347, EAR4345 and EEL4835/4835L or EEL4836/4836L.) A study of the purposes, methods, instructional materials and evaluation techniques in the teaching of elementary music. The course is designed to provide basic skills for teaching classroom music. Instructional methods for teaching individuals and classes are included, as well as skills and strategies for listening, singing and participation in rhythmic movement. Emphasis is placed on how to play and utilize classroom instruments. Pre-student teaching required.

**MUE4355 Elementary and Middle School Music Methods (Grades K–8)\* . . . . . 4 cr**  
(PQ: admission to the music education program and concurrent registration in MUE3601) A practical exposure to elementary and junior high/middle school music through study, observation and participation. Students become involved as aides and instructors in the classroom. Emphasis is placed on the application of these

teaching skills to vocal and general music teaching situations. Pre-student teaching required.

**MUE4365 Secondary Choral and General Music Methods\* . . . . . 3 cr**  
(PQ: admission to the music education program, MUS3277 and concurrent registration in MUE3602 and successful completion of the music department Music Major Progress Interview) A course designed to acquaint students with the role of choral/vocal music in secondary education and to provide a foundation for teaching secondary choral music classes. An overview of teaching general music, music theory and the adolescent changing voice are included.

**MUE4375 Woodwind Methods\* . . . . . 1 cr**  
(PQ: admission to the music education program or consent of instructor) A course designed to assist the student in the development of pedagogical skills and proficiency on woodwind instruments. Application of foundational principles to teaching materials and performance situations is included. Meets two hours per week.

**MUE4376 Brass Methods\* . . . . . 1 cr**  
(PQ: admission to the music education program or consent of instructor) A course designed to assist the student in the development of pedagogical skills and proficiency on brass instruments. Application of foundational principles to teaching materials and performance situations is included. Meets two hours per week.

**MUE4377 Percussion Methods\* . . . . . 1 cr**  
(PQ: admission to the music education program or consent of instructor) A course designed to assist the student in the development of pedagogical skills and proficiency on percussion instruments. Application of foundational principles to teaching materials and performance situations is included. Meets two hours per week.

**MUE4378 String Methods\* . . . . . 1 cr**  
(PQ: admission to the music education program or consent of instructor) A course designed to assist the student in the development of pedagogical skills and proficiency on stringed instruments. Application of foundational principles to teaching materials and performance situations is included. Meets two hours per week.

**MUE4379 Band/Orchestra and General Music Methods\* . . . . . 3 cr**  
(PQ: admission to the music education program, MUS3277 and concurrent registration in MUE3602I) A study of the purposes, methods, instructional materials and evaluation techniques in the teaching of instrumental and general classroom music in grades K–12. The course provides a study of essential musical and extra-musical aspects of administering the instrumental music program at all levels. Methods and repertoire for bands and orchestras are included.

**Education – Physical**

**Note: PQ for the following upper-level (3000–4999) Education courses include admission to a teacher education program.**

**EPH4345 Methods of Teaching Elementary Physical Education . . . . 2 cr**  
(PQ: EDU3235 and admission to the physical education teacher education program. Must be taken concurrently with EPH4345L.) A course designed to cover the organization, content and teaching techniques of physical education programs in the elementary school. Pre-student teaching required.

**EPH4345L Methods of Elementary Physical Education Lab. . . . . 0 cr**  
(PQ: EDU3235 and admission to the physical education teacher education program. Must be taken concurrently with EPH4345.) Observation and teaching in an elementary physical education classroom.



**EPH4355 School Health Education Methods . . . . . 2 cr**  
 (PQ: EDU3235, HPE3305, and admission to the physical education teacher education program. Must be taken concurrently with EPH4355L.) A study of the organization and administration of the complete school health program, including healthful school living, health services and health science instruction. Health problems and their implications for instructional methods and materials for teaching health. Pre-student teaching required.

**EPH4355L School Health Methods Lab . . . . . 0 cr**  
 (PQ: EDU3235, HPE3305, and admission to the physical education teacher education program. Must be taken concurrently with EPH4355.) Observation and teaching in a secondary health education classroom.

**EPH4365 Methods of Teaching Secondary Physical Education . . . . 2 cr**  
 (PQ: EDU3235 and admission to the physical education teacher education program. Must be taken concurrently with EPH4365L.) A

course designed to cover advanced teaching techniques of physical education at the secondary (6–12) school level. Includes methods of presentation and state curriculum requirements for secondary physical education. Pre-student teaching required.

**EPH4365L Methods of Secondary Physical Education Lab . . . . . 0 cr**  
 (PQ: EDU3235 and admission to the physical education teacher education program. Must be taken concurrently with EPH4365.) Observation and teaching in a secondary physical education classroom.

**EPH4375 Adapted Physical Education (Grades K–12) . . . . . 2 cr**  
 (PQ: Must be taken concurrently with EPH4375L.) Principles and techniques involved in teaching developmental/adapted physical education in school settings. Pre-student teaching required.

**EPH4375L Adapted Physical Education Lab . . . . . 0 cr**  
 (PQ: Must be taken concurrently with EPH4375.) Observation and teaching in an adapted physical education setting.

## Education – Social Studies

**Note: PQ for the following upper-level (3000–4999) Education courses include admission to a teacher education program.**

**SSE3255 National Government for Middle School Teachers . . . . . 2 cr**  
 (PQ: admission to the teacher education program in elementary education with a middle school social studies endorsement or consent of the School of Education) An overview of the philosophy and structure of differing types of government with a focus on the United States government. Topics related to understanding the United States government include development of the constitution, the bill of rights and the amendment process, different levels of government (national, state and local), the three branches of the National Government specifically focusing on the duties of each branch and the checks and balance system that exists to guarantee the shared nature of power. Connections are made to how many state governments mirror the national government. In addition, the course explores political parties and the election process (including the electoral college system) and the importance of civic involvement to the democratic process. Applications to middle school social studies instruction are embedded throughout the course.

**SSE4100M Methods of Teaching Social Studies II Lab - Middle School . . . 0 cr**  
 (PQ: EDU3235 and admission to the social studies education [grades 5–12] teacher education program or consent of the School of Education. Must be taken concurrently with SSE4458) Observation and teaching in a middle school social studies classroom.

**SSE4200H Methods of Teaching Social Studies II Lab - High School . . 0 cr**  
 (PQ: EDU3235 and admission to the social studies education [grades 5–12] teacher education program or consent of the School of Education. Must be taken concurrently with SSE4468) Observation and teaching in a high school social studies classroom.

**SSE4358 Social Studies Content and Standards . . . . . 2 cr**  
 (PQ: admission to the School of Education) An introduction to the content and instructional strategies used in social studies education. The content focuses on American Indian & Dakota communities, the role of social class in society, primary and secondary sources, laws and the legal system, citizenship, and community organization. Teaching strategies that support social studies instruction around these issues are embedded into the course.

**SSE4458 Methods of Teaching Social Studies I (Grades 5–8) . . . . 4 cr**  
 (PQ: EDU3235 and admission to the elementary education or social studies teacher education program. Must be taken concurrently with SSE4100M or SSE4458E.) A study of the purposes and practices of middle school social studies with an emphasis on adapting curriculum to the specific needs of middle school learners. The course investigates the following topics: the ten themes of social studies and how to incorporate them into instruction; instructional planning and assessment; the theory and practice of classroom management; instructional techniques within the social studies including constructivist theory, questioning, effective reading skills, leading discussions, inquiry, teaching to a diverse group of learners and cooperative learning; learning styles; creating portfolios; and self-reflection as a means of improving pedagogy. The course also explores the social science disciplines and the content and curriculum pertinent to middle school classrooms. Pre-student teaching required.

**SSE4458E Methods of Teaching Social Studies I Lab–Endorsement . . 0 cr**  
 (PQ: EDU3235 and admission to the social studies teacher education endorsement program or consent of the School of Education. Must be taken concurrently with SSE4458) Observation and teaching in a middle school social studies classroom.

**SSE4468 Methods of Teaching Social Studies II (Grades 9–12). . . . 4 cr**  
 (PQ: EDU3235 and admission to the social studies education [grades 5–12] teacher education program. Must be taken concurrently with SSE4200H.) A study of the purposes and practices of high school social studies with an emphasis on adapting curriculum to the specific needs of high school learners. The course investigates the following topics: content and curricula of high school social studies areas; the integration of social studies with other subjects; current issues and research in the social studies; the use of technology in the classroom; development of teaching effective reading skills in high school social studies; classroom management; current trends in brain research and the implications for pedagogy; instructional planning; instructing students with special needs; multiple intelligences; leading class and small group discussions; instructional techniques like role playing and simulations; becoming a reflective teacher; and creating portfolio entries. Pre-student teaching required.

## COURSE DESCRIPTIONS

**Education – Special**

**Note: PQ for the following upper-level (3000–4999) Education courses include admission to a teacher education program.**

**SPD2215 Introduction to Special Education . . . . . 2 cr**  
(PQ: sophomore standing and concurrent enrollment in SPD2215L.) An overview of the history of special education in America with a focus on how special education is supported by federal, state and local governance. An in-depth look will be given to the cascade of PK–12 educational programs designed to meet the needs of students labeled with special needs. The need for support services within the educational system will be reviewed in relationship to how such services impact the total educational programming for students, families, schools and society. A ten hour field observation placement in special education is required.

**SPD2215L Introduction to Special Education Lab . . . . . 0 cr**  
(PQ: sophomore standing and concurrent enrollment in SPD2215.) Pre-student teaching field experience consisting of 10 hours in a special education classroom.

**SPD3215 Children and Families with Special Needs\* . . . . . 3 cr**  
(PQ: admission to a teacher education program or consent of the School of Education, junior standing and completion of or concurrent registration in SPD2215/2215L) A foundational course for understanding collaborative strategies that teachers can use to support the educational needs of students and families involved with special education services provided under the guidelines of IDEA. Emphasis is on learning how to identify and access multiple levels of resources (family, school and community) in order to facilitate the educational process in a manner that will benefit the student labeled with special needs.

**SPD3218 Special Education: Due Process, Trends and Problems\* . . 2 cr**  
(PQ: admission to a teacher education program or consent of the School of Education) An examination of the legal responsibilities of schools as prescribed by federal and state mandates. Specific issues related to due process for special education under IDEA are addressed. A review of current best practices and policies that impact due process through the use of case studies is presented and students work directly with the IEP process.

**SPD4315 Measurement and Assessment in Special Education\* . . . 3 cr**  
(PQ: admission to a teacher education program or consent of the School of Education) A survey of basic concepts and principles of measurement in special education, including factors influencing

validity and reliability. Students become acquainted with the administration and interpretation of educational tests used in the special education field.

**SPD4415 Behavioral Analysis: Classroom Methods/Interventions for Students Labeled EBD and LD . . . . . 6 cr**  
(PQ: admission to a teacher education program or consent of the School of Education; SPD2215/2215L, SPD3218, SPD4315, concurrent registration in SPD4415L) Multi-frameworks for classroom interventions are used as the foundation for the course. Learners interact with specific models that address classroom interventions specific to meeting the needs of populations receiving support services under the labels of SLD and EBD. Hands-on application will be used to help learners use the interventions effectively. Concurrent registration in SPD4415L is required.

**SPD4415L Special Education Field Experience . . . . . 0 cr**  
(PQ: admission to a teacher education program or consent of the School of Education; SPD2215/2215L, SPD3218, SPD4315 and concurrent registration in SPD4415) Students participate in a twenty hour field experience focused on working with students receiving special education services in the areas of EBD and SLD.

**SPD4425 Behavioral Analysis: Methods and Interventions (non-classroom) . . . . . 6 cr**  
(PQ: admission to special education minor or consent of the School of Education; SPD2215/2215L, SPD3218, SPD4315 and concurrently enrolled in SPD4425L) Multi-frameworks for classroom interventions are used as the foundation for the course. Learners interact with specific models that address classroom interventions specific to meeting the needs of populations receiving support services under the labels of special education (traditional and non-traditional). Hands-on application will be used to help learners use the interventions effectively in a setting appropriate to their chosen field.

**SPD4425L Special Education Field Experience (non-classroom) . . . 0 cr**  
(PQ: admission to special education minor or consent of the School of Education; SPD2215/2215L, SPD3218, SPD4315 and concurrently enrolled in SPD4425) Students participate in a minimum of 30 hours of field experience focused on working with students receiving special education services in the area of special education (e.g., LD, EBD and other categories).

**Education – Visual Arts**

**Note: PQ for the following upper-level (3000–4999) Education courses include admission to a teacher education program.**

**EAR4345 Art Methods for Elementary Teachers . . . . . 2 cr**  
(PQ: ART1005 or ART1825, EDU3235 and admission to the elementary or visual arts education teacher education program. Elementary education majors must be concurrently enrolled in EEL4345, EEL4346, EEL4347, MUE4345 and EEL4835/4835L or EEL4836/4836L. Visual Arts majors must be concurrently enrolled in EAR4345L.) A basic course in art education with emphasis on a comprehensive approach to practices and appreciation of art experiences for elementary school children. Pre-student teaching required.

**EAR4345L Art Methods for Elementary Teachers Lab . . . . . 0 cr**  
(PQ: ART1005 or ART1825, EDU3235 and admission to visual arts education teacher education program. Must be taken concurrently with EAR4345.) Observation and teaching in an elementary visual arts classroom.

**EAR4465 Art Methods for Secondary Art Teachers . . . . . 2 cr**  
(PQ: senior status, EAR4345/4345L and admission to the visual arts education teacher education program. Must be taken concurrently with EAR4465L.) An advanced course in theories and practice for art instruction with emphasis on curriculum development for middle school and high school art students. The course underscores the inclusion of 3-D Fiber arts through the study of fibers/yarns, surface design and structural design within the secondary art curriculum. Pre-student teaching required.

**EAR4465L Art Methods for Secondary Art Teachers Lab . . . . . 0 cr**  
(PQ: senior status, EAR4345/4345L and admission to the visual arts education teacher education program. Must be taken concurrently with EAR4465.) Observation and teaching in a secondary visual arts classroom.

## Education – World Language

**WLE4415 Methods and Materials for Language Teaching. . . . . 4 cr**  
**(PQ:** LIN2226 or 2227, SPA3201, 3202, senior standing and admission to the Spanish education program. Must be taken concurrently with WLE4415L. Spanish Education majors must also be concurrently enrolled in WLE4417L.) A study of the purposes, methods, instructional materials and evaluation techniques in the teaching of world languages. The course provides theory, modeling and application of instructional strategies for developing language skills.

**WLE4415L Methods Lab - Spanish Elementary . . . . . 0 cr**  
**(PQ:** senior standing and admission to the Spanish education program. Must be taken concurrently with WLE4415.) Observation and teaching in an elementary Spanish classroom.

**WLE4416 Methods and Materials for ESL/World Language. . . . . 1 cr**  
**(PQ:** senior standing and admission to teacher education programs in ESL Education and World Language Education. Must be taken concurrently with EDL4461, EDL4461L and EDL4462.) A study of the purposes, methods, instructional materials and evaluation techniques in the teaching of world languages that is designed for the teacher candidate completing dual licensure preparation in ESL and world language teaching. The course provides theory, modeling and application of instructional strategies specific to the world language.

**WLE4417L Methods Lab - Spanish Secondary . . . . . 0 cr**  
**(PQ:** senior standing and admission to the Spanish education program. Must be taken concurrently with WLE4415.) Observation and teaching in a secondary Spanish classroom.

## Engineering

**EGR1005 Introduction to Engineering<sup>§</sup> . . . . . 4 cr**  
 An introduction to engineering practice and profession through problem description, analysis, innovative solutions, design, and implementation. Computer aided design (CAD) is introduced and used in the completion of team-based projects. Results are presented orally and reported. A \$200 course fee required.

**EGR2105 Statics and Dynamics<sup>§</sup> . . . . . 4 cr**  
**(PQ:** C- or better in PHY1201) Force and moment vectors; resultants. Principles of statics. Applications to simple trusses, frames and machines. Distributed loads. Properties of areas. Laws of friction. Review of particle dynamics. Mechanical systems and rigid-body dynamics. Kinematics and dynamics of plane systems. Energy and momentum of 2-D bodies and systems. A \$200 course fee required.

**EGR2107 Introduction to Electronics and Electrical Circuits. . . . . 3 cr**  
**(PQ:** C- or better in PHY1202 and successfully passed or concurrently enrolled in EGR2108) Introduction to modeling, analysis, and design of linear circuits using lumped models for various sources and passive elements. Topics include the application of Ohm's and Kirchhoff's laws, transient and steady state analyses of reactive circuits, and use of ideal diode, BJT, FET, and operational amplifier models in the design of practical applications.

**EGR2108 Electronics and Electrical Circuits Laboratory<sup>§</sup> . . . . . 1 cr**  
**(PQ:** C- or better in PHY1202 and successfully passed or concurrently enrolled in EGR2107) Laboratory experiences spanning the use of standard electrical test and measurement equipment in the design of various first and second order linear circuits. Student team members support one another on documentation of findings. A \$200 course fee required.

**EGR2125/2125L Design and Manufacturing Laboratory<sup>§</sup> . . . . . 2 cr**  
**(PQ:** C- or better in EGR1005) Application of manufacturing processes with consideration of manufacturability at the design phase and realization of the design through safe operation of basic machining equipment. A \$200 course fee required.

**EGR2145 Surveying Fundamentals<sup>§</sup> . . . . . 2 cr**  
**(PQ:** EGR1005) The fundamentals of surveying measurements are introduced to provide a broad overview of instrumentation, procedures, corrections and reductions, datums, and computations to produce a topographical map or a site plan for engineering and design projects. A \$200 course fee required.

**EGR2205 Mechanics of Materials<sup>§</sup> . . . . . 4 cr**  
**(PQ:** C- or better in EGR2105) Basic classical concepts of structural analysis, including external reactions, internal forces and deformations of two- and three-dimensional statically determinate and indeterminate structures. A \$200 course fee required.

**EGR2206 MATLAB<sup>§</sup> . . . . . 2 cr**  
**(PQ:** C- or better in MAT2121 or concurrently enrolled) An introduction to the numerical computing, programming capabilities, and graphics environment of MATLAB with application to engineering solutions. Specifically, students gain practical skills through the completion of problem-based assignments and projects. A \$200 course fee required.

**EGR2207 Thermodynamics<sup>§</sup> . . . . . 4 cr**  
**(PQ:** CHE1021, MAT2122 and PHY1201 [C- or better required in all]) A study of the first and second laws of thermodynamics; basic energy concepts; the properties of liquids and vapors including enthalpy and entropy. Analysis of power and refrigeration cycles. Introduction to gas mixtures, chemical reactions and chemical and phase equilibrium. A \$200 course fee required.

**EGR3115 Materials Science<sup>§</sup> . . . . . 4 cr**  
**(PQ:** CHE1021 and PHY1201) Students learn the structures and physical properties of engineering materials, including metals, ceramics, polymers, semiconductors and composites, by applying knowledge of electronic structure of atoms and chemical bonding theories (molecular, ionic and metallic). Mechanisms and characteristics of strengthening and deformation are explored. A \$200 course fee required.

**EGR3215 Control Systems<sup>§</sup> . . . . . 4 cr**  
**(PQ:** MAT3335) Introduction to control system design, including time domain analysis and frequency domain analysis of control systems. Characteristics, modeling and performance of feedback control systems are analyzed and discussed. A \$200 course fee required.

**EGR3225 Fluid Mechanics<sup>§</sup> . . . . . 4 cr**  
**(PQ:** EGR2105; C or better in EGR2207; and MAT3335 or concurrently enrolled) Introduction and fundamentals of fluid properties, fluid statics, control volume and differential analysis for continuity, momentum and energy equations. Bernoulli equation and potential flow. Laminar and turbulent internal and external flows. Dimensional analysis and similitude. Boundary layers, lift and drag. A \$200 course fee required.

## COURSE DESCRIPTIONS

**EGR3235 Electronic Devices<sup>§</sup> . . . . . 4 cr**  
**(PQ: EGR2107)** The construction and operation of various semiconductor devices are described and presented in common applications. Small signal analysis is used to determine the input resistance, output resistance, amplification, and frequency response of single and multi-stage amplifiers. The properties of A, B, AB, and C power amplifiers are explored. Operational amplifiers are presented in the design of instrumentation, active filter, and oscillator systems. Simulation is utilized to reinforce concepts. A \$200 course fee required.

**EGR3236 Digital Electronics Laboratory<sup>§</sup> . . . . . 2 cr**  
**(PQ: MAT3226)** The fundamentals of digital systems are introduced and applied in a laboratory setting. Topics include the use of a hardware descriptive language for the design of combinational and sequential logic circuits. Various programmable devices, including programmable logic devices (PLD), field-programmable gate arrays (FGPA), and microcontroller implementations are investigated. Learned skills culminate in a design project. A \$200 course fee required.

**EGR3237 Electromagnetic Fields and Waves Laboratory<sup>§</sup> . . . . . 2 cr**  
**(PQ: EGR2107)** Properties of transmission lines, electrostatics, magnetostatics, and electromagnetic waves in unbounded space are modelled by Maxwell's equations and illustrated in a laboratory setting. Topics include wave guides, cavities, radiation theory, and antennas. A \$200 course fee required.

**EGR3245 Structural Analysis<sup>§</sup> . . . . . 4 cr**  
**(PQ: EGR2105)** Topics include design loads per structural and building codes; Support reactions; Structural stability and determinacy; Determinate structure including trusses, beam and frame, cable and arch; Deflections of beams and frames; Work-Energy Methods for deflection calculation; indeterminate structures: Force Method, Displacement Method, and Moment Distribution Method. A \$200 course fee required.

**EGR3246 Materials Laboratory for Civil Engineering<sup>§</sup> . . . . . 2 cr**  
**(PQ: EGR2205)** Behavior mechanisms for materials such as concrete, metals, plastics, wood and asphalt. Specification standards for material properties. Testing techniques for materials. A \$200 course fee required.

**EGR326 Materials Laboratory for Mechanical Engineering<sup>§</sup> . . . . . 2 cr**  
**(PQ: EGR2205)** Testing of mechanical properties of engineering materials (modulus of elasticity, tensile strength, strength in compression, impact strength, creep, necking, fracture). A \$200 course fee required.

**EGR327 Heat and Mass Transfer<sup>§</sup> . . . . . 4 cr**  
**(PQ: EGR3225, MAT3335, and concurrently enrolled in EGR3328)** Fundamental principles of steady and unsteady heat transfer by conduction, radiation and convection are examined. Concepts of mass transfer are introduced. Contains design of fins, phase change heat transfer and heat exchanger design. Finite difference techniques are developed and examined. A \$200 course fee required.

**EGR328 Thermal-Fluids Laboratory<sup>§</sup> . . . . . 2 cr**  
**(PQ: EGR3225 and concurrently enrolled in EGR3327)** Experimental methods in fluids; boundary layer flows; radiative and convective heat transfer experiments; compressible flows. A \$200 course fee required.

**EGR335 Microcontrollers<sup>§</sup> . . . . . 2 cr**  
**(PQ: EGR3236)** Microcontroller organization, opcodes, assembly language programming, logic operations, and bit manipulation with C language equivalency are introduced in a laboratory setting. Peripheral

interface, PWM output, and interrupt programming are implemented for typical solutions. A \$200 course fee is required.

**EGR337 Signals and Systems<sup>§</sup> . . . . . 4 cr**  
**(PQ: MAT3335)** An introduction to time and frequency domain representation of fundamental, continuous and discrete time signals and systems. Topics include fundamental signals and operations, system properties, and representation of linear time-invariant systems with application of appropriate Fourier and Laplace analysis. MATLAB is used to simulate, implement, and analyze the effects of various FIR and IIR filters. A \$200 course fee required.

**EGR338 Communications Systems Laboratory<sup>§</sup> . . . . . 2 cr**  
**(PQ: EGR2108)** The fundamentals of analog and digital communication systems are introduced in a laboratory setting. Various modulation and demodulation methods are explored by practically transmitting and receiving signals, respectively. Signal to noise ratio, quantization error, and other parameters are evaluated in order to discuss system performance. A \$200 course fee required.

**EGR347 Geotechnical Engineering<sup>§</sup> . . . . . 4 cr**  
**(PQ: EGR3246 and concurrently enrolled in EGR3348)** Concepts include geological origin of soil; Grain size of soil; Weight-volume relationships; Plasticity and structure of soil; Classification of soils; Soil compaction; Permeability and Seepage; Stresses in soil; Compressibility of soil; Shear strength of soil; Lateral earth pressure; Slope stability; Bearing capacity of soil; Shallow foundations; Subsoil exploration. A \$200 course fee required.

**EGR348 Soils Testing Laboratory<sup>§</sup> . . . . . 2 cr**  
**(PQ: EGR3246 and concurrently enrolled in EGR3347)** Students investigate testing techniques for geotechnical engineering materials which includes specification standards for soils testing, behavior mechanisms for soils, and determination of moisture content, specific gravity, and Atterberg limits of soils. Sieve analysis, hydrometer analysis, soil classification, proctor compaction test, permeability of soils, shear strength of soil, consolidation testing of soil, and triaxial testing of soil are also explored.

**EGR4235 Embedded System Design\*\* \$ . . . . . 4 cr**  
**(PQ: EGR2206 and EGR3236)** The specification, design, development, simulation, and testing of real-time, embedded microcontroller systems are discussed and practically implemented. Various architectures, real-time programming, and interface of common peripheral devices are introduced and used in applications. A programmable logic controller (PLC) device is introduced and used in typical industrial applications. A \$200 course fee required.

**EGR4237 Machines and Power Systems\*\* \$ . . . . . 4 cr**  
**(PQ: EGR2107)** The fundamentals of transformers and rotating machines are analyzed with typical industrial applications. Power system generation, transmission, and distribution are modeled using equivalent three-phase and single-phase circuits in order to assess stability and dynamic performance. Power flow is simulated with consideration of faults and protection. A \$200 course fee required.

**EGR425 Design of Reinforced Concrete\*\* \$ . . . . . 4 cr**  
**(PQ: EGR2105)** Properties of concrete-making materials; Proportioning of concrete mixtures; Design loads; Behavior of plain and reinforced concrete subjected to flexural and compressive stresses; Strength reduction factor for concrete structures; Failure theories, nominal and design strength of plain and reinforced concrete structural components; Bond, development lengths and splices; Design of beams, slabs, columns and continuous components of reinforced concrete; Design of reinforced concrete structures including footings, retaining walls and shear walls; Design for shear, torsion and serviceability of reinforced concrete. A \$200 course fee required.



**EGR4247 Transportation Engineering\*\* \$** ..... 4 cr  
**(PQ:** MAT2122) Introduction to the profession of transportation engineering; transportation systems and organizations; principles of traffic operations including characteristics of drivers, pedestrians, vehicles and roads, highway safety, theories of traffic flow, intersection design and control, and highway capacity and intersection capacity; process of transportation planning including forecasting travel demand and evaluation of transportation alternatives; design of highway infrastructure including geometrical design of highway facilities and design of highway drainage; pavement materials and pavement design including soil engineering, bituminous materials, and design of flexible and rigid pavements; pavement management. A \$200 course fee required.

**EGR4311 Engineering Design I<sup>S</sup> WCE** ..... 4 cr  
**(PQ:** ENG2205 or ENG2825, and 34 credits from EGR-prefix courses; COS3001, MAT3326, and SCI1010 may be included in the 34 credits) Systematic project design with consideration of client need and specification is implemented by a student team. In particular, the team researches and proposes a solution with analysis of components, materials, man-power, cost estimate, and possible health, safety, environmental, ethical, and social impact. An approved project is then scheduled to identify and define major activities in each project phase, minimize resource conflicts, describe team member responsibilities, and ensure cost effective budgeting, control, and reporting in order to audit, assess, and mitigate project risk. A \$200 course fee required.

**EGR4312 Engineering Design II<sup>S</sup> OCE** ..... 4 cr  
**(PQ:** EGR4311; and SPE1075 or SPE1825) Based upon Engineering Design I, a student team implements an established project plan and evaluates the solution with consideration of the design criteria and impact on health, safety and environment. Assessment is based on member ability to support team success in project organization, documentation, presentation and achievement. A \$200 course fee required.

**EGR4315 Computer Simulation and Analysis\*\* \$** ..... 4 cr  
**(PQ:** EGR2206, EGR2205 or EGR3225, MAT3335; C- or better in all prerequisites) Geometric and solid modeling for computational analysis, system optimization and rapid prototyping. Focus is on designing a system, representing that system on the computer using appropriate meshing techniques, and analyzing it using finite volume or finite element techniques. Emphasis is on the use of computer-based tools for system design. Students are required to develop models that capture the necessary physics, are computationally efficient, and are validated where possible. A \$200 course fee required.

**EGR4339 Numerical Analysis\*\* \$** ..... 4 cr  
**(PQ:** C- or better in EGR2206 and MAT2122) Topics studied include solution of equations by interpolation and approximation, differentiation and integration, matrices and systems of equations and solution of differential equations. A \$200 course fee required.

**EGR4355 Biomedical Instrumentation and Devices\*\* \$** ..... 4 cr  
**(PQ:** EGR2107) The fundamental devices, circuitry, and techniques used to acquire and process biomedical quantities and signals are discussed, analyzed, and practically implemented in a laboratory setting. In particular, physiological signals, related transducers, signal conditioning methods, and extracted features are used in the design of biomedical acquisition systems. Furthermore, the safe design of biomedical devices, clinical laboratory instruments, and medical imaging systems is discussed and analyzed. A \$200 course fee required.

**EGR4357 Engineering Biomechanics\*\* \$** ..... 4 cr  
**(PQ:** EGR2205 and MAT3335) This course introduces the complex mechanical behaviors of biological tissues and human movement. It is intended to provide a sound basis for students interested in pursuing careers in biotechnology, medicine, or biomedical research. The course includes anisotropy, viscoelasticity, active force generation and pressure vessels as applied concepts of statics, dynamics, and mechanics of materials to biological systems. Changes in mechanics due to injury or disease are also discussed. Relevant aspects of anatomy and physiology are covered as appropriate. A \$200 course fee required.

**EGR4841 Research<sup>\$</sup>** ..... 0–2 cr  
**(PQ:** consent of instructor) Students identify a problem, conduct a literature search, write a proposal outlining the research to be conducted and then carry out the research project. Students prepare a written report and/or an oral summary of their work. **Note:** This course is designated as repeatable for a maximum of 4 credits. A \$200 course fee required.

**EGR4995 Engineering Internship** ..... 1–2 cr  
**(PQ:** junior standing, consent of instructor, and internship registration form) Students gain industry experience through an internship position that provides an opportunity for the application of problem-solving skills with consideration of engineering ethics and practice. **Note:** This course is designated as repeatable for a maximum of 4 credits. See page 25 for note regarding internships.

## English

Directed studies are available. See pages 26–27.

**ENGO109 Education Writing Lab** ..... 2 cr  
**(Required of Education majors who need to demonstrate English proficiency for admittance to a teacher education program; others may take course with consent of instructor) A supplement to college-level writing, usage and punctuation skills, including an emphasis on focused writing and organizational strategies. Credits do not apply to degree requirements.**

**ENG1105 Composition<sup>#</sup>** ..... 4 cr  
**(PQ:** ACT English or ACT English/Writing score of 19 or above [SAT Writing and Language score of 26 or above]; CLT Grammar/Writing score of 21 or above, high school cum GPA of 2.67 or higher) A writing course designed to prepare students for college-level thinking and writing. Emphasis will be placed on the writing process, including editing skills. Equivalent to ENG1109 (see College of Graduate, Online, & Adult Learning catalog).

**ENG1105L English Composition Lab** ..... 1 cr  
**(Required of students with ACT English or ACT English/Writing score of 18 or below [SAT Writing and Language score of 25 or below; CLT Grammar/Writing score of 20 or below] and if the student's high school cum GPA is 2.66 or below. To be taken concurrently with ENG1105.) Reinforcement of skills used in college-level writing, including an emphasis on compositional strategies and editing. This course supports students in ENG1105 Composition.**

**ENG1825 Honors Composition** ..... 4 cr  
**(PQ:** ACT English or ACT English/Writing score of 27 or above [SAT Writing and Language score of 33 or above, or CLT score of 85 or above], or high school cum GPA of 3.7 or higher, or consent of instructor; taken in place of ENG1105) A writing course for students who have demonstrated special proficiency in language use and reading skills. Through individual and collaborative assignments, students will practice their critical reading and thinking skills, study rhetoric by analyzing argumentation and write essays in multiple genres. ENG1825 is taken in place of ENG1105.



## COURSE DESCRIPTIONS

**ENG2146 Writing for Organizations** . . . . . **2 cr**  
**(PQ:** ENG1105 or ENG1825, or consent of instructor) Principles and forms of professional writing within organizations, including procedures, policies, reports, proposals, electronic media, project management timeline, and professional presentations.

**ENG2205 Critical Thinking and Writing<sup>#</sup>** . . . . . **2 cr**  
**(PQ:** ENG1105 or ENG1825) A writing course designed to improve students' skills in source analysis, critical thinking and argumentation as they create a research paper. Students will develop skills in research by using reference materials, journals and databases related to their disciplines. Should be taken before completion of 60 graduation credits. Equivalent to ENG2209 (see College of Graduate, Online, & Adult Learning catalog).

**ENG2215 Writer's Style<sup>#</sup>** . . . . . **2 cr**  
**(PQ:** ENG1105 or ENG1825, or consent of instructor) A writing course that explores a variety of writing nuances, genres and techniques. Students write several non-fiction texts.

**ENG2216 Writing of Poetry** . . . . . **2 cr**  
**(PQ:** ENG1105 or ENG1825, and sophomore standing) A study of prosody, the techniques of poetry writing and contemporary poets with an emphasis on creating original poetry in a workshop format.

**ENG2217 Writing of Fiction** . . . . . **2 cr**  
**(PQ:** ENG1105 or ENG1825, and sophomore standing) A study of the techniques of fiction writing and contemporary fiction writers with an emphasis on creating original short stories in a workshop format.

**ENG2235 Editing and Proofreading** . . . . . **2 cr**  
**(PQ:** ENG1105 or ENG1825) An introduction to all levels of the editing process—acquisition and development editing, substantive and line editing, copyediting and proofreading. Students will read and reference relevant texts on editing and will practice their editorial skills on a variety of sample manuscripts.

**ENG2825 Honors Critical Thinking and Writing** . . . . . **2 cr**  
**(PQ:** ENG1105 or ENG1825, and ACT English or ACT English/Writing score of 27 or above [SAT Writing and Language score of 33 or above, or CLT score of 85 or above], or high school cum GPA of 3.7 or higher, or consent of instructor; taken in place of ENG2205) A writing course for students who have demonstrated special proficiency in language use and reading skills. The course is designed to improve students' skills in source analysis, critical thinking, and argumentation as they create a research paper. Through individual and collaborative assignments, students will develop skills in research by using reference materials, journals, and databases related to their disciplines. This course should be taken before a student completes 60 graduation credits. ENG2825 is taken in place of ENG2205.

**ENG3125 Structure of English Grammar** . . . . . **4 cr**  
**(PQ:** ENG1105 or ENG1825) A course in analyzing the structures of English sentences in all their various forms. The course includes theories of grammar and applications of syntactical analysis to writing, reading and teaching.

**ENG3165 Instructional Design for Professional Writing<sup>\*</sup>** . . . . . **2 cr**  
**(PQ:** ENG1105 or ENG1825) Students study learning theory and design models to write and develop training or educational materials for online platforms.

**ENG3210 Christianity and Writing<sup>\*</sup>** . . . . . **2 cr**  
**(PQ:** ENG2215, ENG2216 or ENG2217, or consent of instructor) A writing course designed to give students practical and theoretical insight into how writing and the arts integrate with Christian faith. Students will produce creative, faith-oriented texts and read faith-based literature by established writers.

**ENG3219 Autobiographical Writing<sup>\*</sup>** . . . . . **2 cr**  
**(PQ:** ENG2215 or ENG2217, or consent of instructor) Development of students' writing skills centered on personal histories. Emphasis will be placed on writing technique and critique, heightened self-awareness and the importance of memoir in literature and life.

**ENG3240 Writing of Place<sup>\*</sup>** . . . . . **2 cr**  
**(PQ:** ENG2215, ENG2216, or ENG2217 or consent of instructor) A writing course designed to give students practical and theoretical insight into how landscape integrates into writing. Students will read work by professional authors and produce creative text that prominently features a sense of place.

**ENG3247 Technical Writing<sup>\*</sup>** . . . . . **2 cr**  
**(PQ:** ENG1105 or ENG1825) Principles and forms of technical writing, including writing technical instructions, technical descriptions and technical reports.

**ENG3248 Grant Writing** . . . . . **2 cr**  
**(PQ:** ENG2205 or ENG2825, or consent of instructor) A course designed to give students practical and technical experience in creating grant proposals on behalf of nonprofit organizations. Students will work with an organization of their choice to gather information that will lead to the development of key components of a grant proposal. With additional instruction in how to tailor a proposal to a specific funding audience, students will adapt their existing text to meet the focus areas of a selected funder.

**ENG3249 Social Media Marketing<sup>\*</sup>** . . . . . **2 cr**  
**(PQ:** ENG1105 or ENG1825, or consent of instructor) A writing course exploring use of social media to tell stories of a brand's products and services. Topics include identifying target audiences for ministry, nonprofit and for-profit applications and identifying techniques and strategies for audience engagement across multiple social media platforms.

**ENG3256 Advanced Writing of Poetry<sup>\*</sup>** . . . . . **2 cr**  
**(PQ:** ENG2216) A course in which students continue to develop their writing skills in poetry through the reading of contemporary poetry, the study of poetic technique and the practice of writing poetry. Emphasis will be placed on deepening students' understanding of the poetic craft, engaging in a workshop format and examining the spiritual aspect of poetry.

**ENG3257 Advanced Writing of Fiction<sup>\*</sup>** . . . . . **2 cr**  
**(PQ:** ENG2217) A course in which students continue to develop their writing skills in fiction through the creation of original short stories. Emphasis will be placed on deepening students' use of the tools of fiction, good writing technique, critique and learning from established fiction writers.

**ENG3316 Freelance Content Writing<sup>\*</sup>** . . . . . **2 cr**  
**(PQ:** ENG1105 or ENG1825) A writing course designed to give students practical knowledge and writing skills in content marketing and freelancing which will enable them to do independent, freelance writing for clients.

**ENG3625 Advanced Writer's Workshop<sup>\*</sup>** . . . . . **2 cr**  
**(PQ:** two of the following: ENG2215, ENG2216, or ENG2217, or consent of instructor) A continued development of students' skills in reading and writing poetry and prose. Course provides an intensive writing experience in which students produce sophisticated texts in a chosen genre.

**ENG4435 Writing Theory and Ethics<sup>WCE</sup> \*** . . . . . **2 cr**  
(PQ: ENG2205 or ENG2825, and junior or senior standing, or consent of instructor) A survey of Western and non-Western writing theories from classical to contemporary with an emphasis on the relationship of theory to Christianity and ethics, encompassing the overlapping studies of literacy, rhetoric/composition, professional/technical writing and creative writing, as well as drawing on language studies and philosophy.

**ENG4615 Literary Editing** . . . . . **0–1 cr**  
(PQ: ENG2216, ENG2217 and consent of literary magazine advisor) Practical experience in editing *Inkstone*, the university literary magazine, including publicity, selection of creative pieces and work with printing houses. **Note:** This course is designated as repeatable and may be repeated three times for credit after the original taking of the course.

**ENG4855 Senior Capstone: Creative Writing<sup>DCE</sup>** . . . . . **2 cr**  
(PQ: ENG2205 or ENG2825; ENG2215; ENG2216; ENG2217; ENG4435; SPE1075 or SPE1825; and 4 credits from ENG3210, ENG3219, ENG3256, ENG3257, ENG3625 and approved topics;

senior standing; English major with a writing or literature and writing concentration; and consent of instructor) An individualized course in which students write creative texts in poetry, personal essay and/or short fiction.

**ENG4858 Senior Capstone: Professional Writing<sup>DCE</sup>** . . . . . **2 cr**  
(PQ: ENG2205 or ENG2825; SPE1075 or SPE1825; ENG2146; ENG4435; 4 credits from ENG2235, ENG3165, ENG3247, ENG3248, ENG3249, ENG3316 and approved topics; senior standing; English major with a writing or literature and writing concentration; consent of faculty supervisor and internship registration form) An individualized course for which students write within the field of professional writing and produce a portfolio.

**ENG4995 Writing Internship** . . . . . **1–4 cr**  
(PQ: consent of faculty supervisor and internship registration form) Supervised work experience in writing, publishing, or other English-related employment. **Note:** This course is designated as repeatable. See page 25 for note regarding internships (professional experiences).

## English for Non-Native Speakers

**LAN1105L English Composition Lab** . . . . . **1 cr**  
(Required of non-native speakers of English with ACT English or ACT English/Writing score of 18 or below [SAT Writing and Language score of 25 or below; CLT Grammar/Writing score of 20 or below], TOEFL score of 70 or below, or with no ACT or SAT score. To be taken

concurrently with ENG1105.) Reinforcement of skills used in college-level writing, including an emphasis on compositional strategies and editing. This course supports students in ENG1105 Composition whose first language is not English.

## English as a Second Language (TESOL)

**ESL3210 Introduction to Sociolinguistics** . . . . . **2 cr**  
(PQ: sophomore standing) This course will focus on examining language and linguistic behavior as influenced by social and cultural factors. Topics include language and learning development, function of language and the social, intellectual and political impact of communication. Drawing from research on social contexts of language use, we will consider the pedagogical implications of teaching and learning English in K–12 school contexts

**ESL3215 Language, School and Society** . . . . . **4 cr**  
(PQ: sophomore standing) Examination of the role of language in human interaction and how it reflects socioeconomic status, power, ethnicity, geographical origin, political and religious identity and gender. Implications for teaching and learning English as a second language.

**ESL3315 Theory of Language Acquisition** . . . . . **4 cr**  
(PQ: LIN2226) Study of current research and theories in language acquisition. Examination of the language learning process and variables that affect language acquisition.

**ESL4325 Teaching Grammar for ESL - TESOL** . . . . . **2 cr**  
(PQ: ENG3125, LIN2226 and enrollment in TESOL minor) Study of English grammar with emphasis on how to effectively present English grammatical points to ESL students in diverse settings.

**ESL4326 ESL Curriculum and Assessment - TESOL** . . . . . **2 cr**  
(PQ: ENG3125 and LIN2226 and enrollment in TESOL minor) Study and practice of language curriculum development. Study and practice of formal and informal second language assessment techniques to determine appropriate placement and to evaluate the progress of ESL students in diverse settings.

## Finance

**FIN2025 Personal Money Management** . . . . . **2 cr**  
A survey of the principles of financial management from the viewpoint of the consumer. Topics include personal budgeting, consumer buying, credit, real estate, investments, personal income tax, insurance, risk analysis, trusts, wills and estates. (Open to business and non-business majors.)

**FIN2221 Finance I** . . . . . **2 cr**  
(PQ: C or better in ACC2101 and ACC2102, or concurrently enrolled in ACC2102) Introduction to financial concepts and issues within the context of the corporation. Topics include analysis of financial statements, budgeting, leverage and working capital management.

**FIN3222 Finance II** . . . . . **2 cr**  
(PQ: FIN2221 or ACC3201 or concurrently enrolled in ACC3201) A continuation of FIN2221. Further examination of financial issues within the corporation. Topics include time value of money, risk/return relationships and application to capital budgeting.

**FIN3225 Investments** . . . . . **4 cr**  
(PQ: C or better in FIN3222) Discussion of decision criteria and procedures used in investment selection. Risk as a concept is explored. Relationships between risk and return are developed and used with analytical techniques developed to study marketable securities. Portfolio management, including international aspects, is developed in the context of dynamic financial markets.

**COURSE DESCRIPTIONS**

**FIN3226 Money and Banking** . . . . . **4 cr**  
 (PQ: C or better in FIN3222; and C or better in ECO2201 or ECO2211)  
 A history of commercial banking, functions of the Federal Reserve System, creation of money, open market operations and fiscal and monetary controls.

**FIN3227 Trusts, Wills and Estates** . . . . . **2 cr**  
 (PQ: C or better in BUS3331) An advanced analysis of the various tools of estate planning, including trusts and wills.

**FIN4325 Wealth Management** . . . . . **4 cr**  
 (PQ: C or better in FIN3222) This course addresses issues in financial planning from an individual perspective, covering portfolio management, performance analysis, diversification and risk, retirement planning, asset protection, insurance, and real estate.

**FIN4855 Portfolio Research** . . . . . **2 cr**  
 (PQ: C or better in FIN3222, FIN3225; finance major or consent of instructor) Instructor-guided design of a balanced fund portfolio for use in FIN4856. Focus on research and justification of proposed portfolio design aligned with fund goals and UNW's mission and values.

**FIN4856 Portfolio Management** . . . . . **2 cr**  
 (PQ: C or better in FIN4855; finance major or consent of instructor) Instructor-guided, hands-on experience managing investment holdings in accordance with the portfolio designed in FIN4855. Emphasis on managing for a competitive risk-adjusted rate and alignment with established fund priorities and Christian ethics.

**FIN4995 Finance Internship** . . . . . **1 cr**  
 (PQ: BUS3835, consent of faculty supervisor, and internship registration form) Supervised work experience related to student's major. Students may enroll for this course at various times as their schedules permit. **Note:** This course is designated as repeatable and may be repeated three times after the original taking of the course. See page 25 for note regarding internships.

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**General Studies**

**GST1015 Basic Computer Applications<sup>##</sup>** . . . . . **1 cr**  
 This class teaches basic computer literacy and introduces students to common desktop applications such as word processing, spreadsheets, Internet and multimedia. Software specific to the course includes Microsoft Word, Excel, Internet Explorer and PowerPoint. Skills gained in the course will provide a foundation for using these applications in other Northwestern courses. Only offered through Dual Enrollment.

**GST1025 Culture, Language, and Transition into College** . . . . . **1 cr**  
 This course will use experiential techniques to expose students to a variety of learning paradigms that address best practices that align with a successful college life in the U.S. The course will focus on the adjustments students make upon entering college campuses in the U.S. and the strategies that support college success. The course will use a wrap-around approach to offer personalized interventions leading to a successful college experience. Students are expected to use this information to develop and at the end of the course, present a personalized portfolio outlining strategies for continued success in meeting the academic rigor of college life. This course is a requirement for all incoming students on an F-1 visa. **Note:** This course is designated as repeatable for continued support.

**GST1035 Discovering Majors<sup>##</sup>** . . . . . **1 cr**  
 This experientially based course is recommended for students who are undecided about an academic major and who are motivated to explore options. Students will explore both the concept of a college major and the content within the major to understand how majors relate to careers. Students will learn about major/career decision making strategies, research and evaluate majors they are considering and rank their major choices based on what they have learned. Finally, students will critically reflect on their decision making process and create an action plan for further exploration. Only offered through Dual Enrollment.

**GST4095 Intent to Register for an Academic Internship** . . . . . **1–14 cr**  
 (PQ: Faculty advisor approval) This course indicates a student's intent to register for an academic internship. It is to be used for students that intend to secure an academic internship, but will not have secured the internship prior to the deadlines required for financial aid and/or athletic eligibility.

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**Geography**

**GEO1005 Introduction to Geography** . . . . . **2 cr**  
 An introduction to the study of the interrelation of human and physical geography. Attention is directed to geographical concepts, maps, physical geography, population geography, cultural geography, political geography, agriculture and economic geography.

**GEO1007 Principles of Geography<sup>##</sup>** . . . . . **3 cr**  
 An introduction to the study of the interrelation of human and physical geography. Attention is directed to geographical concepts, maps, physical geography, population geography, cultural geography, political geography, agricultural and economic geography. May be taken to satisfy the Scientific & Quantitative Literacy social science requirement in the core curriculum. Equivalent to GEO1005. Only offered through Dual Enrollment.

**GEO1015 World Geography** . . . . . **2 cr**  
 An analysis of the global perspective of peoples and places in a political and economic geographical context. Topics include the study of the various geographical regions of the world with attention paid to the particular aspects of each region's peoples, cultures and economic development.

**GEO1017 Principles of World Geography<sup>##</sup>** . . . . . **3 cr**  
 An analysis of the global perspective of peoples and places in a political and economic geographical context. Topics include the study of the various geographical regions of the world with attention paid to the particular aspects of each region's peoples, cultures and economic development. May be taken to satisfy the Scientific & Quantitative Literacy social science requirement in the core curriculum. Equivalent to GEO1015. Only offered through Dual Enrollment.

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## Health & Physical Education

Full details are given under School of Education programs for the Physical Education/Health licensure areas. See pages 107–111 and 121.

- HPE1005 Foundations of Physical Education and Health . . . . . 2 cr**  
For freshmen and sophomores majoring or minoring in physical education or kinesiology. Survey of trends in the field of physical education. History, present philosophy and objectives are examined. Professional publications in the field are analyzed.
- HPE2005 First Aid and Personal Safety . . . . . 1 cr**  
Skills and knowledge necessary to give aid to victims of trauma or sudden illness. Red Cross first aid and CPR certifications available.
- HPE2006 Sexuality Education . . . . . 2 cr**  
This course will explore the current knowledge, attitudes and contemporary issues in family, social and sexuality education and prepare future professionals for family life and sexuality education at the K–12 level. The course is intended to help students increase their knowledge of sexuality, relationship principles and the ability to educate and promote sexual and family health. There will be an emphasis on knowledge mastery, curriculum design, educational materials and implementation methods.
- HPE2007 Methods of Teaching Group Exercise . . . . . 2 cr**  
This course is an introduction to teaching group exercise. A foundation of information about fitness and principles of exercise necessary to teach group exercise will be explored. In addition, the students will have an opportunity to practice techniques and skills needed to teach a variety of formats of group exercise.
- HPE2015 Techniques of Team Sports . . . . . 3 cr**  
The theory and practice of skill analysis and instructional strategies in the teaching of soccer, flag football, team handball, lacrosse, basketball, softball and badminton.
- HPE2016 Techniques of Individual and Lifetime Sports . . . . . 4 cr**  
The theory and practice of skill analysis and instructional strategies in the teaching of soccer, flag football, team handball, dance rhythms, lacrosse, basketball, softball, badminton, and group exercise.
- HPE2175 Anatomy of Human Movement . . . . . 4 cr**  
The course examines the anatomical structures of human movement. Though basic knowledge of respiratory, endocrine, digestive, integument and urinary systems will be covered, emphasis is placed on understanding the functional anatomy. A majority of the study will be of the circulatory, neuromuscular, skeletal and articular systems and their relationship to human movement, exercise and sport. The course is designed as a complementary course to the mechanics of human movement known as Biomechanics.
- HPE3005 Personal and Community Health . . . . . 2 cr**  
A study of personal and community problems in selected physical, emotional, social, spiritual and mental areas.
- HPE3006 Human Nutrition . . . . . 4 cr**  
Nutrition needs throughout the life cycle; the relationship between the quality of diet and diseases; an understanding of the present knowledge of nutrient requirements, functions and availability for optimum health and fitness.
- HPE3007 Coaching Theory\* . . . . . 2 cr**  
Theoretical and practical foundations of coaching. Topics include coaching philosophies, leadership techniques, skill analysis, practice design, motivational approaches and administrative issues.
- HPE3008 Health Behavior: Theory and Program Planning . . . . . 2 cr**  
A study of the determinants of health behavior, factors influencing health behavior, health behavior theories and application methodology will be outlined. Contemporary models to plan health education programs will also be discussed.
- HPE3009 Officiating Athletics\*\* . . . . . 2 cr**  
Techniques, rules, problems and procedures in officiating high school basketball, volleyball and baseball.
- HPE3015 Adapted Fitness and Activity . . . . . 2 cr**  
A study of exceptional physical and mental conditions that affect body movement and motor development. Course material will also cover techniques and principles directed to a teacher or trainer of fitness and sport for special populations and/or students with physical disabilities.
- HPE3025 Health and Sport Management . . . . . 4 cr**  
This course covers the basic knowledge and skill sets of a sport and health manager to current trends and issues in the management industry. This course provides the principle and theory for students as they study and prepare for a variety of sport and health management careers. The major themes within this course include principles of management, marketing, financial and economic, legal, ethical, sales, facility, event and career preparation. Best practices and principles applied to the organization and administration of for-profit and nonprofit sport and health programs.
- HPE3075 Assessment and Measurement in Physical Education . . . . 2 cr**  
A study of existing methods of evaluation for physical education programs with consideration given to techniques of test administration and the organization and interpretation of test data.
- HPE3205 Advanced First Aid\*\* . . . . . 1 cr**  
(PQ: HPE2005) Advanced first aid training techniques.
- HPE3275 Care and Prevention of Injuries . . . . . 2 cr**  
(PQ: HPE2005 or concurrently enrolled) Theory and practice of taping and rehabilitation techniques. The role of coaches in care of injuries will be studied.
- HPE3305 Health Education Curriculum and Instruction . . . . . 3 cr**  
(PQ: EDU2215; for K–12 Physical Education & Health majors only) This course provides teachers with the competencies and knowledge needed to teach school health education. An examination of the school health program, national health education curricula, national health education standards and pedagogy and teaching resources in health education will form the focus of the course.
- HPE3376 Exercise Physiology\* . . . . . 4 cr**  
(PQ: BIO1009 or BIO1011) A study of the physiological effects which muscular activity and exercise have upon the human body. Laboratory experiments, diagnostic techniques and methods will be integrated with principles and theory.
- HPE3377 Biomechanics\* . . . . . 4 cr**  
(PQ: BIO3157 or HPE2175) Mechanics of body movement, principles of leverage, application of muscular forces and the analysis of physical skills.

## COURSE DESCRIPTIONS

**HPE4075 Administration of Physical Education and Sport\*** . . . . . **2 cr**  
Current practices and principles applied to problems of organization and administration of curricular and extracurricular programs in physical education and sport.

**HPE4305 Health and Fitness Evaluation and Diagnosis\*** . . . . . **2 cr**  
(PQ: HPE3376) The professional preparation in the fitness field as well as the theory and practice of evaluating physical fitness for the purpose of prescribing cardiovascular, flexibility and strength training exercise to all age groups, both healthy persons and those with medical concerns.

## Healthcare Management

**HCM4080 Strategic Management in Healthcare**<sup>oo</sup> . . . . . **4 cr**  
This course builds foundational understanding of the use of management systems in healthcare deliveries. Students will determine what management systems best align with an organization's mission. Application studies on both Lean and TQM management styles will be completed. This course also requires students to explore how managers build teams in highly regulated environments and ensure the processes for completing work are practical, compliant, and efficient. Only offered through Adult Undergraduate (see College of Graduate, Online, & Adult Learning catalog).

**HCM4087 Healthcare Law and Ethics**<sup>oo</sup> . . . . . **2 cr**  
This course is designed to give students an understanding of the common legal and ethical issues in healthcare delivery. Students will evaluate cases to better their understanding of informed consent, as it relates to existing conditions, risks, and cost. Students will learn and assess various risk mitigation techniques for human resource, technology, and malpractice liabilities. The positive and negative aspects of corporate governance, community, state, and federal accountability systems in healthcare will be explored. Only offered through Adult Undergraduate (see College of Graduate, Online, & Adult Learning catalog).

**HCM4085 Healthcare Leadership**<sup>oo</sup> . . . . . **4 cr**  
Students will learn strategies for building high-quality, high context teams centered on quality healthcare delivery. An assessment of how existing organizations integrate vision and values in to their care menu and delivery modalities will be required. This course is designed to help students formulate and articulate their own healthcare leadership principles, in both the stewardship of resources and the management of staff. Information interviews will create a platform for experiential and market-place relevant learning in this course. Only offered through Adult Undergraduate (see College of Graduate, Online, & Adult Learning catalog).

**HCM4089 Finance Systems in Healthcare**<sup>oo</sup> . . . . . **4 cr**  
This course will explore the unique and complex systems of healthcare reimbursement. Students will gain an understanding of how insurance reimbursement systems intersect with delivery and how providers use analytics to determine cost, cost sharing, and pricing. Students will also learn how hospital systems operate financially and how those systems comply with corporate governance and operational requirements. Students will use information interviews to build context for class content. Only offered through Adult Undergraduate (see College of Graduate, Online, & Adult Learning catalog).

## Health Sciences

**HSC4835 Senior Seminar for the Health Sciences**<sup>OCE WCE</sup> . . . . . **2 cr**  
(PQ: ENG2205 or ENG2825, SPE1075 or SPE1825, and at least junior standing as a health sciences major) A capstone course designed to provide an integration of concepts in the biological sciences, biochemistry and the health professions with a discussion of the ethics of applied biology and the health sciences as they pertain to a global and culturally diverse society.

**HSC4995 Health Sciences Internship** . . . . . **1–4 cr**  
(PQ: consent of faculty supervisor and internship registration form) Supervised work experience in the health professions. **Note:** This course is designated as repeatable. See page 25 for note regarding internships.

## History

**HIS1005 Historical Perspectives on Culture, Belief, and Civilization**<sup>#</sup> . . . . . **4 cr**  
Students will examine how world cultures and belief systems have interacted with each other since ancient times. They will explore a variety of ideas, traditions, and movements, discuss key literary and cultural texts, and develop a thoughtful view on the roots and influence of Judaism, Christianity, and Islam. Reflecting upon this complex historical heritage will inform discussion of today's global issues. Equivalent to HIS1009 (see College of Graduate, Online, & Adult Learning catalog).

**HIS1007 Survey of American History**<sup>##</sup> . . . . . **4 cr**  
This course is designed to provide an introductory survey of significant themes in American History. It will consider how the United States formed and developed and will pay attention to important topics in American politics, society, economics, culture and religious belief. Only offered through Dual Enrollment.

**HIS1005L Historical Perspectives Lab** . . . . . **1 cr**  
(Required of students with ACT Composite score of 20 or below, high school cum GPA of 2.66 or below, or First-Generation Student with high school cum GPA of 3.0 or below. Taken concurrently with HIS1005.) This lab course supports students' academic skill building in areas such as reading college texts, note taking, repeated spaced practice.

**HIS1825 Honors Historical Perspectives on Culture, Belief, and Civilization** . . . . . **4 cr**  
(PQ: ACT Composite score of 27 or above [SAT score of 1280 or above or CLT score of 85 or above], or high school cum GPA of 3.7 or higher, or consent of instructor) Students will examine a variety of ideas and movements to understand how world cultures and belief systems (especially Judaism, Christianity, and Islam) have interacted since ancient times and inform today's global issues. Special emphasis is placed on the use of documents to create historical interpretations. The course stresses the practice of rhetoric in all its forms: writing, discussion, presentation, and debate. HIS1825 is a repeat of HIS1005.



**HIS1826 Honors Seminar in Humanities . . . . . 4 cr**

(PQ: ACT Composite score of 27 or above [SAT score of 1280 or above or CLT score of 85 or above], or high school cum GPA of 3.7 or higher, or consent of instructor) Students will examine a variety of ideas and movements to understand how world cultures and belief systems (especially Judaism, Christianity, and Islam) have interacted in the past and inform today's global issues. Special emphasis is placed on the use of documents to create historical interpretations. The course stresses the practice of rhetoric in all its forms: writing, discussion, presentation, and debate.

**HIS2001 U.S. History to 1877 . . . . . 4 cr**

A survey of the social, economic, political, religious and diplomatic history of the United States from the age of exploration and colonization through the Reconstruction period. Topics include exploration and colonization, the American Revolution, the new nation, Jacksonian Democracy, slavery, reform, manifest destiny, sectionalism, economic development, the Civil War and Reconstruction.

**HIS2002 U.S. History since 1877. . . . . 4 cr**

A survey of the social, economic, political, religious and diplomatic history of the United States since Reconstruction. Topics include the Gilded Age, the Progressive Era, World War I, the Twenties, the Great Depression, World War II, the Cold War and recent America.

**HIS2005 Introduction to Historical Studies . . . . . 2 cr**

Meant for all History majors and minors, this course will equip students with the concepts and skills necessary for completing upper-level history courses. Topics include locating historical resources, bibliographies, citation, historical argumentation, historiography and the integration of Christianity and historical study.

**HIS3095 Digital History, Public History, and Archiving . . . . . 4 cr**

This course examines the practice of history in the digital and public spheres. In order to help students become knowledgeable practitioners in the fields of digital history, public history, and archiving, this course has the following aims: to introduce students to a variety of disciplines and careers for historians outside of academia; to evaluate the latest scholarship about digital and public history; to familiarize the student with digital resources; to construct a historical project in the field of public history and/or digital history.

**HIS3105 History of the Ancient Near East\* . . . . . 4 cr**

(PQ: HIS1005, HIS1825, or HIS1826 or concurrently enrolled, or consent of instructor) A study of the history and culture of the civilizations of Mesopotamia, Syria-Palestine, Asia Minor and Iran from earliest times to 500 B.C. Special attention will be given to the history and culture of the Monarchy period in Israel.

**HIS3106 History and Archaeology of Ancient Egypt . . . . . 4 cr**

(PQ: HIS1005, HIS1825, or HIS1826 or concurrently enrolled, or consent of instructor) A study of the history and culture of the civilization of ancient Egypt from earliest times to 500 B.C. Special attention will be given to contacts with Israel and to the methods and discoveries of archaeology in the Nile Valley.

**HIS3115 Old Testament Archaeology\* # . . . . . 2 cr**

(PQ: HIS1005, HIS1825, or HIS1826 or concurrently enrolled, or consent of instructor) A survey of the methods and results of archaeology as applied to sites and topics of Old Testament significance. Special emphasis is placed upon the interpretative and apologetic uses of archaeology.

**HIS3116 New Testament Archaeology\* # . . . . . 2 cr**

(PQ: HIS1005, HIS1825, or HIS1826 or concurrently enrolled, or consent of instructor) A survey of the methods and results of archaeology as applied to sites and topics of New Testament significance. Special emphasis is placed upon the interpretative and apologetic uses of archaeology.

**HIS3125 History of the Christian Church from Apostolic Times to the Present# . . 4 cr**

(PQ: HIS1005, HIS1825, or HIS1826 or concurrently enrolled, or consent of instructor) A study of the Christian church from apostolic times to the present. Emphasis is on the development of institutions, traditions, doctrine, ideas, expansion, the relationship of church and state, denominationalism and sectarianism and the interactions of the church with secular and intellectual movements.

**HIS3128 History of the Greek World\* . . . . . 4 cr**

(PQ: HIS1005, HIS1825, or HIS1826 or concurrently enrolled, or consent of instructor) A study of the history and culture of the ancient Greek world from earliest times to 30 B.C., with special emphasis on literature, religion and the impact of Greek civilization on Christianity.

**HIS3129 History of the Roman World\* . . . . . 4 cr**

(PQ: HIS1005, HIS1825, or HIS1826 or concurrently enrolled, or consent of instructor) A study of the history and culture of the ancient Roman world from the Republic through the fall of the Western empire in 476 A.D., with special attention to contacts with early Christianity, Roman literature and Roman religion.

**HIS3135 Renaissance and Reformation\* . . . . . 4 cr**

(PQ: HIS1005, HIS1825, or HIS1826 or concurrently enrolled, or consent of instructor) A study of European history from 1300 to 1650. Topics include the development of nation-states, capitalism, humanism, exploration and colonization, science and technology, the fine arts, religious reform and warfare.

**HIS3136 History of Europe in the 18th and 19th Centuries\* . . . . . 4 cr**

(PQ: HIS1005, HIS1825, or HIS1826 or concurrently enrolled, or consent of instructor) A survey of European political history and socio-cultural developments between 1700 and the outbreak of World War I.

**HIS3145 History of Twentieth Century Europe\* . . . . . 4 cr**

(PQ: HIS1005, HIS1825, or HIS1826 or concurrently enrolled, or consent of instructor) A study of European developments from World War I to the present. Emphasis is on political and economic systems and the place of Europe in world affairs. Other topics include fine arts, religion, demography and social systems.

**HIS3155 History of East Asia\* . . . . . 4 cr**

(PQ: HIS1005, HIS1825, or HIS1826 or concurrently enrolled, or consent of instructor) An examination of the political, social, economic and cultural backgrounds of modern China, Japan and Southeast Asia. A survey of current political, economic and cultural conditions will be included.

**HIS3156 History of Russia from Earliest Times to the Present\* . . . . 4 cr**

(PQ: HIS1005, HIS1825, or HIS1826 or concurrently enrolled, or consent of instructor) A study of the history and development of Russia from the ancient world to the present with special emphasis on the 19th and 20th centuries. Topics to be studied will include Russian political, social, cultural and religious history.

**HIS3165 American Revolution and Early Republic . . . . . 4 cr**

(PQ: HIS1005, HIS1825, or HIS1826 or concurrently enrolled, or consent of instructor) A study of the creation of the American Republic in the period 1763–1815. Primacy is given to the political changes which led to Independence and the creation of a Constitutional government, but the cultural, social, economic and religious changes of the period also receive consideration.

## COURSE DESCRIPTIONS

**HIS3166 History of the Modern Middle East . . . . . 4 cr**  
**(PQ:** HIS1005, HIS1825, or HIS1826 or concurrently enrolled, or consent of instructor) A survey of Middle Eastern civilization from the time of Mohammad to the Present, including the development of social and cultural institutions. Particular attention will be given to the political, economic, and diplomatic developments in this region since 1914, including the Israeli-Palestinian struggle, Iraq, and U.S. Middle East Policies.

**HIS3167 Civil War and Reconstruction . . . . . 4 cr**  
**(PQ:** HIS1005, HIS1825, or HIS1826 or concurrently enrolled, or consent of instructor) In the period 1848–1877, the United States was torn asunder through the conflict of the Civil War and Reconstruction. This course traces the issues and events involved in these great matters. Focusing on political and military matters, the course also considers the widespread upheaval of the period and the ways the Civil War remains an important historical touchstone today.

**HIS3175 American Religious History . . . . . 4 cr**  
**(PQ:** HIS1005, HIS1825, or HIS1826 or concurrently enrolled, or consent of instructor) A study of religion in American history from the first European settlements to the present. Special attention is given to Protestant evangelicalism, but other Christian and non-Christian groups are considered.

**HIS3206 History of Recent America, World War II to the Present\* . . . 4 cr**  
**(PQ:** HIS2001 or HIS2002 or consent of instructor) An examination of the political, social and economic forces, events, ideas and trends which have shaped the United States, including the impact of World War II, the Cold War era, the Korean War, the Vietnam War and the domestic and foreign affairs of the 1980s and 1990s.

**HIS4835 Senior Seminar<sup>OCE WCE</sup> . . . . . 4 cr**  
**(PQ:** history or politics, history, and economics major; senior standing, ENG2205 or ENG2825, and SPE1075 or SPE1825; or consent of instructor) A senior seminar class dealing with the methodology of research and with historical bibliography.

**HIS4995 History Internship . . . . . 1–8 cr**  
**(PQ:** consent of faculty supervisor and internship registration form) Supervised work experience in history. **Note:** This course is designated as repeatable. See page 25 for note regarding internships.

**HIS5019U History of Christianity . . . . . 4 cr**  
**(PQ:** acceptance into an accelerated graduate program) In this course, students will survey the history of the church from its birth in the 1st century AD to its current manifestations in the 21st century. Attention will be given to the people and events that contributed to the growth and development of Christianity.

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## Honors Courses

**ART1825 Honors Topics: Art Appreciation . . . . . 2 cr**  
**(PQ:** ACT Composite score of 27 or above [SAT score of 1280 or above or CLT score of 85 or above], or high school cum GPA of 3.7 or higher, or consent of instructor) An in-depth study of a particular artist, historical period, or geographic location of visual art. Focus of the course is on descriptive, interpretive and evaluative analysis of art. ART1825 is a repeat of ART1005 and ART1007.

**BIA1826 Honors Christian Thinking & Living . . . . . 2 cr**  
**(PQ:** ACT Composite score of 27 or above [SAT score of 1280 or above or CLT score of 85 or above], or high school cum GPA of 3.7 or higher, or consent of instructor) A study of basic Christian beliefs and values in the cultivation of a Christian mindset and character. This includes principles for spiritual growth and moral decision-making. BIA1826 is a repeat of BIA1007.

**BIA1827 Honors Interpreting Scripture . . . . . 2 cr**  
**(PQ:** ACT Composite score of 27 or above [SAT score of 1280 or above or CLT score of 85 or above], or high school cum GPA of 3.7 or higher, or consent of instructor) A study of the Bible as the Word of God and of the proper methods of interpretation for spiritual transformation. BIA1827 is a repeat of BIA1015.

**BIB2826 Honors Survey of the New Testament . . . . . 2 cr**  
**(PQ:** ACT Composite score of 27 or above [SAT score of 1280 or above or CLT score of 85 or above], or high school cum GPA of 3.7 or higher, or consent of instructor) A study of the socio-historical setting, literary genres and theological message of the New Testament. Students study the process by which the New Testament was established, the relationship of the Old Testament to the New Testament and critical methods of New Testament scholarship. BIB2826 is a repeat of BIB2008.

**BIB2827 Honors Survey of the Old Testament . . . . . 4 cr**  
**(PQ:** ACT Composite score of 27 or above [SAT score of 1280 or above or CLT score of 85 or above], or high school cum GPA of 3.7 or higher, or consent of instructor) A survey of the 39 books of the Old Testament with emphasis on historical setting and literary features. BIB2827 is a repeat of BIB2005.

**BIB3825 Honors Topics in Old Testament Exposition\*\* . . . . . 2–4 cr**  
**(PQ:** ACT Composite score of 27 or above [SAT score of 1280 or above or CLT score of 85 or above], or high school cum GPA of 3.7 or higher, or consent of instructor) Each of the offerings of this course focuses on an Old Testament book or grouping of books; specifically addressing its more specialized, technical and problematic issues; students interact with the work of scholars who have made special contributions to the field of study.

**BIB3826 Honors Topics in New Testament Exposition\*\* . . . . . 2–4 cr**  
**(PQ:** ACT Composite score of 27 or above [SAT score of 1280 or above or CLT score of 85 or above], or high school cum GPA of 3.7 or higher, or consent of instructor) Each of the offerings of this course focuses on a New Testament book or grouping of books; specifically addressing its more specialized, technical and problematic issues; students interact with the work of scholars who have made special contributions to the field of study.

**BIB3827 Honors Topics in Old/New Testament Exposition\*\* . . . . 2–4 cr**  
**(PQ:** ACT Composite score of 27 or above [SAT score of 1280 or above or CLT score of 85 or above], or high school cum GPA of 3.7 or higher, or consent of instructor) Each of the offerings of this course focuses on Old and New Testament books or grouping of books as specified in the class schedule. Each course offering moves quickly through the basic content of the biblical book(s) to focus on more specialized, technical and problematic issues. Some of the issues that are examined critically include introductory matters (authorship, date, provenance, purpose and literary background), structure, theology and use in the Old or New Testament. Emphasis is given to interaction with the work of Old or New Testament scholars who have made special contributions to the book(s) studied.

**BIB4825 Honors Systematic Theology\* . . . . . 4 cr**  
**(PQ:** ACT Composite score of 27 or above [SAT score of 1280 or above or CLT score of 85 or above], or UNW cum GPA of 3.6 or higher, or consent of instructor) The study of Evangelical Christian beliefs and their relationship to other belief systems as well as their relevance to contemporary discussions both inside and outside of the church. BIB4825 is a repeat of BIB4360.

**BI02825/2825L Honors Topics in Biology\*<sup>\$</sup> . . . . . 2 or 4 cr**  
 (PQ: ACT Composite score of 27 or above [SAT score of 1280 or above or CLT score of 85 or above], or high school cum GPA of 3.7 or higher, or consent of instructor) A study of a specialized aspect of biology curriculum that includes contemplation of the natural world. The laboratory component may consist of an intensive field trip to a specialized ecosystem or habitat. For 4 credit course only: \$200 laboratory fee required; concurrent registration required in lecture and lab.

**ENG1825 Honors Composition . . . . . 4 cr**  
 (PQ: ACT English or ACT English/Writing score of 27 or above [SAT Writing and Language score of 33 or above or CLT score of 85 or above], or high school cum GPA of 3.7 or higher, or consent of instructor; taken in place of ENG1105) A writing course for students who have demonstrated special proficiency in language use and reading skills. Through individual and collaborative assignments, students will practice their critical reading and thinking skills, study rhetoric by analyzing argumentation and write essays in multiple genres. ENG1825 is a repeat of ENG1105.

**ENG2825 Honors Critical Thinking and Writing . . . . . 2 cr**  
 (PQ: ENG1105 or ENG1825, and ACT English or ACT English/Writing score of 27 or above [SAT Writing and Language score of 33 or above or CLT score of 85 or above], or high school cum GPA of 3.7 or higher, or consent of instructor; taken in place of ENG2205) A writing course for students who have demonstrated special proficiency in language use and reading skills. The course is designed to improve students' skills in source analysis, critical thinking, and argumentation as they create a research paper. Through individual and collaborative assignments, students will develop skills in research by using reference materials, journals, and databases related to their disciplines. This course should be taken before a student completes 60 graduation credits. ENG2825 is a repeat of ENG2205.

**HIS1825 Honors Historical Perspectives on Culture, Belief, and Civilization . . . . . 4 cr**  
 (PQ: ACT Composite score of 27 or above [SAT score of 1280 or above or CLT score of 85 or above], or high school cum GPA of 3.7 or higher, or consent of instructor) Students will examine a variety of ideas and movements to understand how world cultures and belief systems (especially Judaism, Christianity, and Islam) have interacted since ancient times and inform today's global issues. Special emphasis is placed on the use of documents to create historical interpretations. The course stresses the practice of rhetoric in all its forms: writing, discussion, presentation, and debate. HIS1825 is a repeat of HIS1005.

**HIS1826 Honors Seminar in Humanities . . . . . 4 cr**  
 (PQ: ACT Composite score of 27 or above [SAT score of 1280 or above or CLT score of 85 or above], or high school cum GPA of 3.7 or higher, or consent of instructor) Students will examine a variety of ideas and movements to understand how world cultures and belief systems (especially Judaism, Christianity, and Islam) have interacted in the past and inform today's global issues. Special emphasis is placed on the use of documents to create historical interpretations. The course stresses the practice of rhetoric in all its forms: writing, discussion, presentation, and debate.

**IDS3825 Honors Colloquium\*\* . . . . . 0–4 cr**  
 (PQ: ACT Composite score of 27 or above [SAT score of 1280 or above or CLT score of 85 or above], 3.6 cum GPA or higher and consent of instructor) An honors topics class in which students from a variety of disciplines do individualized study centered within a common cross-cultural geographic location. Students then meet in a colloquium setting of sharing and discussing with each other the results of their study and participate in a study tour of the designated location.  
**Note:** This course is designated as repeatable and may be repeated for up to a maximum of 4 credits.

**IDS3826 Honors Project . . . . . 0-1 cr**  
 (PQ: Eagle Scholars Honors Program member; consent of instructor) Supervised venue for Eagle Scholar to complete an individualized project supplementing his or her course of study and approved by a cooperating faculty member. Twenty to twenty-five hours of study is required. **Note:** This course is designated as repeatable.

**IDS3827 Honors Seminar . . . . . 0 cr**  
 A required meeting time for members of the Eagle Scholars Honors Program. **Note:** This course is designated as repeatable.

**LDR1825 Honors Leadership for Transformation<sup>\$</sup> . . . . . 4 cr**  
 (PQ: ACT Composite score of 27 or above [SAT score of 1280 or above or CLT score of 85 or above], or high school cum GPA of 3.7 or higher, or consent of instructor) A holistic exploration of the role of spiritual formation, intercultural awareness, and vocational clarity as they relate to one's personal and professional leadership development. Students engage in a diverse and vulnerable learning community to grow in self-awareness and develop a plan for on-going growth and development. Honors students will develop a preliminary philosophy of faith and learning integration for their intended area of study. A \$50 course fee required. LDR1825 is a repeat of LDR1015.

**LDR4825 Honors Leading with Courage and Calling<sup>\$</sup> . . . . . 2 cr**  
 (PQ: LDR1015 (or LDR1011 and LDR2112), LDR1825, or LDR3415, senior standing; and UNW cum GPA of 3.6 or higher) A synthesis of one's personal and professional readiness to lead in the home, church, community, and world. Theological perspectives on work and calling as well as practical skills in intercultural awareness further prepare students to act with courage and conviction in an increasingly diverse and globalized world. Honors students finalize a philosophy of faith and learning integration for their discipline or profession. A \$50 course fee required. LDR4825 is a repeat of LDR4425.

**LIT2825 Honors Topics in Literature . . . . . 2–4 cr**  
 (PQ: ACT English or ACT English/Writing score of 27 or above [SAT Writing and Language score of 33 or above or CLT score of 85 or above], or high school cum GPA of 3.7 or higher, or consent of instructor) A study of literature in connection with a particular topic. Emphasis will be placed on independent work and critical thinking.

**MDS1825 Honors Big Ideas Through the Creative Lens . . . . . 2 cr**  
 (PQ: ACT Composite score of 27 or above [SAT score of 1280 or above or CLT score of 85 or above], or high school cum GPA of 3.7 or higher, or consent of instructor) Through creative work in the arts—literature, visual arts, theatre, music, film, and dance—humans experience and communicate divergent perspectives, grapple with complex topics and emotions, and ultimately move toward a fuller understanding of what is real, what we can know, and how we should live. In this course we examine a single complex aspect of the human experience through hands-on creative experiences with the elements and processes of various art forms and the study of notable artists and works. This introductory course does not require prior artistic experience.

**PHI2825 Honors Topics in Philosophy . . . . . 2–4 cr**  
 (PQ: ACT Composite score of 27 or above [SAT score of 1280 or above or CLT score of 85 or above], or high school cum GPA of 3.7 or higher, or consent of instructor) An investigation of a selected topic in philosophy for honors students. Emphasis will be placed on independent work and critical thinking.

## COURSE DESCRIPTIONS

**SPE1825 Honors Public Speaking** . . . . . **3 cr**  
**(PQ:** ACT Composite score of 27 or above [SAT score of 1280 or above or CLT score of 85 or above], or high school cum GPA of 3.7 or higher, or consent of instructor) An introductory study and analysis of basic principles of effective communication with emphasis on

public address, interpersonal and group communication. Emphasis will be placed on research and critical thinking skills. Attention will also be given to rhetorical analysis of contemporary speeches and to comparing Christian rhetoric and secular rhetoric. SPE1825 is a repeat of SPE1075.

## Intercultural Studies

**ICS1008 Introduction to Missions** . . . . . **2 cr**  
 An introduction to biblical and philosophical principles for world missions with a view to discovering best practices for engaging in cross-cultural ministry. This course includes an emphasis on historical and contemporary issues in missions.

**ICS3067 Social Justice** . . . . . **2 cr**  
 An interdisciplinary examination of social evil and social righteousness with the goal of constructing transformational responses to contemporary issues in social justice. Special topics will include ideology, power, sexism, religion, public policy, education, consumerism, and media.

**ICS2005 Evangelism and Discipleship** . . . . . **2 cr**  
 A study of the biblical foundation, spiritual preparation, and methods of personal evangelism and discipleship. Special topics related to outreach in a global and pluralistic society will be considered.

**ICS3068 Relief and Development\*** . . . . . **2–3 cr**  
 A practical and philosophical exploration of issues in domestic and international relief and development. This course explores topics such as the nature of poverty, asset-based community development, and holistic development.

**ICS2015 World Religions#** . . . . . **4 cr**  
 A survey of the beliefs and practices of the major religions of the world, including Animism, Buddhism, Confucianism, Hinduism, Judaism and Islam.

**ICS3069 Business as Mission<sup>OCE</sup>** . . . . . **2 cr**  
**(PQ:** SPE1075 or SPE1825) A practical and philosophical exploration of issues in business as mission as they relate to for-profit, nonprofit, and mission contexts. Special topics such as kingdom entrepreneurship, faith and economics, and tent-making will be explored.

**ICS2045 Cultural Anthropology#** . . . . . **4 cr**  
 An exploration of the field of cultural anthropology with a special emphasis on understanding culture and its impact on all aspects of society. This class guides learners to reflect on their own cultural background and to develop attitudes and skills that equip them to investigate and respond to cultural similarities and differences. The application of cultural anthropology to various contexts and fields of study is also explored. Equivalent to ANT2049 (see College of Graduate, Online, & Adult Learning catalog).

**ICS3107 Biblical Theology of Mission<sup>WCE</sup>** . . . . . **2 cr**  
**(PQ:** BIB2005 or BIB2827; BIB2008 or BIB2826; and ENG2205 or ENG2825) A biblically based study of the plan of God to be glorified among the nations, stretching from Genesis to Revelation, plus skill development in biblical theological method.

**ICS3005 Human Global Migration** . . . . . **2 cr**  
 This course investigates the causes and consequences of human migration around the world. It examines various views and responses to migration from cultural, religious, and political perspectives, and provides practical ways to engage migrant communities in the United States and around the world. Special attention is given to refugees, asylum seekers, and communities impacted by forced migration.

**ICS3206 Intercultural Teamwork\*** . . . . . **2 cr**  
 An examination of the interpersonal and intrapersonal dynamics of working in international and cross-cultural environments. Special attention is given to cross-cultural conflict and leveraging the benefits of multicultural teams.

**ICS3015 Race and Ethnicity in America#** . . . . . **4 cr**  
 This course explores developmental, sociological, and philosophical questions of race, ethnicity, and citizenship, with special attention to the experiences of African Americans, Asian Americans, Latino Americans, and indigenous peoples of the United States. Practical implications for social justice, reconciliation, and personal well-being will also be explored.

**ICS3209 Urban Community Development<sup>\$</sup>** . . . . . **2 cr**  
 This course prepares students to analyze rapidly changing urban contexts so that they learn how to partner with local leaders for transformational community development. Special attention is given principles of asset based community development and transformational leadership. A \$200 course fee required.

**ICS3016 Understanding Islam** . . . . . **2 cr**  
 An overview of the Muslim faith as it is practiced today. Emphasis will be on areas of conflict and agreement with Evangelical Christianity and current issues in Christian witness to Muslims

**ICS4025 Culture, Change, and Worldview\*<sup>OCE</sup>** . . . . . **2 cr**  
**(PQ:** SPE1075 or SPE1825) An examination of intercultural theories with a view to understanding similarities and differences across cultures. An emphasis on cultural change and the relationship between culture and worldview transformation is also included.

**ICS3027 Global Peoples and Culture** . . . . . **2–3 cr**  
**(PQ:** consent of ICS faculty) A study of peoples and cultures in global contexts with an emphasis on a particular national context. This course is normally completed in an intercultural context as part of an off-campus study experience.

**ICS4225 Intercultural Studies Research Methods** . . . . . **2 cr**  
**(PQ:** ICS1008, and ENG2205 or ENG2825) An overview and practical application of intercultural studies research methodologies including demography and ethnography. Special attention is given to urban and overseas contexts.

**ICS3065 Introduction to Teaching English as a Foreign Language\*\*<sup>\$</sup>** . . . . . **2–3 cr**  
 An introduction to the language and teaching skills that are necessary for teaching English as a foreign language. Essential skills for entry-level work as an English teacher in a foreign country or domestic nonprofit are covered in this course. A \$300 course fee required.

**ICS4490 ICS Internship Orientation** . . . . . **0–1 cr**  
 An orientation to the ICS internship including guided preparation for the administrative, spiritual, and ministry requirements of one's field experience. **Note:** This course is designated as repeatable.



**ICS4495 ICS Internship Debriefing** . . . . . **0-1 cr**  
(PQ: ICS4991, ICS4992, ICS4993, or ICS4994) A structured debriefing normally completed during the semester following an ICS internship experience. **Note:** This course is designated as repeatable.

**ICS4990 Overseas Intercultural Studies Internship** . . . . . **8 cr**  
(PQ: for students going on the fall missions trip. Consent of faculty supervisor and internship registration form) Application of classroom learning in cross-cultural ministry contexts. Itinerary varies annually. **Note:** See page 25 for note regarding internships.

**ICS4991, 4992, 4993, 4994**  
**Intercultural Studies Internship I, II, III, IV.** . . . . . **2 cr each**  
(PQ: consent of faculty supervisor and internship registration form) Supervised ministry experience which includes crossing of significant cultural and/or language barriers. **Note:** See page 25 for note regarding internships.

**ICS5225U Culture and Worldview Transformation** . . . . . **2 cr**  
(PQ: acceptance into an accelerated graduate program) An evaluation of cultural theories as they relate to personal and organizational change. The nature, process, and challenges associated with cultural change and worldview transformation is also explored.

## Interdisciplinary Studies

**IDS3825 Honors Colloquium\*\*** . . . . . **0-4 cr**  
(PQ: ACT Composite score of 27 or above [SAT score of 1280 or above or CLT score of 85 or above], 3.6 cum GPA or higher and consent of instructor) An honors topics class in which students from a variety of disciplines do individualized study centered within a common cross-cultural geographic location. Students then meet in a colloquium setting of sharing and discussing with each other the results of their study and participate in a study tour of the designated location. **Note:** This course is designated as repeatable and may be repeated for up to a maximum of 4 credits.

**IDS3826 Honors Project.** . . . . . **0-1 cr**  
(PQ: Eagle Scholars Honors Program member; consent of instructor) Supervised venue for Eagle Scholar to complete an individualized project supplementing his or her course of study and approved by a cooperating faculty member. Twenty to twenty-five hours of study is required. **Note:** This course is designated as repeatable.

**IDS3827 Honors Seminar** . . . . . **0-1 cr**  
A required meeting time for members of the Eagle Scholars Honors Program. **Note:** This course is designated as repeatable.

**IDS3865 Professional Competency Assessment<sup>WCE</sup>** . . . . . **1 cr**  
(PQ: For approved Interdisciplinary Studies majors only; ENG2205 or ENG2825. Must be taken concurrently with IDS4845.) Development of a collection of work demonstrating that major outcomes have been met.

**IDS4845 Capstone Project<sup>OCE</sup>** . . . . . **4 cr**  
(PQ: SPE1075 or SPE1825, and senior standing. For approved Interdisciplinary Studies majors only. Must be taken concurrently with IDS3865.) Individualized projects designed to incorporate elements of all disciplines included in the Interdisciplinary Studies major.

**IDS4995 Interdisciplinary Internship.** . . . . . **1-4 cr**  
(PQ: consent of faculty supervisor and internship registration form) Supervised work experience in an interdisciplinary field. **Note:** This course is designated as repeatable. See page 25 for note regarding internships.

## Journalism

Directed studies are available. See page 26–27.

**Note:** JOU2625–2627 and JOU4625–4627 are designated as repeatable.

**JOU2625 Journalism Workshop.** . . . . . **0-1 cr**  
Practical experience in planning and producing *The Examiner*, University of Northwestern's student newspaper.

**JOU3269 Publication Production\*\*** . . . . . **2 cr**  
This course explores the skills needed to produce a printed publication. Students will also learn publication production, including typography, layout and design, desktop publishing and printing.

**JOU4625 Journalism Workshop.** . . . . . **0-1 cr**  
(PQ: consent of instructor) Advanced practical experience in planning and producing *The Examiner*, University of Northwestern's student newspaper.

**JOU4995 Journalism Internship.** . . . . . **1-4 cr**  
(PQ: consent of faculty supervisor and internship registration form) Supervised work experience in off-campus journalism. **Note:** See page 25 for note regarding internships.

## Kinesiology

**KIN1005 Sport in American Society** . . . . . **2 cr**  
Introductory course in sports studies dealing with sport and physical activity as a psychological and sociological phenomenon. Emphasis on career opportunities in fields related to sport in American society.

**KIN1065 Principles of Sports Management.** . . . . . **2 cr**  
This course is designed to provide students with an overview of the field of Sports Management. The course will examine the fundamental components of sports management, including personnel issues, the development of the industry, current state, and future trends in the discipline. Students will be introduced the basic tenets and principles of sports management. Through guest speakers and site visits students

will have the opportunity to see theory in practice at various events, venues, and businesses.

**KIN2025 Issues and Trends in Sports** . . . . . **2 cr**  
Issues of society are reflected in sport, no matter how insulated or isolated sport may appear to be. The contemporary issues of society, an understanding of their reflection in, their relationship to, and their influence upon sport, whether it be amateur or professional, will be examined. A special emphasis will be placed upon how issues in sport today are examined through our societal passion for social media, and how these behaviors influence consumers, fans, and sponsors.



## COURSE DESCRIPTIONS

**KIN3035 Sports Marketing . . . . . 4 cr**

The relevant areas of marketing are applied to sport applications for spectator and participative sport organizations. Special emphasis is placed on strategic planning, product analysis, and the development and presentation of marketing packages. It is important that sport management students understand the vital role of marketing within the sport industry. Marketing may take several forms in sport businesses. Students must be able to differentiate between use of marketing to sell sport products and/or services (marketing of sport) from the use of sport and sport personality marketing to sell general or sport-related products or services (marketing through sport).

**KIN3045 Sports Ethics . . . . . 2 cr**

This course is designed to provide students with opportunities to develop moral, ethical, biblical, and philosophical values and skills in the area of sports ethics. Through reasoning and case studies, students will explore and clarify their career goals and sharpen their critical thinking skills for analyzing ethical issues and generating possible solutions to those issues in sports management.

**KIN3075 Sports Leadership . . . . . 2 cr**

(PQ: department chair approval) This course is designed to provide students with opportunities to develop moral and ethical values, and philosophical skills, in the area of Sports Leadership. Sports Management issues and organizational behavior are examined and students are presented with opportunities to develop and understand key leadership and management skills. Students will analyze management decisions and their impact as well as the process of how decisions are made. The course's association with a local professional coach or front office executive will provide a unique perspective into topics relating to leadership and management in the sports industry.

**KIN3305 Upper Body Evaluation\* . . . . . 2 cr**

(PQ: BIO3157 or HPE2175; and HPE3275) Evaluation and diagnosis of injuries to the chest, spine, shoulder, elbow, wrist and hand.

**KIN3306 Lower Body Evaluation\* . . . . . 2 cr**

(PQ: BIO3157 or HPE2175; and HPE3275) Evaluation and diagnosis of injuries to the pelvis, knee, quadriceps, hamstring, gastrocnemius, ankle and foot.

**KIN3307 Advanced Care and Prevention of Injuries\* . . . . . 2 cr**

(PQ: HPE3275) Methods of assessing the severity of athletic injuries and the understanding of rehabilitation programs of injured athletes. Course is also designed to acquaint the student with elements of administering an athletic training department/program.

**KIN3615 Kinesiology Practicum . . . . . 2 cr**

(PQ: consent of instructor; kinesiology majors only) Supervised practical experience in a student's study of emphasis.

**KIN4055 Sports Facility and Game Management . . . . . 4 cr**

This course is designed to provide students with opportunities to develop an understanding of planning, funding, and operating sporting events and the operation of the facilities in which the events take place. Topics that will be discussed include building a facility, financing a facility, operation of a facility, producing events, day-to-day operations of a facility, concessions, maintenance, franchise interaction, game night production, and the career paths to become a successful sports event and/or facility manager.

**KIN4835 Kinesiology Seminar<sup>OCE WCE</sup> . . . . . 1 cr**

(PQ: ENG2205 or ENG2825; SPE1075 or SPE1825; and senior standing) Issues, problems and career opportunities in kinesiology today.

**KIN4995 Kinesiology Internship . . . . . 10–14 cr**

(PQ: senior standing and internship registration form) Supervised in-depth experience in a setting appropriate to the student's specialization in kinesiology. **Note:** See page 25 for note regarding internships.

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## Leadership

**LDR1011 Spiritual and Personal Formation for Leadership<sup>S</sup> . . . . . 2 cr**

As a part of the Leadership Development Core, this course is an exploration of the role of spiritual formation, discernment, and self-awareness as they relate to one's personal and professional leadership development. Students engage in a vulnerable learning community to grow personally and spiritually. A \$25 course fee required.

**LDR1015 Leadership for Transformation<sup>S</sup> . . . . . 4 cr**

A holistic exploration of the role of spiritual formation, intercultural awareness, and vocational clarity as they relate to one's personal and professional leadership development. Students engage in a diverse and vulnerable learning community to grow in self-awareness and develop a plan for on-going growth and development. A \$50 course fee required.

**LDR1825 Honors Leadership for Transformation<sup>S</sup> . . . . . 4 cr**

(PQ: ACT Composite score of 27 or above [SAT score of 1280 or above or CLT score of 85 or above], or high school cum GPA of 3.7 or higher, or consent of instructor) A holistic exploration of the role of spiritual formation, intercultural awareness, and vocational clarity as they relate to one's personal and professional leadership development. Students engage in a diverse and vulnerable learning community to grow in self-awareness and develop a plan for on-going growth and development. Honors students will develop a preliminary philosophy of faith and learning integration for their intended area of study. A \$50 course fee required. LDR1825 is a repeat of LDR1015.

**LDR2112 Relational and Cultural Awareness in Leadership<sup>S</sup> . . . . . 2 cr**

(PQ: LDR1011) As a part of the Leadership Development Core, this course is an exploration of the role of relational, global, and intercultural awareness in one's personal and professional leadership development. Students engage in a diverse and vulnerable learning community to grow in interpersonal and intercultural awareness. A \$25 course fee required.

**LDR2625 Workshop in Leadership Development . . . . . 0–2 cr**

This interactive course provides an opportunity for students to explore, understand, and apply biblical leadership concepts. Emphasis will be given to the connection between spiritual formation and leadership, identifying and understanding personal leadership gifts and challenges, along with practice in applying concepts to commonly experienced leadership scenarios. **Note:** This course is intended for students who have been accepted into the Leadership Development Program (LDP), but all students are welcome.

**LDR3060 Foundations of Nonprofit Leadership . . . . . 2 cr**

This course provides foundational understanding of the role of nonprofits in civic and global societies with special emphasis on their unique missions, ethical responsibilities, and organizational structures. Emerging trends and innovations shaping the future of nonprofit organizations are also discussed.

**LDR3135 Peer Mentoring for Leadership Growth** . . . . . **0–1 cr**  
**(PQ:** Peer Mentor Application) Students work with a lead faculty to develop plans for serving as peer mentors for a group of 8-12 students in LDR1015. This course prepares students to lead weekly small group mentoring sessions in a section of LDR1015. **Note:** This course is designated as repeatable.

**LDR3415 The Self-aware Leader<sup>s</sup>** . . . . . **0–2 cr**  
**(PQ:** Senior transfer standing [traditional undergraduate only]) A holistic reflection on the role of spiritual formation, intercultural awareness, and vocational clarity as they relate to one's personal and professional leadership development. A \$50 course fee required.

**LDR4425 Leading with Courage and Calling<sup>s</sup>** . . . . . **2 cr**  
**(PQ:** LDR1015 (or LDR1011 and LDR2112), LDR1825, or LDR3415, and senior standing) A synthesis of one's personal and professional readiness to lead in the home, church, community, and world. Theological perspectives on work and calling as well as practical skills in intercultural awareness further prepare students to act with courage and conviction in an increasingly diverse and globalized world. A \$50 course fee required.

**LDR4825 Honors Leading with Courage and Calling<sup>s</sup>** . . . . . **2 cr**  
**(PQ:** LDR1015 (or LDR1011 and LDR2112), LDR1825, or LDR3415, senior standing; and UNW cum GPA of 3.6 or higher) A synthesis of one's personal and professional readiness to lead in the home, church, community, and world. Theological perspectives on work and calling as well as practical skills in intercultural awareness further prepare students to act with courage and conviction in an increasingly diverse and globalized world. Honors students finalize a philosophy of faith and learning integration for their discipline or profession. A \$50 course fee required. LDR4825 is a repeat of LDR4425.

**LDR4991, 4992 Nonprofit Internship I, II.** . . . . . **2 cr**  
**(PQ:** Senior standing, MIN3216 or MIN5210U, consent of faculty supervisor and internship registration form) Supervised experience in a nonprofit context with special emphasis on the learning the missional, relational, and managerial practices of the organization. Internship requires 50 hours of supervised experience per credit. See page 25 for note regarding internships.

## Linguistics

**LIN2226 Introduction to Linguistics** . . . . . **4 cr**  
**(PQ:** ENG1105 or ENG1825) A study of the basic concepts of language and the history of English. Includes phonetics, phonology, morphology, semantics and syntax.

**LIN3841 Research.** . . . . . **1–2 cr**  
**(PQ:** ENG1105 or ENG1825 and consent of instructor) With the goal of presentation or publication, students work closely with a faculty member to participate in primary research on language.

**LIN4425 Linguistic Research Methods** . . . . . **2 cr**  
**(PQ:** ENG2205 or ENG2825, SPE1075 or SPE1825, senior standing, English major with a linguistics concentration and consent of department chairperson) A course which introduces students to methods of linguistic research to describe language both spoken and written. Students will elicit data with a variety of methods and analyze language while working with a research participant from an unfamiliar language and will conduct linguistic analyses of text. To prepare

for their own individualized research, students will also conduct background research and locate a community or research participant for fieldwork or, for written language, a text to analyze.

**LIN4856 Senior Capstone: Linguistics<sup>OCE WCE</sup>** . . . . . **2 cr**  
**(PQ:** ENG2205 or ENG2825; LIN4425; CanIL-TWU transfer course courses LING310 and LING360 or equivalent; SPE1075 or SPE1825; senior standing; English major with a linguistics concentration; and consent of instructor) An individualized course in which students research, analyze and describe the language of a linguistic community or linguistic informant. Students will prepare a paper and a presentation on a topic such as a feature of a specific language, dialect, or accent.

**LIN4996 Linguistics Internship.** . . . . . **1–4 cr**  
**(PQ:** consent of faculty supervisor and internship registration form) Supervised work experience in linguistics. **Note:** See page 25 for note regarding internships (professional experiences).

## Literature

**LIT1037 Introduction to Shakespeare<sup>#</sup>** . . . . . **4 cr**  
 A general education course designed to provide an introduction to the works of Shakespeare, his times and his culture. The course will provide a study of a selection of Shakespeare's plays and an introduction to reading and interpreting the plays. Only offered through Dual Enrollment.

**LIT1100 Introduction to Literature<sup>#</sup>** . . . . . **4 cr**  
 A study of the literary genres of fiction, poetry, drama and the novel. Emphasis is placed on literary conventions and textual analysis. Equivalent to LIT1109 (see College of Graduate, Online, & Adult Learning catalog). Only offered through Dual Enrollment.

**LIT1106 Popular Literature<sup>\*</sup>** . . . . . **2 cr**  
 A study of genres such as fantasy, mystery, science fiction, adventure and other best-selling fiction. Particular focus of course to be published prior to registration. **Note:** This course is designated as repeatable as long as topic covered is not duplicated.

**LIT1107 Comparative Study of Major Authors<sup>\*</sup>** . . . . . **2 cr**  
 A course in which selected authors, such as C.S. Lewis and J.R.R. Tolkien, are compared and contrasted. Particular focus of course to be published prior to registration. **Note:** This course is designated as repeatable as long as topic covered is not duplicated.

**LIT2045 Epic Literature** . . . . . **2 cr**  
 A study of selected epics that have influenced western art and literature, such as Homer's *Odyssey* and *Iliad* and Dante Alighieri's *Divine Comedy* (*Inferno*, *Purgatorio*, and *Paradiso*).

**LIT2105 Literary Studies** . . . . . **4 cr**  
**(PQ:** ENG1105 or ENG1825, or concurrently enrolled. This course is designed for English majors: literature, writing, and literature and writing concentrations; CALE majors; literature minors; and other students interested in an intensive study of literature) A course designed for English majors which provides training and practice in the analysis of various literary forms and in the use of argument, evidence and documentation in literary essays. The course introduces literary theory while emphasizing the integration of faith, reading and writing.

**LIT2117 Historically Based Literature<sup>\*</sup>** . . . . . **2–4 cr**  
 A study of literature produced during or concerning particular periods of time, such as the American Civil War, World War I, and the Holocaust. Particular focus of course to be published prior to registration. **Note:** This course is designated as repeatable as long as topic covered is not duplicated.

## COURSE DESCRIPTIONS

**LIT2118 Multiethnic American Literature<sup>#</sup>** . . . . . **4 cr**  
A study of literature from various cultures in America, such as African American, Native American, Hispanic, Asian and others. Only offered through Dual Enrollment.

**LIT2119 Drama\*** . . . . . **2 cr**  
A study of literary and theatrical aspects of a variety of plays, classical through contemporary.

**LIT2135 Shakespeare and Film** . . . . . **4 cr**  
Shakespeare and Film is a study of a selection of Shakespeare's plays and of films based on or inspired by Shakespeare. The course will include recent and classic film versions and film adaptations of the plays. It will provide an introduction to reading and interpreting the plays and viewing and interpreting the films.

**LIT2156 Contemporary Poetry\*** . . . . . **2 cr**  
This course will sample poetry from the 1980s to the present by authors from a broad range of racial, ethnic, and cultural backgrounds, with emphasis on understanding recent poetic movements, techniques, and approaches.

**LIT2157 Contemporary Fiction\*** . . . . . **2 cr**  
This course will sample fiction from the 1990s to the present by authors from a broad range of racial, ethnic, and cultural backgrounds, with emphasis on the distinctive literary techniques and approaches these authors employ.

**LIT2825 Honors Topics in Literature** . . . . . **2–4 cr**  
(PQ: ACT English or ACT English/Writing score of 27 or above [SAT Writing and Language score of 33 or above or CLT score of 85 or above], or high school cum GPA of 3.7 or higher, or consent of instructor) A study of literature in connection with a particular topic. Emphasis will be placed on independent work and critical thinking.

**LIT3136 Shakespeare** . . . . . **2 cr**  
(PQ: ENG2205 or ENG2825, or concurrently enrolled) Reading, analysis and discussion of selected Shakespearean plays.

**LIT3145 Contemporary World Literature** . . . . . **2 cr**  
(PQ: ENG2205 or ENG2825, or concurrently enrolled) An investigation of selected works of contemporary non-Western authors, specifically non-American and non-British authors.

**LIT3215 Studies in the Novel\*** . . . . . **4 cr**  
(PQ: ENG2205 or ENG2825, or concurrently enrolled) Reading and analysis of selected novels. Course content may revolve around a theme, a literary period, literature of a selected region, etc. Topic of course will be announced prior to registration.

**LIT3221 American Literature I\*** . . . . . **4 cr**  
(PQ: ENG2205 or ENG2825, or concurrently enrolled) Reading, analysis, and discussion of selected American prose and poetry, by authors of diverse background and experience, from the colonial era to 1865.

**LIT3222 American Literature II\*** . . . . . **4 cr**  
(PQ: ENG2205 or ENG2825, or concurrently enrolled) Reading, analysis, and discussion of selected American prose and poetry, by authors of diverse background and experience, from 1865 to the present.

**LIT3231 British Literature I\*** . . . . . **4 cr**  
(PQ: ENG2205 or ENG2825, or concurrently enrolled) Reading, analysis and discussion of selected British prose and poetry through the eighteenth century.

**LIT3232 British Literature II\*** . . . . . **4 cr**  
(PQ: ENG2205 or ENG2825, or concurrently enrolled) Reading, analysis and discussion of selected British prose and poetry from the nineteenth and twentieth centuries.

**LIT3255 Young Adult Literature** . . . . . **2 cr**  
(PQ: ENG2205 or ENG2825, or concurrently enrolled) This course provides an introduction to contemporary literature for young adults. Extensive reading of young adult literature and critical analysis of its diverse themes are included.

**LIT4835 Seminar in Literature Topics\*\*** . . . . . **4 cr**  
(PQ: ENG2205 or ENG2825, or concurrently enrolled) Intensive study in one or more literary genres, periods, authors, countries, or issues.

**LIT4841 Research** . . . . . **1–2 cr**  
(PQ: consent of instructor) Students interact professionally with previously written texts, textual sources, and/or historical artifacts while working with a faculty member.

**LIT4859 Senior Capstone: Literature<sup>OCE</sup>** . . . . . **2 cr**  
(PQ: ENG2205 or ENG2825; LTH4155; SPE1075 or SPE1825; senior standing; English major with a literature or literature and writing concentration; and consent of instructor) An individualized course in which students research and write about a literary topic of their choice and prepare for postgraduate options.

**LIT4995 Literature Internship** . . . . . **1–2 cr**  
(PQ: consent of faculty supervisor and internship registration form) An internship in which students interact professionally with previously written texts, textual sources, and/or historical artifacts. **Note:** See page 25 for note regarding internships.

**LTH4155 Literary Theory\*<sup>WCE</sup>** . . . . . **2 cr**  
(PQ: ENG2205 or ENG2825, and junior or senior standing, or consent of instructor) This course is an introduction to literary theory and criticism. It offers students an opportunity to study various critical approaches to literature.

## Management

**MGT2271 Management** . . . . . **4 cr**  
An introductory course covering the basic theory and practice of management, including planning, organizing, controlling, motivating and leading. Case analyses and presentations are required.

**MGT3075 Entrepreneurship** . . . . . **2 cr**  
An introductory study of how to start a small business. Students examine their readiness to start a business, survey the legal issues facing a start-up and examine the various approaches to business formation. Students apply the topics of marketing research and marketing mix, finance, and operations to the formulation of a comprehensive business plan, market and finance assessment.

**MGT3255 Human Resource Management** . . . . . **2 cr**  
An introduction to Human Resources (HR) as a vital function of an organization. Building to topics introduced in the Management course, students will investigate how the HR function can assist managers in enhancing the performance of their functional areas. Major topics include the changing nature of HR management, HR planning, organizational development, employee recruitment selection & retention, legal issues, employee training, appraisal, pay & benefits, motivation and change implementation.

**MGT3272 Management II\*\*** . . . . . **4 cr**  
**(PQ: C or better in MGT2271)** An intermediate-level course which covers key management theories and practices in more depth and breadth than MGT2271; e.g., teaming, empowering, partnering, etc. Case analyses and presentations and a comprehensive research paper are required.

**MGT3275 Small Business Management** . . . . . **2 cr**  
**(PQ: ACC2101, MGT2271, MKT1085, and FIN3222 [or concurrently enrolled] [C or better required in all])** A study of specific managerial concerns in a small or start-up business. Students learn the value of small business in the U.S., the attributes of a successful manager in such organizations and the legal aspects of establishing & running a business. The functional areas of business, including marketing, operations, facilities, accounting and human resources are explored. The course requires students to develop operational systems in order to process data, providing critical information for problem-identification and solving. This is a hands-on, application class.

**MGT3276 Operations Management** . . . . . **2 cr**  
**(PQ: ACC2101, MGT2271, and FIN3222 [or concurrently enrolled] [C or better in all])** All businesses require some form of operations to deliver a product or service to a customer. For most companies, operations is a complex network of complex processes and systems. This course studies the key operations, including product design, environmental design, facility management, management systems, payroll, HR, finance and marketing. Students will build operational systems to manage a particular area of an operation, identify problems, and determine strategy for improved performance in the area of operation. This class is an application-based class that draws on content from management, finance, and accounting courses.

**MGT3375 Operations Continuous Improvement\*\*** . . . . . **2 cr**  
**(PQ: C or better in MGT3276)** Continuous improvement in Operations is essential for a firm to remain competitive in a global economy. This course covers Lean Operations operations as exemplified by the Toyota Production System, Statistical Quality Control (including 6 Sigma) and quality improvement. Field trips to local companies are part of the course.

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## Management Information Systems

**MIS2062 Database Management I\*** . . . . . **4 cr**  
 This course presents the fundamental concepts of databases and the general architectures used in modern databases. The ideas of database design are presented along with topics such as database access, indexing, reports and queries. The student will be exposed to one of the current database management systems. An actual database application using the programmability of the DBMS is created as part of this course.

**MIS3185 Server Administration\*** . . . . . **4 cr**  
**(PQ: COS2112)** This course provides the student with knowledge and exposure for managing network servers. Students will administrate file servers and web servers as well as build virtual machines (VMs).

**MIS3362 Database Management II\*\*** . . . . . **2 cr**  
**(PQ: MIS2062)** This course focuses on database system structures, structured query language (SQL) and distributed databases. Topics include: Report Generation, Data Analysis Using Multiple Constraints,

**MGT3376 Supply Chain Management** . . . . . **2 cr**  
 This course provides basic definitions and concepts for planning and controlling the flow of materials into, through and out of an organization. It explains fundamental relationships among the activities that occur in the supply chain from suppliers to customers. In addition, the course addresses types of manufacturing systems, forecasting, master planning, material requirements planning, capacity management, production activity control, purchasing, inventory management, distribution, quality management and Just-in-Time manufacturing.

**MGT4245 Business Strategy** . . . . . **2 cr**  
**(PQ: ACC2102, BUS2011, and MGT2271 [C or better required in all]; and senior standing)** This course introduces students to the Strategic Management Process and its application to business cases. Readings in contemporary publications understanding of the strategic challenges facing businesses. Teamwork and quantitative analysis are emphasized. Guest speakers and field trips reinforce the topics covered.

**MGT4267 Project Management** . . . . . **2 cr**  
 An introductory course in project management that presents methods for planning and scheduling a project in use of tools such as task sequencing, GANTT chart, Critical Path Method (CPM), Program Evaluation and Review Technique (PERT) and software to monitor and control projects. Lecture also includes discussions of key elements of successful team, finance, and operations management. This class focuses on both lecture and practical application.

**MGT4855 Corporate Strategies and Policies** . . . . . **4 cr**  
**(PQ: ACC2102, BUS2011, and MGT2271 [C or better required in all]; and senior standing)** This is the senior capstone course. Students gain knowledge of the Strategic Management Process through readings and case analysis. Greater business and strategic understanding is then developed with readings in contemporary publications and application to cases. Teamwork, quantitative analysis, current business news and strategic communication are emphasized. Guest speakers and field trips reinforce the topics covered.

Data Recovery and Transfer, Maintenance of Data Consistency and Integrity and Database clusters.

**MIS3368 Applications Development Tools and Techniques\*\*** . . . . . **4 cr**  
**(PQ: CYS3065 and MIS2062, or consent of instructor)** This course builds upon the analysis, design and programming skills previously mastered and utilizes a modern application development tool to introduce the student to the realm of applications development. Students learn the issues surrounding the applications development process and reinforce those concepts by creating a working application.

**MIS3382 Data Communications II\*\*** . . . . . **2 cr**  
**(PQ: CYS2081)** This course is designed to introduce students to local area network hardware switch and router installation and configuration. The course is designed around OSI 7-layer Reference model and introduces the student to layer-2 switching, VLANs, Access Control Lists, IGRP and routing protocols.

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## COURSE DESCRIPTIONS

## Marketing

**MKT1085 Principles of Marketing#** . . . . . 4 cr  
The structure, function and behavior of marketing systems are discussed. Emphasis is placed on the impact of social and economics environment and on the process of the decision-making aspect of marketing.

**MKT3165 Digital Marketing** . . . . . 4 cr  
This course focuses on the application of marketing principles to E-Commerce including B2B, B2C, the use of Social Media and how they provide business with a global outreach. Additional topics include: Internet Security, Social, Ethical and Political issues. It is a hands-on course. Students will work individually and in groups.

**MKT3186 Consumer Behavior** . . . . . 4 cr  
(PQ: MKT1085 and BUS2011 [C or better required in both]) This course acquaints the student with the basic dynamics of consumer behavior and analytical techniques used in marketing to study consumer behavior. Consumer behavior examines influences upon consumer decision-making while marketing research relates to methods used to explore, examine and evaluate existing market opportunities.

**MKT3188 Advertising and Promotion** . . . . . 4 cr  
(PQ: C or better in MKT1085; and SPE1075 or SPE1825) Analysis of the role of advertising and sales promotion in marketing. Subject areas treated include advertising strategy, agencies, media and consumer motivation.

**MKT3189 International Marketing\*\*** . . . . . 4 cr  
(PQ: C or better in MKT1085) Management problems, techniques and strategies necessary to incorporate the marketing concept into a world market place. Particular attention is paid to environmental and cultural variables as they affect marketing procedure.

**MKT4995 Marketing Internship** . . . . . 1 cr  
(PQ: BUS3835, consent of faculty supervisor, and internship registration form) Supervised work experience related to student's major. Students may enroll for this course at various times as their schedules permit. **Note:** This course is designated as repeatable and may be repeated three times after the original taking of the course. See page 25 for note regarding internships.

## Mathematics

**MAT1005 Mathematics for the Liberal Arts#** . . . . . 4 cr  
A course designed for non-mathematics majors to spark interest in everyday mathematics and develop the mathematics needed to thrive in society. Contemporary topics may be chosen from mathematical fields such as: voting theory, apportionment, fair division, graph theory, scheduling, sequences, geometry, growth models, personal finance, probability, statistics, fractals, and cryptography. Equivalent to MAT1009 (see College of Graduate, Online, & Adult Learning catalog).

**MAT1005L Mathematics for the Liberal Arts Lab** . . . . . 1 cr  
(Required of students with ACT Math score of 17 or below [SAT Math score of 470 or below or CLT Quantitative Reasoning score of 19 or below] or high school cum GPA of 2.66 or below. To be taken concurrently with MAT1005.) Math skill building in areas including, but not limited to fractions, decimals, percentages, and ratio and proportion. This lab course supports students in MAT1005 Mathematics for the Liberal Arts.

**MAT1006 Mathematics for Elementary School Teachers** . . . . . 4 cr  
A course designed for elementary education majors to expose students to the mathematics they will need in teaching elementary school mathematics. Topics include problem solving, number theory, real numbers, geometry, probability, statistics, algebra, sets and mathematics of finance, fractions, decimals and numeration systems.

**MAT1035 Business Mathematics#** . . . . . 4 cr  
This course will cover topics and skills essential for success in business, accounting, and finance courses. Mathematical topics will include developing mathematical models, general quantitative and proportional and statistical reasoning, interpreting operations with real numbers, solving equations and systems of equations, graphing, functions, and the mathematics of finance. Emphasis on applying mathematical concepts and appropriate technology related to realistic examples from the business world.

**MAT1035L Business Mathematics Lab** . . . . . 1 cr  
(Required of students with ACT Math score of 17 or below [SAT Math score of 470 or below or CLT Quantitative Reasoning score of 19 or below] or high school cum GPA of 2.66 or below. To be taken concurrently with MAT1035.) Math skill building in areas including, but not limited to fractions, decimals, percentages, and ratio and proportion. This lab course supports students in MAT1035 Business Mathematics.

**MAT1085 Mathematics for Science Application** . . . . . 4 cr  
This course will cover topics and skills essential for success in biology, chemistry, algebra-based physics and nursing courses via practical applications encountered in university coursework in the sciences. Topics will include exponential and logarithmic functions (for exponential population growth and radioactive decay), general quantitative and proportional reasoning (for chemical stoichiometry and medical dosages), approximation techniques and elementary probability and statistics.

**MAT1126 Precalculus##** . . . . . 4 cr  
(PQ: two years of high school algebra or ACT Math score of 24–27 [SAT Math score of 580–630]; see guidelines according to major on page 47) A preparatory course intended for students who will take MAT2121. Topics include limits, functions (exponential, logarithmic, trigonometric), conic sections, polar coordinates and other topics in analytical geometry. Only offered through Dual Enrollment.

**MAT2005 Problem Solving** . . . . . 2 cr  
An introduction to mathematics and mathematics problem solving, including problem selection, problem solving strategies, the problem solving process and contemporary applications of mathematics. Some emphasis on the importance of good oral and written communication skills and teamwork.

**MAT2025 Calculus with Applications\*\*** . . . . . 4 cr  
(PQ: minimum ACT Math score of 24 [SAT Math score of 580]) A non-theoretical development of the limit, derivative and integral concepts. Multivariable calculus and vectors. Emphasis on applications to biology, business and other disciplines.



**MAT2035 Quantitative Analysis#** . . . . . 4 cr

(PQ: C- or better in any college-level mathematics course or ACT Math score of 21 or above [SAT 530 or above]) An introductory course covering topics in mathematics necessary for success in the business world. Topics include the mathematics of finance, linear programming, Bayes's Theorem, expected value, matrices and game theory. Mathematical modeling is used to determine solutions for business problems.

**MAT2055 Statistics#** . . . . . 4 cr

(PQ: minimum ACT Math score of 18 [SAT Math score of 470], or C- or better in any college-level mathematics course, or high school cum GPA of 2.67 or higher, or successful completion of MAT1005L or MAT1035L, or achieve passing score on mathematics placement exam) Descriptive and inferential statistics include methods for describing data, binomial and normal probability distributions, tests of hypotheses, simple linear regression, analysis of variance, nonparametric techniques, two-sample testing and contingency tables.

**MAT2075 History of Mathematics** . . . . . 2 cr

A course designed for mathematics teachers and others wanting to broaden their mathematical background; a brief synopsis of the history of mathematics from its earliest days to the present. Focus on topics related to elementary, middle and high school mathematics. An examination of key ideas, processes and topics in mathematics that share common historical roots, which may include: numeration systems, trigonometry, solving equations, geometric perspectives, statistics, logic and infinity.

**MAT2121 Calculus and Analytic Geometry I#** . . . . . 4 cr

(PQ: B- or better in MAT1126, or ACT Math score of 28 or above [SAT Math score of 660 or above] or achieve passing score on mathematics placement exam) The study of functions, limits, derivatives and applications of derivatives such as maxima/minima and related rates.

**MAT2122 Calculus and Analytic Geometry II#** . . . . . 4 cr

(PQ: C- or better in MAT2121) Continued study of calculus to include antiderivatives, integration techniques, applications of definite integrals such as volumes of revolution, polar coordinates, series, sequences and power series.

**MAT2221 Foundations of Mathematics I** . . . . . 2 cr

(PQ: C- or better in MAT2121) Introductory treatment of the foundations of the mathematics and the concepts that are basic to mathematical knowledge. Development of the logical structure of mathematics including propositions, predicates and truth tables and the rules of logic. A formal development of set theory including set operations, permutations, combinations, Pascal's triangle and partitions.

**MAT2222 Foundations of Mathematics II** . . . . . 2 cr

(PQ: MAT2221, or concurrently enrolled) Continued treatment of the foundations of the mathematics and the concepts that are basic to mathematical knowledge. In-depth analysis of axiomatic systems and proof techniques including: direct proof, proof by contradiction, existence proofs and mathematical induction. A formal development of relations including equivalence classes, partial orders and functions. A study of the concepts of infinity and countability.

**MAT3211 Linear and Abstract Algebra** . . . . . 4 cr

(PQ: C- or better in MAT2222) Fundamental concepts from linear algebra, including: systems of linear equations, the algebra of matrices, linear transformations, eigenvalues and determinants. Fundamental concepts from abstract algebra, including: group theory, ring theory, field theory, equivalence relations, isomorphisms and homomorphisms. Fundamental structures such as congruences, number systems, polynomials, permutations and symmetry groups.

**MAT3223 Calculus and Analytic Geometry III** . . . . . 4 cr

(PQ: C- or better in MAT2122) Multivariate Calculus, including vectors in the plane and in space, functions of 2 and 3 variables, partial differentiation, double and triple integration in Cartesian, cylindrical and spherical coordinates. An introduction to differential equations.

**MAT3225 Discrete Mathematics** . . . . . 2 cr

(PQ: C- or better in MAT2055 or MAT2121) An overview of the mathematics of discrete processes. Topics include graphs, trees, linear programming, recursion and algorithm analysis.

**MAT3226 Applications of Digital Logic** . . . . . 2 cr

An overview of the mathematics of the discrete processes of computers. Topics include the fundamentals of logic, Boolean algebra, formal grammars and automaton.

**MAT3245 Geometry** . . . . . 4 cr

(PQ: C- or better in MAT2121) The study of Euclidean and non-Euclidean geometry from axiomatic, synthetic, analytic and transformational approaches with emphases on modeling, inductive and deductive reasoning and proof techniques.

**MAT3252 Calculus-based Statistics** . . . . . 4 cr

(PQ: C- or better in MAT2122 or consent of instructor) Descriptive and inferential statistics with applications in business, science, engineering and the computing sciences. Topics include random sampling, estimation, hypothesis testing, linear regression, analysis of variance and the use of computer packages to aid in statistical analysis. Calculus is used.

**MAT3255 Advanced Concepts of Middle School****Mathematics (Grades 5–8)** . . . . . 4 cr

(PQ: completion of at least 3 MAT courses at the 2000 level or above) An in-depth, college-level study of the foundational structure underlying the major mathematical concepts taught in the middle grades. Content strands include number and operations, patterns and algebra, geometry and measurement and data analysis and probability. Includes emphasis on key transitions in mathematical thinking and connection of middle level concepts to college math course content.

**MAT3257 Statistics for Data Analysis** . . . . . 4 cr

(PQ: C- or better in MAT2055 or MAT3252 or consent of instructor) A course designed to explore statistical methods for data analysis using contemporary data analysis tools. Topics include planning statistical procedures for data analysis, statistical research design principles, planning data files for analysis, using computer software for data analysis, extended study of analysis of variance (ANOVA), completely randomized designs, factorial designs, randomized block designs, split-plot designs, crossover and repeated measure designs, and response surface designs.

**MAT3265 Advanced Concepts of High School****Mathematics (Grades 9–12)\*** . . . . . 4 cr

(PQ: completion of at least 5 MAT courses at the 2000 level or above) A study of foundational secondary level mathematics concepts from an advanced, college-level perspective. Content strands include number system structures, functions and equations, integers and polynomials, congruence and symmetry, area and volume, trigonometry, data analysis and probability and discrete math topics. Includes emphasis on extensions and generalizations, applications, problem solving and connection of secondary level concepts to college math course content.

## COURSE DESCRIPTIONS

**MAT3335 Differential Equations with Applied Linear Algebra . . . . . 4 cr**  
**(PQ:** C- or better in MAT3211 or MAT3223) Techniques for solving systems of linear equations and first, second, and higher order ordinary differential equations, including the method of the Laplace transformation. The algebra of matrices, linear transformations, determinants, vector spaces, characteristic equations, eigenvalues, eigenvectors, and applications in the physical sciences and engineering are included.

**MAT3835 Career Competencies Seminar . . . . . 1 cr**  
**(PQ:** minimum of junior standing) Orientation and preparation for an academic internship. To be completed the semester immediately prior to enrolling in the internship course offered by the academic department.

**MAT4337 Mathematical Models and Applications\* . . . . . 4 cr**  
**(PQ:** C- or better in MAT2055, MAT3225, or MAT3226) A survey course in choosing mathematical models and computer simulations to help explain and predict real-world phenomena. Mathematical models

related to linear programming, integer programming, Markov chains, game theory, social choice theory, dynamic systems and chaos theory will be explored. Particular problems in the social, life, physical and management sciences are discussed, with models being developed as needed.

**MAT4845 Senior Project<sup>OCE WCE</sup> . . . . . 2 cr**  
**(PQ:** ENG2205 or ENG2825, SPE1075 or SPE1825, and senior standing) A capstone experience for mathematics majors in their senior year. This will provide an overview of all mathematics with attention to its history and philosophy. Each student does an in-depth, guided project, culminating in both a written report and an oral presentation.

**MAT4995 Mathematics Internship . . . . . 1–4 cr**  
**(PQ:** MAT3835 and consent of faculty supervisor and internship registration form) Supervised work experience in mathematics.  
**Note:** See page 25 for note regarding internships.

## Media Production

Directed studies are available. See page 26–27.

**Note:** MEP2625–2627 and MEP4625–4627 are designated as repeatable.

**MEP1012 Audio Production . . . . . 3 cr**  
 This course introduces students to the world of Audio Production. Students will examine the history, theory and practice of audio production plus investigate the unique properties of the medium. In addition to providing extensive hands-on experience through production exercises and projects, the course places considerable emphasis on aesthetic analysis of audio products through a series of “critical listening” exercises. The concept of sound design for radio, TV, film and animation is applied to the various productions. Students will see how the power of sound can influence audiences and shape their mood and emotion.

**MEP1013 Video Production . . . . . 4 cr**  
 This course introduces students to the world of video production. Students will examine the history, theory and practice of video production plus investigate the unique properties of the medium. In addition to providing extensive hands-on experience through production exercises and projects, the course places considerable emphasis on aesthetic analysis of video products through a series of “critical viewing” exercises.

**MEP1016 Story Structure. . . . . 4 cr**  
 An examination of communication in the electronic media through the analysis and development of script structure and narrative story elements. Subjects include storyboarding, acts, scenes, premises, plots, characters, action, motifs, etc. Students write critical analyses of professional scripts and productions and author their own treatments.

**MEP2036 Multi-Camera Production\* . . . . . 3 cr**  
 An overview of multi-camera studio production techniques. Students learn how to produce, direct, run graphics, operate camera, supervise scripts, engineer audio and manage personnel in a studio production.

**MEP2055 Media History . . . . . 2 cr**  
 A study of significant historical contributions to radio, TV, film, or other media focusing on a particular aspect such as genre, influential leaders, content creators, historical era, or international movement. All works of media history will be examined for their form, intent, purpose, reflective nature, and production design. Specific focus of the course will be published prior to registration. **Note:** This course is designated as repeatable and may be repeated one time after the original taking of the course.

**MEP2115 Broadcast Tech. . . . . 2 cr**  
**(PQ:** MEP1012, MEP1013, or consent of instructor) An introduction to the technical equipment used in television and radio broadcasting. Students will learn the basic electronic components of a television and radio facility, how to troubleshoot problems with equipment, set up a studio for broadcast, clean and maintain audio and video equipment and trace the signal flow through studio equipment.

**MEP2625 Radio & Podcasting Productions . . . . . 0–1 cr**  
 Laboratory experience in radio through the student radio station. Students choose from various radio departments, including programming, music, community outreach, technical support, news/sports and production. **Note:** This course is designated as repeatable.

**MEP2626 Five16 Film Productions . . . . . 0–1 cr**  
 This course provides students with hands-on experience and training in writing, directing, producing and editing different types of video productions. Students will be working in crews (teams) in bringing a project from conception to completion. **Note:** This course is designated as repeatable.

**MEP2627 News & Documentary Productions. . . . . 0–1 cr**  
 Laboratory experience in the production of television news. News & Documentary Productions is a news program produced for distribution over the local cable television system. Students are involved in all aspects of the production. **Note:** This course is designated as repeatable.

**MEP3035 Non-Fiction: Documentary & News . . . . . 3 cr**  
 This course focuses on the planning and creation of nonfiction video storytelling projects. This includes documentaries, news packages, and various corporate-oriented productions. Students will learn the nonfiction method of writing, directing, interviewing, and post-production editing and sound design and then produce their own stories and projects.

**MEP3045 Directing the Actor. . . . . 3 cr**  
 The class provides students with the study of techniques, approaches, and hands-on experience in directing actors in film.

**MEP3056 Web Content Strategy\* . . . . . 2 cr**

This course examines the theory and practice of planning for effective web content creation, delivery and governance. Concepts explored include information architecture, usability, content project planning and management and search engine optimization.

**MEP3115 Scriptwriting . . . . . 4 cr**

(PQ: MEP1016) A study of the distinctive characteristics of scripts written for radio, television and film. Special attention will be given to the three-act structure, character delineation and motivation, conflict development and pacing, dialogue and subtext and unifying message. Students gain extensive experience through writing a treatment for a short film or television screenplay.

**MEP3117 Media Business . . . . . 4 cr**

An overview examination of the multi-faceted business aspects of the media industry with a particular focus on radio, TV, film, and the music industry. Students learn organizational structure, financial economic elements, audience measurement tools, marketing, promotions and advertising, and other programming and production concepts relating to the operation of electronic media.

**MEP3125 Advanced Audio Production . . . . . 4 cr**

(PQ: MEP1012) This course will give advanced instruction and practice in the techniques of audio production. Students will complete hands-on assignments and develop a stronger working knowledge of what it means to produce excellent audio.

**MEP3126 Brand Production Strategies . . . . . 3 cr**

An examination of communication techniques and strategies used to create effective audio and video commercial brand messages. The class will explore strategies for radio station branding & imaging plus develop and produce video creative branding campaigns for other products and services. Students will experience the power of audience-oriented strategic branding and the role storytelling plays in production process. The course shows how branding moves beyond simply focusing on attributes and benefits. (When feasible, the class will often collaborate with classes in the Public Relations and Marketing majors.)

**MEP3135 Single Camera Production . . . . . 3 cr**

(PQ: MEP1013) In this course you will receive advanced instruction and practice in the art and craft of single camera production and narrative storytelling. You will produce two exercises and one short film, bringing the projects through preproduction, production and postproduction.

**MEP3137 Post-Production . . . . . 4 cr**

(PQ: MEP1013 or consent of instructor) An intensive course in post-production techniques applied in Adobe Premiere Pro. Editing theory and practice are integrated components of this course that broadly covers four areas: Editing aesthetics, Editing techniques, compositing and effects and finishing techniques.

**MEP3139 Cinematography and Lighting . . . . . 2 cr**

(PQ: MEP1013) This course explores the aesthetics of cinematography and the execution of these ideas and principles. Subjects include:

composition, exposure, strategy, filters, lighting, camera movement, operation and power distribution. The class will be divided into lecture, screenings and on set and in-studio lighting and shooting (UNW studio and *Lights On* in Minneapolis).

**MEP3615 Media Production Practicum. . . . . 1–2 cr**

(PQ: consent of faculty supervisor and internship registration form) Course allows students to gain hands-on experience in on-campus operations, based on student interest and career objectives in media production. In addition to the hands-on experience, students produce an 8- to 10-page portfolio which includes a description of the media production experience and skills they gained and an analysis of the day-to-day opportunities and problem-solving aspects of working in a professional environment. **Note:** This course is designated as repeatable for up to 4 total credits (of which only 2 credits can be applied to the selectives required in the major).

**MEP4125 Sound Design. . . . . 3 cr**

(PQ: MEP1012) The art of sound conveys mood and emotion. It delivers ideas, sensations and story information. It can powerfully enhance the visual experience or completely destroy the aesthetic narrative with a misplaced sound effect or illogical music score. Students will build on their non-linear editing skills while focusing on their analytical and critical listening skills. Students will work with film, animation and audio productions to develop audio communication concepts, sonic environments and aural experiences.

**MEP4625 Radio & Podcasting Productions . . . . . 0–1 cr**

(PQ: MEP2625; open to seniors and station executive staff only) Advanced laboratory experience in radio station management through the student radio station. Students serve as executive staff. **Note:** This course is designated as repeatable.

**MEP4626 Five16 Film Productions . . . . . 0–1 cr**

(PQ: MEP2626) This course provides advanced students with hands-on experience and training in writing, directing, producing and editing different types of video productions. Students will be helping to lead crews in bringing a project from conception to completion. **Note:** This course is designated as repeatable.

**MEP4627 News & Documentary Productions. . . . . 0–1 cr**

(PQ: MEP2627) Advanced laboratory experience in the production of television news. The News & Documentary Productions is a news program produced for distribution over the local cable television system. Students are involved in all aspects of the production.

**Note:** This course is designated as repeatable.

**MEP4855 Senior Capstone. . . . . 3 cr**

(PQ: senior standing) A capstone experience for Media Production students in their senior year. An original, individual project is planned and completed during the semester.

**MEP4995 Media Production Internship. . . . . 1–4 cr**

(PQ: consent of faculty supervisor and internship registration form) Supervised work experience within a company that offers media creation related tasks. **Note:** See page 25 for note regarding internships.

## Ministry

**MIN1007 Ministry Foundations<sup>o</sup> . . . . . 4 cr**

This course addresses theological, philosophical, and historic foundations for Christian ministry. Students will be introduced to various fields of ministry, explore giftedness and call, discover the purpose of the church, and wrestle with cultural implications for ministry practice. The student will connect with a local ministry and begin to formulate a personal theology and philosophy of ministry during the context of this course.

**MIN1641, 1642, 1643, 1644 Christian Service I, II, III, IV . . . . . 1 cr each**

(PQ: consent of faculty supervisor and internship registration form) Practical experience in a local church or Christian organization. Designed to encourage student involvement in Christian service. Each credit requires ministry involvement totaling at least 50 hours per credit.

## COURSE DESCRIPTIONS

**MIN2016 Biblical Interpretation for Study**<sup>◊</sup> . . . . . **2 cr**

An introduction to biblical interpretation and application as a foundational tool for equipping students to grow spiritually, teach faithfully, and lead effectively in the Christian community. Special emphasis will be given to helping others learn how to study the Bible.

**MIN2045 Christian Formation for Ministry Practice**<sup>◊</sup> . . . . . **2 cr**

(PQ: Christian Ministries majors and minors) This course explores Christian formation by examining the biblical text, historic Christian spiritual practices, theories of faith formation, and contemporary Christian formation texts. This course addresses balancing personal growth and ministry practice alongside discipleship, intellectual engagement, and practical application.

**MIN3045 Developmental Foundations for Ministry**<sup>WCE ◊</sup> . . . . . **4 cr**

(PQ: ENG2205 or ENG2825, and sophomore standing) This course provides an overview of theories related to educational psychology and human development across the lifespan. Specific application to ministry contexts in the local church and other ministry-based agencies is examined. Students complete research-based projects in their area of ministry interest.

**MIN3065 Digital Ministry** . . . . . **2 cr**

This course explores the use of technology in diverse ministry settings including the local church, missions, and nonprofit organizations with the goal of helping students articulate thoughtful and practical perspectives on digital ministry. Special topics will be considered such as social media usage, podcasting, and live-streaming.

**MIN3075 Church Planting** . . . . . **2 cr**

This course explores the biblical imperatives for church multiplication and equips students with practical skills to build a team and develop contextually appropriate strategies for planting new churches. Special topics will be considered such as multi-ethnic church planting, multi-site churches, and church revitalization.

**MIN3105 Leading in Pastoral Ministry\*** . . . . . **2 cr**

(PQ: MIN1007) This course examines a biblical foundation and a practical understanding of the shepherding and overseer roles of the pastor in local church ministries. Special attention is given to church governance, ministerial ethics, discipline, staff leadership, ceremonies, and the ordinances. Pastoral self-care including family well-being is also considered.

**MIN3107 Spiritual Lives of Children** . . . . . **2 cr**

This course overviews the biblical, philosophical, theological, and theoretical foundations for ministry with children and families. Attention is given to both internal and external influences on children and the impact of their moral and spiritual formation. The importance of children learning and growing in the context of their family will be emphasized.

**MIN3205 Human Sexuality** . . . . . **4 cr**

This course will examine biblical and theological foundations, as well as social science research, for human sexuality. A holistic view of human sexuality will be explored through the examination of sociological, biological, psychological and spiritual aspects of human nature and behavior. Biblical principles are discovered and applied to the development of individual sexual values and sexual discipline. The role of the church in supporting healthy sexuality will be considered.

**MIN3206 Relationships**<sup>◊</sup> . . . . . **4 cr**

(PQ: sophomore standing) This course will examine biblical and theological foundations, social science research and relationship models for healthy relationships. Focus will be given to the process of relationships: identity formation, friendship, dating, courtship, engagement and marriage. Additional issues including singleness, intimacy, forgiveness, gender issues, communication skills, conflict resolution, relational integrity, cultural awareness and financial

planning will be addressed. Research projects and other assignments will include exegetical work in relevant scriptural passages.

**MIN3207 Ministry in a Globalized World**<sup>◊</sup> . . . . . **2 cr**

This course prepares students to understand the impact of globalization on present day ministry. Students will be equipped to investigate diverse social and cultural contexts and develop strategies to minister effectively in an era of cultural, religious, and ethical diversity.

**MIN3216 Leadership in Ministry**<sup>◊</sup> . . . . . **4 cr**

A study of the principles and practices of leadership in local church, nonprofit, and mission contexts. This course includes a study of biblical principles for leadership, leadership self-awareness, leadership styles, team dynamics, culture and leadership, and conflict management. Special attention is given to developing strategic initiatives informed by one's organizational mission and vision. A \$40 course fee required.

**MIN3218 Teaching Methods in Ministry**<sup>OCCE ◊</sup> . . . . . **4 cr**

(PQ: C- or better in MIN1007 and MIN2016 or BIA1015/1827; SPE1075 or SPE1825) A theoretical and practical approach to giving students experience in the development and practice- teaching of biblical lessons. The course will address contemporary methods, scope and sequence and curriculum analysis and evaluation, with special attention to the effect of gender and culture on the teaching/ learning process.

**MIN3226 Family Studies\*** . . . . . **2 cr**

This course examines the family as a social/cultural unit with emphasis on parental interaction with the developing child. Family structure and dynamics from the perspective of theology and family science theory will be studied. Focus will be on multidisciplinary theories of the family dynamics across the life span. Consideration will be given to biblical and theological foundations, societal influences, parenting, family structure, family worship, family stress & coping and domestic violence. Strategies for establishing positive and collaborative relationships among families, teachers, care-givers, and education systems are addressed. Students write summaries of current professional articles using APA style.

**MIN3227 Retreats, Events, and Camps\*\*** . . . . . **2 cr**

This course gives consideration to biblical, theological, philosophical, and historical foundations of retreats, events, and camps in light of Christian spiritual growth and formation. Principles related to organizational responsibilities and operational aspects of Christian ministry are also addressed. There is an emphasis on the role of retreats, events, and camps in ministry contexts. A \$95 course fee required.

**MIN3231 Care and Counseling in Ministry**<sup>◊</sup> . . . . . **4 cr**

This course provides a foundation and overview of counseling techniques, practices, and typical counseling situations which are faced in both church and parachurch ministry settings. Emphasis is placed on methods and techniques for effectively counseling people in crisis from all age groups. Guidance is given in the counseling of lay leadership, families in crisis, and the handling of abuse cases. Consideration is given to the legal, ethical, and practical implications of Christian counseling. A \$100 course fee required.

**MIN3308 Leading Children and Families** . . . . . **2 cr**

A study of the establishment, development and evaluation of children and family ministry. Emphasis will be on practical methods of ministry, leadership, recruitment and training. Learning experiences and curriculum development will focus on integrating spiritual, cognitive, social, emotional, physical and creative domains for the emerging development of the child. Emphasis will be placed on helping congregations become communities that support families and nurture faith of the families.



**MIN4306 Preaching and Worship\*** . . . . . **4 cr**  
**(PQ:** BIA1015 or BIA1827 or MIN2016) This course prepares students to faithfully preach the Word of God in partnership with the Holy Spirit. Special emphasis is given to the role of preaching in worship and to general principles for leading worship. Students will deliver two sermons in this course.

**MIN4405 Contemporary Issues in Preaching\*** . . . . . **2 cr**  
**(PQ:** MIN4306) An advanced preaching course designed to help students understand contemporary issues in preaching including the integration of technology. Students practice using contemporary methodologies.

**MIN4845 Research Seminar** . . . . . **2 cr**  
**(PQ:** senior standing and MIN3045 or MIN5045U, MIN3216 or MIN5210U, and MIN4991) This course includes both theological and empirical research aiming to introduce students to basic methods of Christian ministry and social science research. Use of observation, interview, and evaluation with an emphasis on the development of critical thinking skills and writing are included. The course is designed to help students gain a fuller understanding of church and parachurch ministries in their socio-cultural settings, enable them to develop more relevant and effective ministries, and prepare students for additional further study. A major research project and paper are included in the course.

**MIN4855 Capstone**<sup>o</sup> . . . . . **2 cr**  
**(PQ:** senior standing and MIN3045 or MIN5045U, MIN3216 or MIN5210U, and MIN4991) During the final semester, in conjunction with an internship or otherwise involved in a ministry setting, students will discuss and evaluate their ministry preparedness, areas of gifting, and calling. Students will revisit and revise the personal theology and philosophy of ministry created during the Ministry Foundations course and complete a ministry portfolio to prepare and guide them in future ministry.

**MIN4991, 4992 Ministry Internship I, II**<sup>o</sup> . . . . . **2 cr each**  
**(PQ:** senior standing, MIN3216 or MIN5210U, consent of faculty supervisor and internship registration form) Supervised experience in ministry locally or abroad which focuses upon leadership and counseling. Internship requires 50 hours of ministry per credit.  
**Note:** See page 25 for note regarding internships.

**MIN5045U Human Development for Ministry** . . . . . **4 cr**  
**(PQ:** acceptance into an accelerated graduate program) This course applies theories of human development and educational psychology to ministry contexts. In addition to completing a ministry research project, students develop a philosophy of formational ministry that applies relevant theory.

**MIN5210U Leading and Organizing Ministry**<sup>s</sup> . . . . . **4 cr**  
**(PQ:** ENG2205 or ENG2825, and acceptance into an accelerated graduate program) This course considers the leadership development of the whole person: knowledge, character, and skill. Practice of leadership and management for the church and for Christian nonprofit organizations will be studied. Students will examine God's vision for their lives, leading and organizing a ministry to accomplish a mission, and how to develop leaders who equip other leaders. A \$40 course fee required.

**MIN5405U Advanced Preaching\*** . . . . . **2 cr**  
**(PQ:** MIN4306 or MIN5410, and acceptance into an accelerated graduate program) This course prepares students to evaluate contemporary approaches to preaching including overall sermonic structure and technological integration. Students identify and utilize advanced preaching strategies.

**MIN5610U Ministering Culturally and Globally** . . . . . **2 cr**  
**(PQ:** acceptance into an accelerated graduate program) This course prepares students to investigate social and cultural contexts in order to communicate and minister effectively in a diverse and globalized society. This course also applies theological and philosophical principles related to the global and local mission of the Church.

**MIN5993U Graduate Internship I** . . . . . **1 cr**  
**(PQ:** acceptance into an accelerated graduate program, consent of faculty supervisor, and internship registration form) Students complete at least fifty hours of ministry field experience during the course of one semester. Through a process of practice and reflection, students evaluate their learning goals, personal growth, and overall growth as a ministry leader. A primary goal of the course is to test your vocational calling through field experience.

**MIN5994U Graduate Internship II** . . . . . **1 cr**  
**(PQ:** MIN5993U, acceptance into an accelerated graduate program, consent of faculty supervisor, and internship registration form) Students complete at least fifty hours of ministry field experience during the course of one semester. Through a process of practice and reflection, students evaluate their learning goals, personal growth, and overall growth as a ministry leader. A primary goal of the course is to assess one's vocational calling in order to choose an emphasis track in the M.Div. program.

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## Multi-Disciplinary Studies

**MDS1825 Honors Big Ideas Through the Creative Lens** . . . . . **2 cr**  
**(PQ:** ACT Composite score of 27 or above [SAT score of 1280 or above or CLT score of 85 or above], or high school cum GPA of 3.7 or higher, or consent of instructor) Through creative work in the arts—literature, visual arts, theatre, music, film, and dance—humans experience and communicate divergent perspectives, grapple with complex topics and emotions, and ultimately move toward a fuller understanding of what is real, what we can know, and how we should live. In this course we examine a single complex aspect of the human experience through hands-on creative experiences with the elements and processes of various art forms and the study of notable artists and works. This introductory course does not require prior artistic experience.

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## COURSE DESCRIPTIONS

## Music – Applied

## CLASS APPLIED

**MUP1001 Class Voice\*\*** . . . . . 1 cr

A study of basic solo vocal techniques, including breath control, proper tone production, diction and stage presence, as well as psychological aspects, taught in a class setting. Course may be repeated.

**MUP2013 Group Piano.** . . . . . 1 cr

Instruction and practice in piano technique, repertoire, harmonization, transposition, accompanying, hymn playing, score reading, and sight reading. **Note:** This course is designated as repeatable for credit until the student passes the piano proficiency level required for the degree.

**MUP3216 Keyboard Techniques\*\*** . . . . . 2 cr

(**PQ:** MTC2112 or consent of instructor) An overview of keyboard skills including score reading, transposition, improvisation, chart reading and figured bass realization.

## INDIVIDUAL APPLIED

A separate lesson fee (see page 15) will be assessed per credit. 1 credit (25- to 30-minute lesson); 2 credits (50- to 60-minute lesson). A private lesson registration form is required for permission to register in each semester of study.

**Note: MUP2100–MUP3160 and MUP4100–MUP4160 are designated as repeatable unless designated otherwise.**

## Applied numbers:

**2XXX:** All freshmen and sophomore music majors; all minor, secondary and elective lessons.

**31XX:** Junior Performance majors, junior and senior Music (B.A./B.S. including Music Ministry Emphasis) majors, and Music Education majors. (**PQ:** successful completion of the Music Major Progress Interview; additional prerequisites for vocal majors.)

**41XX:** Senior Performance majors who have completed their junior recital.

**MUP2100 Private Voice - Major** . . . . . 1–2 cr

(**PQ:** audition for first semester of study) Private, individual voice lessons at the lower division music major level for Vocal Performance (B.Mus.), Vocal Music Education (B.M.E), and Music (B.A./B.S. including Music Ministry Emphasis) majors. Required Vocal Lab class meets weekly with studio teacher.

**MUP3100 Private Voice - Major** . . . . . 1–2 cr

(**PQ:** successful completion of the Music Major Progress Interview, passing of vocal proficiency requirements and completion of MUS3101 and MUS3102 with a grade of C- or above) Private, individual voice lessons at the upper division level of study required for Vocal Performance (B.Mus.) and Vocal Music Education (B.M.E.) majors. Optional study level for vocally proficient Music (B.A./B.S. including Music Ministry Emphasis) majors. Vocal study includes preparation toward a Junior (B.Mus.) or Senior (B.M.E.) Recital. Required Vocal Lab class meets weekly with studio teacher.

**MUP4100 Private Voice - Major** . . . . . 1–2 cr

(**PQ:** completion of junior recital as a Vocal Performance [B.Mus.] major). Private, individual voice lessons at the upper division level of study required for Vocal Performance (B.Mus.) majors only. Vocal study includes preparation toward the Senior Recital. Required Vocal Lab class meets weekly with studio teacher.

**MUP2105 Private Voice - Minor** . . . . . 1–2 cr

(**PQ:** audition for first semester of study) Private, individual voice lessons at the lower division level of study required for Music minors whose principal instrument is voice.

**MUP2106 Private Voice - Elective.** . . . . . 1–2 cr

(**PQ:** audition for first semester of study) Private, individual voice lessons as a non-music major elective student. Optional study level for vocal music majors past degree requirements.

**MUP2107 Private Voice - Secondary** . . . . . 1–2 cr

(**PQ:** audition for first semester of study) Private, individual voice lessons as a secondary instrument for music majors, including piano majors pursuing a B.M.E. degree and licensure in vocal and classroom music. Weekly Vocal Lab class attendance is required for B.M.E. Piano majors with Vocal Licensure.

**MUP2110 Private Piano - Major.** . . . . . 1–2 cr

(**PQ:** audition for first semester of study) Private piano lessons at the lower division music major level for B.Mus., B.M.E. (piano as primary instrument), B.S. and B.A. music majors. Required piano lab class meets weekly with the studio teacher.

**MUP3110 Private Piano - Major.** . . . . . 1–2 cr

(**PQ:** successful completion of the Music Major Progress Interview and piano proficiency requirements) Private piano lessons at the upper division level of study for B.Mus. and B.M.E. (piano as primary instrument) majors. Optional for proficient B.A. and B.S. majors. Study includes preparation toward a junior (B.Mus.) or senior (B.M.E.) half recital. Required piano lab meets weekly with the studio teacher.

**MUP4110 Private Piano - Major.** . . . . . 1–2 cr

(**PQ:** completion of junior recital as a B.Mus. major) Private piano lessons at the upper division level of study for B.Mus. majors only. Study includes preparation toward a senior recital. Required piano lab meets weekly with the studio teacher.

**MUP2115 Private Piano - Minor.** . . . . . 1–2 cr

(**PQ:** audition for first semester of study) Private piano lessons at the lower division of study for Music minors whose principal instrument is piano. Attendance at six piano labs per semester is required.

**MUP2116 Private Piano - Elective** . . . . . 1–2 cr

(**PQ:** audition for first semester of study) Private piano lessons as a non-music major elective student. Optional study for music majors, past degree requirements.

**MUP2117 Private Piano - Secondary** . . . . . 1–2 cr

(**PQ:** audition for first semester of study) Private piano lessons as a secondary instrument for music majors wishing to further develop their piano skills and/or preparing to pass music major piano proficiency requirements.

- MUP2127 Private Organ - Secondary** ..... 1–2 cr  
**MUP2130 Private String - Major** ..... 1–2 cr  
**MUP2140 Private Woodwind - Major** ..... 1–2 cr  
**MUP2150 Private Guitar - Major** ..... 1–2 cr  
**MUP2170 Private Brass - Major** ..... 1–2 cr  
**MUP2180 Private Percussion - Major** ..... 1–2 cr  
**MUP2190 Private Harp - Major** ..... 1–2 cr  
(PQ: acceptance by audition as a music major) Primarily lower division (2000 level, all degrees) repertoire and study materials at the instructor's discretion. Wind/String Lab, GSR & Jury required.
- MUP3130 Private String - Major** ..... 1–2 cr  
**MUP3140 Private Woodwind - Major** ..... 1–2 cr  
**MUP3150 Private Guitar - Major** ..... 1–2 cr  
**MUP3170 Private Brass - Major** ..... 1–2 cr  
**MUP3180 Private Percussion - Major** ..... 1–2 cr  
**MUP3190 Private Harp - Major** ..... 1–2 cr  
(PQ: passing the Music Major Progress Interview jury with a grade of B [for B.A., B.S., B.M.E. degrees] or B+ [for B.Mus. degree]) Primarily upper division (3000/4000 level) repertoire and study materials at the instructor's discretion. Wind/String Lab, GSR & Jury required.
- MUP4130 Private String - Major** ..... 1–2 cr  
**MUP4140 Private Woodwind - Major** ..... 1–2 cr  
**MUP4150 Private Guitar - Major** ..... 1–2 cr  
**MUP4170 Private Brass - Major** ..... 1–2 cr  
**MUP4180 Private Percussion - Major** ..... 1–2 cr  
**MUP4190 Private Harp - Major** ..... 1–2 cr  
(PQ: Successful completion of a junior recital [for B.M. degree]) Study includes preparation for the full senior recital MUP4696. Wind Lab required. GSR & jury required only if no recital that semester.
- MUP2135 Private String - Minor** ..... 1–2 cr  
**MUP2145 Private Woodwind - Minor** ..... 1–2 cr  
**MUP2155 Private Guitar - Minor** ..... 1–2 cr  
**MUP2175 Private Brass - Minor** ..... 1–2 cr  
**MUP2185 Private Percussion - Minor** ..... 1–2 cr  
**MUP2195 Private Harp - Minor** ..... 1–2 cr  
(PQ: audition with area coordinator) Primarily lower division. GSR optional at instructor's discretion. Wind/String Lab optional.
- MUP2136 Private String - Elective** ..... 1–2 cr  
**MUP2146 Private Woodwind - Elective** ..... 1–2 cr  
**MUP2156 Private Guitar - Elective** ..... 1–2 cr  
**MUP2176 Private Brass - Elective** ..... 1–2 cr  
**MUP2186 Private Percussion - Elective** ..... 1–2 cr  
**MUP2196 Private Harp - Elective** ..... 1–2 cr  
(PQ: interview with area coordinator) For study by non-majors, primarily lower division (2000-level) repertoire and study materials at the instructor's discretion. GSR, Jury and Wind/String Lab optional.
- MUP2137 Private String - Secondary** ..... 1–2 cr  
**MUP2147 Private Woodwind - Secondary** ..... 1–2 cr  
**MUP2157 Private Guitar - Secondary** ..... 1–2 cr  
**MUP2177 Private Brass - Secondary** ..... 1–2 cr  
**MUP2187 Private Percussion - Secondary** ..... 1–2 cr  
**MUP2197 Private Harp - Secondary** ..... 1–2 cr  
(PQ: acceptance as a music major, interview with area Coordinator) For majors studying an instrument that is not the student's primary performance area; GSR & Jury optional at instructor's discretion, Wind/String Lab optional.
- MUP2160 Private Composition - Major** ..... 1–2 cr  
(PQ: B- or better in MTC1007, MTC2004 and MTC2112) Original work drawn from standard musical forms with a focus on melodic and motivic construction. Initial works will be written for one or two instruments. Additional semesters of study will include the use of more intricate forms and the composition of works for varied ensembles. Required Composition Lab meets weekly with the composition teacher.
- MUP2165 Private Composition - Minor** ..... 1–2 cr  
Original work drawn from standard musical forms with a focus on melodic and motivic construction. Required Composition Lab meets weekly with the composition teacher.
- MUP2166 Private Composition - Elective** ..... 1–2 cr  
Private, individual composition lessons for non-music majors and music majors with other proficiencies. Optional level of study for composition majors past degree requirements.
- MUP2365 Private Counterpoint - Minor** ..... 1–2 cr  
(PQ: C- or better in two or more semesters of private composition lessons) Study of 18th century counterpoint through composition and analysis of invention, canon, fugue and related contrapuntal forms. Required Composition Lab meets weekly with the composition teacher.
- MUP3160 Private Composition - Major** ..... 1–2 cr  
(PQ: C- or better in MUP2160 and successful completion of the Music Major Progress Interview). Original work drawn from standard musical forms with a focus on melodic and motivic construction. Initial works will be written for one or two instruments. Additional semesters of study will include the use of more intricate forms and the composition of works for varied ensembles. Required Composition Lab meets weekly with the composition teacher.
- MUP4160 Private Composition - Major** ..... 1–2 cr  
(PQ: C- or better in MUP3160, MTC4207, successful completion of the Music Major Progress Interview, or consent of instructor). Original work drawn from standard musical forms with a focus on melodic and motivic construction. Initial works will be written for one or two instruments. Additional semesters of study will include the use of more intricate forms and the composition of works for varied ensembles. Required Composition Lab meets weekly with the composition teacher.
- MUP2225 Private Songwriting - Minor** ..... 1–2 cr  
Learn, analyze, and apply the foundational and structural elements of songwriting through this collaborative, growth-oriented, experience designed for both aspiring and experienced songwriters.
- MUP2226 Private Songwriting - Elective** ..... 1–2 cr  
Learn, analyze, and apply the foundational and structural elements of songwriting through this collaborative, growth-oriented, experience designed for both aspiring and experienced songwriters.
- MUP2256 Private Commercial Guitar - Elective** ..... 1–2 cr  
(PQ: permission of instructor with audition for first semester of study) Private commercial guitar lessons as a non-music major elective student.
- MUP2257 Private Commercial Guitar - Secondary** ..... 1–2 cr  
(PQ: permission of instructor with audition for first semester of study) Private commercial guitar lessons as a secondary instrument for music majors wishing to further develop their commercial guitar skills.
- MUP2286 Private Drum Set - Elective** ..... 1–2 cr  
(PQ: audition for first semester of study) Private drum set lessons as a non-music major elective student.
- MUP2287 Private Drum Set - Secondary** ..... 1–2 cr  
(PQ: audition for first semester of study) Private drum set lessons as a secondary instrument for music majors wishing to further develop their drum set skills.
- MUP2356 Private Electric Bass - Elective** ..... 1–2 cr  
(PQ: audition for first semester of study) Private electric bass lessons as a non-music major elective student.

## COURSE DESCRIPTIONS

**MUP2357 Private Electric Bass - Secondary** . . . . . 1–2 cr  
(PQ: audition for first semester of study) Private electric bass lessons as a secondary instrument for music majors wishing to further develop their electric bass skills.

**MUP3307 Private Conducting - Secondary** . . . . . 1–2 cr  
(PQ: MUS3277 or consent of instructor) A continuation of conducting study with emphasis on expressive elements, score study, and rehearsal techniques.

**MUP3360 Private Counterpoint - Major\*** . . . . . 2 cr  
(PQ: C- or better in two or more semesters of private composition lessons and successful completion of the Music Major Progress Interview) Study of 18th-century counterpoint through composition and analysis of invention, canon, fugue and related contrapuntal forms.

**MUP4360 Private Counterpoint - Major\*** . . . . . 2 cr  
(PQ: C- or better in two or more semesters of private composition lessons and successful completion of the Music Major Progress Interview) Study of 18th-century counterpoint through composition and analysis of invention, canon, fugue and related contrapuntal forms.

**MUP3695 Junior Recital - Half** . . . . . 0 cr  
(PQ: successful completion of the Music Major Progress Interview, and approval of faculty; concurrent registration in private lessons on major instrument) Half recital for juniors in a Bachelor of Music Performance major.

**MUP4695 Senior Recital - Half** . . . . . 0 cr  
(PQ: successful completion of the Music Major Progress Interview, completion of Piano Proficiency and approval of faculty; concurrent registration in private lessons on major instrument) Half recital for seniors in a Bachelor of Music Education major.

**MUP4696 Senior Recital - Full** . . . . . 1 cr  
(PQ: successful completion of the Music Major Progress Interview, completion of Piano Proficiency and approval of faculty; concurrent registration in private lessons on major instrument) Full recital for seniors in a Bachelor of Music major.

## Music – Ensembles

**Note: A separate fee (\$) will be assessed (see page 15). Courses in this section are designated as repeatable.**

**MEN3001 Northwestern Choir**<sup>\$</sup> . . . . . 0–2 cr  
**MEN3002 Con Brio Men's Chorus**<sup>\$</sup> . . . . . 0–1 cr  
**MEN3003 Amata Women's Chorale**<sup>\$</sup> . . . . . 0–1 cr  
**MEN3004 Chamber Singers**<sup>\$</sup> . . . . . 0–1 cr  
**MEN3005 Opera Workshop** . . . . . 0–1 cr  
(PQ: consent of instructor) Introduction to basic concepts of singing on stage through exercises in visual expression, stage movement and characterization. Preparation and performance of operatic arias, choruses, scenes and/or complete operas.

**MEN3015 Worship Team** . . . . . 0–1 cr  
Ensemble participation.  
**MEN3030 Orchestra - Strings**<sup>\$</sup> . . . . . 0–2 cr  
**MEN3031 Orchestra - Winds**<sup>\$</sup> . . . . . 0–2 cr  
**MEN3040 Symphonic Band**<sup>\$</sup> . . . . . 0–2 cr  
**MEN3041 Jazz Ensemble**<sup>\$</sup> . . . . . 0–1 cr  
**MEN3042 Chamber Music** . . . . . 0–1 cr

## Music – General

**MUS1000 Music Hour** . . . . . 0–1 cr  
A weekly assembly of music majors and minors for the purpose of student performance or discussion of topics of significance to musicians. On campus and off-campus concert attendance is required. **Note:** This course is designated as repeatable.

**MUS1075 Introduction to Music**<sup>##</sup> . . . . . 2 cr  
A basic survey course designed to increase the interest in and understanding of music as an art form. Passing the department competency exam fulfills the course requirement, but does not earn credit. Only offered through Dual Enrollment.

**MUS2176 Fundamentals of Conducting\*** . . . . . 2 cr  
(PQ: MTC2112) Technique, practices and principles of conducting, including hand and baton technique, metric patterns, tempo, style, dynamics, terminology study and preparation of the score. Practical experience with performing organizations is stressed.

**MUS3101 Diction for Singers I\*** . . . . . 1 cr  
(PQ: two semesters of private voice lessons as a major or consent of instructor) One class and one lab per week. An introduction to the study and application of the International Phonetic Alphabet (IPA) and its guidelines for usage in singing Italian and English vocal literature. Practical application will occur in the lab class through individual and group coaching of singing and speaking.

**MUS3102 Diction for Singers II\*** . . . . . 1 cr  
(PQ: C- or better in MUS3101 or consent of instructor) One class and one lab per week. A continuation of the study and application of the International Phonetic Alphabet (IPA) and its guidelines for usage in singing German and French vocal literature. Practical application will occur in the lab class through individual and group coaching of singing and speaking.

**MUS3215 Piano Pedagogy\*** . . . . . 2 cr  
(PQ: sophomore music major or consent of instructor) Procedures for teaching keyboard fundamentals and musicianship for private and class lessons, including a survey and analysis of current developmental psychologies, teaching methods and materials for beginning students. Includes practical experience in individual piano teaching.

**MUS3277 Advanced Conducting\*** . . . . . 2 cr  
(PQ: MUS2176) A continuation of conducting study with emphasis on expressive elements, score study and analysis, and rehearsal planning and techniques.

**MUS4401 Vocal Pedagogy I\*** . . . . . **2 cr**  
**(PQ:** MUP3100 and successful completion of the Music Major Progress Interview, or consent of instructor) A study of the basics of vocal production for singing and speaking: respiration, phonation, registration, resonance, articulation and coordination. Anatomy and physiology of the vocal mechanism. Mind-body integration concepts. Introductory information for healthy and efficient singing and speaking. Includes some out-of-class observations. Prerequisite for registration in MUS4401 for B.M.E. Piano Majors with Voice Emphasis is the completion of the minimum vocal proficiency requirements.

**MUS4402 Vocal Pedagogy II\*** . . . . . **2 cr**  
**(PQ:** MUS4401 or concurrently enrolled) Extended study of topics in Vocal Pedagogy I with special emphasis on practical applications for the teaching of singers. Diagnosis and correction of vocal problems. Philosophy and psychology of singing and teaching. Lifespan voice teaching including the child, changing and adolescent voices. Principles of vocal health in speaking and singing, including related vocal disorders and their treatment. Pedagogical principles, methods and resources for teaching singing. Includes supervised individual voice teaching. Practical information for setting up a private vocal studio. Includes out-of-class observations.

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## Music History

**MUH3101 Western Music History to 1750\*<sup>WCE</sup>** . . . . . **4 cr**  
**(PQ:** MTC2112; ENG2205 or ENG2825; or consent of instructor) A study of the music of Western civilization traced from its primitive origins through the Renaissance to the Baroque period, ending with the music of J.S. Bach.

**MUH3102 Western Music History after 1750\*<sup>WCE</sup>** . . . . . **4 cr**  
**(PQ:** MTC2112; ENG2205 or ENG2825; or consent of instructor) A study of the music of Western civilization from the Rococo period to the present day, with special attention given to the major musical forms in vocal and instrumental music as demonstrated in the works of the major composers.

**MUS4841 Senior Project** . . . . . **1–2 cr**  
**(PQ:** successful completion of the Music Major Progress Interview and piano proficiency and consent of faculty supervisor, or declared minor in Music Composition and consent of faculty supervisor) A capstone experience for the B.A./B.S. Music degree. In cooperation with the faculty supervisor, the student will propose and complete a project demonstrating knowledge and skills acquired in their coursework and/or looking ahead to potential career opportunities.

**MUS4995 Music Internship** . . . . . **1–2 cr**  
**(PQ:** successful completion of the Music Major Progress Interview and piano proficiency and consent of faculty supervisor, and internship registration form) Supervised experience in a real-world setting requiring a variety of skills, including, but not limited to, organizational, administrative, technical and musical abilities. 40 hours of on-site work is required per credit. **Note:** See page 25 for note regarding internships.

**MUH3105 American Music** . . . . . **2 cr**  
 A survey of the roots and development of American music from European, African and Native American sources. Both popular and art forms are studied, including worship music in the American Christian church.

**MUH3106 Music in World Cultures.** . . . . . **2 cr**  
 An introductory study of cultural traditions, belief systems and practices of world cultures as approached through the study and analysis of the music of ethnic groups. Various worldviews are examined through comparison with biblical and theological concepts.

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## Music in the Church

Directed studies are available. See page 26–27.

**MCH3125 Theology of Worship\*** . . . . . **2 cr**  
**(PQ:** MIN1007) An introduction to worship theology and worship arts with an overview of traditional, contemporary, and convergent worship forms and styles in the role of worship leading. Students will develop their own theology of worship statement.

**MCH4315 Leading Worship\*** . . . . . **2 cr**  
**(PQ:** MTC1007, MCH3125) The theory, methods, and techniques of musical preparation and presentation for leading worship in ministry. Includes techniques for working with music ensembles and basic arranging and improvisation. Course includes practicum experience in local churches.

**MCH4995 Music Ministry Internship.** . . . . . **2 cr**  
**(PQ:** Successful completion of the Music Major Progress Interview and piano proficiency and consent of faculty supervisor, and internship registration form) Supervised experience in a local church music ministry setting that includes experience in worship planning/leading as well as administrative and technical experiences. 80 hours of ministry work required. **Note:** See page 25 for note regarding internships.

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## Music Literature

**MUL4301 Solo Vocal Literature\*** . . . . . **2 cr**  
**(PQ:** successful completion of the Music Major Progress Interview or consent of instructor) A survey of art song literature and selected vocal chamber music from the 17th century through the 21st century.

**MUL4315 Piano Literature\*** . . . . . **2 cr**  
**(PQ:** MUH3101, MUH3102 and successful completion of the Music Major Progress Interview, or consent of instructor) A study of the literature for piano, surveying the repertoire of the late 17th century through the 21st century.

**MUL4345 Instrumental Literature - Major Instrument\*\*** . . . . . **2 cr**  
**(PQ:** MUH3101, MUH3102 and successful completion of the Music Major Progress Interview, or consent of instructor) A study of available literature for a student's major instrument. The study includes literature from all grade levels and historical periods.

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## COURSE DESCRIPTIONS

## Music Theory & Composition

### **MTC1007 Music Theory Foundations . . . . . 4 cr**

A study of the foundational concepts of music: pitch, rhythm, scales, modes, intervals, chords, and harmony with an introduction to notation software, piano, and singing.

### **MTC2004 Sight Singing and Ear Training II. . . . . 1 cr**

(PQ: C- or better in MTC1007) This course parallels MTC2112 from an aural standpoint with the addition of two- and three-voice dictation and an introduction to chord progressions. Passing the department competency exam fulfills the course requirement, but does not earn credit.

### **MTC2112 Music Theory II: Diatonic Practice . . . . . 3 cr**

(PQ: C- or better in MTC1007) A continuation of MTC1007 with a basic understanding of the orchestral score and its analysis, instrument transpositions, higher tertian chords, modulation and secondary functions, as well as more advanced analysis. Passing the department competency exam fulfills the course requirement, but does not earn credit.

### **MTC3101 Music Theory III: Chromatic and Jazz-Pop Harmony<sup>OCE</sup> . . . 3 cr**

(PQ: SPE1075 or SPE1825 and C- or better in MTC2112.) A study of chromaticism: modal mixture; Neapolitan sixths; augmented 6th; 9th, 11th, 13th chords; altered dominant and chromatic mediant chords; sonata form; jazz and pop harmonies. Students write as well as analyze music. Passing the department competency exam fulfills the course requirement, but does not earn credit.

### **MTC3102 Music Theory IV: Practices after 1875 . . . . . 3 cr**

(PQ: C- or better in MTC3101; to be taken concurrently with MTC3104) A study of compositional practices of the late 19th century to the present. Students research, perform and present a paper on a work from the 20th/21st century. Also, students compose two pieces to be rehearsed and performed for the class. Passing the department competency exam fulfills the course requirement, but does not earn credit.

### **MTC3103 Sight Singing and Ear Training III . . . . . 1 cr**

(PQ: C- or better in MTC2004.) A laboratory class including solfège singing of chromatic music, rhythmic dictation, melodic and harmonic dictation with modulations, recognition of seventh chords, syncopation, modes and atonal sight singing. Passing the department competency exam fulfills the course requirement, but does not earn credit.

### **MTC3104 Sight Singing and Ear Training IV . . . . . 1 cr**

(PQ: C- or better in MTC3103) A laboratory class concentrating on atonal sight singing, changing meters and nonfunctional harmonic progressions, as well as continued work on speed in sight-reading music of all styles. Passing the department competency exam fulfills the course requirement, but does not earn credit.

### **MTC4207 Orchestration\* . . . . . 2 cr**

(PQ: C- or better in MTC3101 and successful completion of the Music Major Progress Interview) Study of the characteristics and capabilities of orchestral instruments as applied to composing, orchestrating and arranging.

### **MTC4209 Choral Arranging\* . . . . . 2 cr**

(PQ: C- or better in MTC3101 and successful completion of the Music Major Progress Interview) A study of the technique of arranging music for voices.

### **MTC4305 Analytic Techniques\* . . . . . 3 cr**

(PQ: C- or better in MTC3102 and successful completion of the Music Major Progress Interview) A survey of standard analytical techniques applied to major forms from the Baroque through the Modern period. Includes an introduction to the analysis of 20th-century music: set theory, Schenkerian analysis and newer compositional techniques.

## Nursing

### **NUR1005 Success in Nursing. . . . . 1 cr**

This course will examine ways in which students can be successful in the School of Nursing Program. Focus will be on assisting students in determining how they can learn and retain knowledge; gain critical thinking skills; combat ineffective study habits; and improve content retention. Emphasis is on providing students opportunities to examine and prioritize their goals and commitments while eliminating low-priority goals and obstacles to obtaining academic success in School of Nursing.

### **NUR2215 Professional Nursing: Called To Serve . . . . . 2 cr**

This course introduces the student to the concept of professional nursing as a Christ-centered calling. The mission and philosophy of University of Northwestern School of Nursing will be presented. The course investigates relationship building necessary for collaborative practice with interprofessional healthcare team members. Skills and abilities characteristic of a professional nurse generalist will be emphasized.

### **NUR2216 Assessment and Communication Strategies for Service<sup>§</sup> . . . 4 cr**

This course develops foundational health assessment and communication skills related to individuals within the home, church, community and world. Service to the well-adult population will be emphasized. A \$525 clinical fee required.

### **NUR2217 Serving Through Interprofessional Collaboration<sup>§</sup> . . . . . 2 cr**

This course introduces students to the defining characteristics of interprofessional practice, incorporating biblically based Christian values. It focuses on nursing as a member of the interprofessional collaborative team. Emphasis is on communication, networking and team building. A \$525 clinical fee required.

### **NUR2218 Foundational Adult Care Services<sup>§</sup> . . . . . 6 cr**

This course introduces the hands-on application of the biblically based Christian worldview to professional practice. Development of foundational nursing skills related to serving adult individuals and families across the continuum of healthcare environments will be emphasized. A \$525 clinical fee required.

### **NUR3215 Pharmacology and Therapeutic Services . . . . . 3 cr**

(PQ: C or better in NUR2215, NUR2216, NUR2217, and NUR2218) This course will introduce pharmacology principles and therapeutic modalities into nursing ministry and services. It will emphasize pharmacological agents and their effects on body systems and medication administration.

### **NUR3216 Advanced Adult Care Services<sup>§</sup> . . . . . 8 cr**

(PQ: C or better in NUR2215, NUR2216, NUR2217, and NUR2218) Development of advanced nursing skills related to serving adult individuals and families across the continuum of healthcare environments will be emphasized within the biblically based Christian worldview. A \$525 clinical fee required.



**NUR3315 Infant, Child and Family Care Services<sup>§</sup> . . . . . 6 cr**  
**(PQ:** C or better in NUR3215, NUR3216, and BIO3159) This course incorporates Christ-centered, biblically based principles while focusing on nursing ministry and service to infants, children and families within the home, church, community and world. Development of skills required for promoting health, preventing disease and addressing unmet healthcare needs of infants, children and families will be emphasized. A \$525 clinical fee required.

**NUR3316 Psychiatric–Mental Health Care Services<sup>§</sup> . . . . . 3 cr**  
**(PQ:** C or better in NUR3215, NUR3216, and BIO3159) An overview is presented of psychiatric–mental health nursing throughout the lifespan to individuals, families, groups, communities and populations across the continuum of healthcare environments. Synthesis of knowledge from biblical truths, liberal arts, the sciences and evidence-based practice will be incorporated into ministry and services to clients with psychiatric–mental health care needs. A \$525 clinical fee required.

**NUR3317 Serving Transcultural Populations<sup>§</sup> . . . . . 4 cr**  
**(PQ:** C or better in NUR3215, NUR3216, and BIO3159) This course incorporates a cultural-assessment model to identify specific components in various populations to provide unique and quality nursing ministry and service. Emphasis is on providing students opportunities to examine their own Christian values and ethics in relationship to socio-cultural variables. It includes an immersion experience in a culture different from the student's culture. A \$525 clinical fee required.

**NUR4310 Business Finance for Healthcare Services . . . . . 2 cr**  
**(PQ:** C or better in NUR3315, NUR3316, NUR3317, and completion of all pre-requisite courses) This course will provide a foundation of concepts and skills in business finance in preparation of graduates for entry-level, beginning professional healthcare or nursing practice. Emphasis will be on resource management, cultural considerations, government influences and regulations which impact healthcare within the United States.

**NUR4315 Evidence-Based Services . . . . . 3 cr**  
**(PQ:** C or better in NUR3315, NUR3316, NUR3317, and completion of all pre-requisite courses) This course provides an understanding of the research process that undergirds evidence-based services. It will explore underlying worldviews that have led to the development of research approaches. It will include basic elements of research design, sampling, data collection and analysis. Students will critique a research article, develop a research proposal and complete an evidence-based practice paper.

**NUR4316 Service Leadership and Management<sup>§</sup> . . . . . 2 cr**  
**(PQ:** C or better in NUR3315, NUR3316, NUR3317, and completion of all pre-requisite courses) This course will provide a foundation of concepts and skills in service leadership and management in preparation of graduates for entry-level, beginning-professional nursing practice. Emphasis will be on managing resources, interpersonal and interprofessional communication skills and servant-leadership principles. A \$525 clinical fee required.

**NUR4317 Community and Population-Based Care Services<sup>§</sup> . . . . . 4 cr**  
**(PQ:** C or better in NUR3315, NUR3316, NUR3317, and completion of all pre-requisite courses) Explore community- and population-based care with an emphasis on health promotion and disease prevention within a biblically based Christian worldview. Provide nursing ministry and services using in-person or virtual-delivery systems. This course incorporates a community-based clinical-immersion experience. A \$525 clinical fee required.

**NUR4318 Synthesis of Care Services<sup>§</sup> . . . . . 3 cr**  
**(PQ:** C or better in NUR3315, NUR3316, NUR3317, and completion of all pre-requisite courses) This course will focus on synthesis of nursing ministry and services from a biblically based Christian worldview. It will include analysis of one's own abilities and skills to work as a competent nurse generalist. Emphasis will be on clinical immersion. A \$525 clinical fee required.

**NUR4319 NCLEX-RN Preparation for Service . . . . . 3 cr**  
**(PQ:** C or better in NUR3315, NUR3316, NUR3317, and completion of all pre-requisite courses) This course assists students with preparation (emotional, physically, spiritually and academically) for taking the NCLEX-RN examination required for licensure as a registered nurse.

## Philosophy

**PHI2005 Introduction to Philosophy<sup>#</sup> . . . . . 4 cr**  
 A survey of Western philosophy: history, systems, problems, methods, ethics and leading figures. May be taken to count toward the Theological Philosophy requirement in the core curriculum. Equivalent to PHI2009 (see College of Graduate, Online, & Adult Learning catalog). Only offered through Dual Enrollment.

**PHI2006 Fundamentals of Logic\* . . . . . 2 cr**  
 In this course students learn the basic principles of propositional and first-order logic. Emphasis is on developing understanding and skill in constructing valid deductive arguments and recognizing fallacious reasoning. Informal and inductive logic will also be introduced with a survey of common informal fallacies.

**PHI2016 Ethics<sup>#</sup> . . . . . 4 cr**  
 A comparative introduction to normative social theory. An examination and critique of alternative grounds for claiming that an action, attitude, social rule, or social institution is morally right or wrong.

**PHI2055 Introduction to Theological Philosophy<sup>#</sup> . . . . . 2 cr**  
 This course explores the implications of the biblical doctrines of creation, fall, redemption and providence for the study of philosophy.

It stresses the Christ-centered nature of creation, the moral and theological nature of knowledge, and the dependence of the created order upon the providential activity of God. Particular attention will be given to topics such as the Creator/creature distinction, the effects of sin and regeneration on the mind, and the relationship between general and special revelation.

**PHI2825 Honors Topics in Philosophy . . . . . 2–4 cr**  
**(PQ:** ACT Composite score of 27 or above [SAT score of 1280 or above or CLT score of 85 or above], or high school cum GPA of 3.7 or higher, or consent of instructor) An investigation of a selected topic in philosophy for honors students. Emphasis will be placed on independent work and critical thinking.

**PHI3011 History of Philosophy: Ancient\* . . . . . 2 cr**  
 A survey of the history of philosophy from Thales to Augustine. The course focuses on major developments and figures in philosophic thought with particular attention to Plato, Aristotle, the early church fathers and Augustine. The course will explore the interaction between Greek and Roman philosophy and the development of early Christianity.

## COURSE DESCRIPTIONS

**PHI3012 History of Philosophy: Medieval\*** . . . . . 2 cr

A survey of the history of philosophy from Augustine up to Descartes. The course focuses on major developments and figures in philosophic thought with particular attention to Augustine, Boethius, Anselm, Aquinas, William of Ockham, Molina and Suarez. The course will explore the ways in which medieval Christian thinkers shaped and were shaped by philosophic and historical movements.

**PHI3013 History of Philosophy: Modern\*** . . . . . 2 cr

A study of the major thinkers and topics in 17th- and 18th-century European philosophy. Key figures include Descartes, Leibniz, Hume, Berkeley and Kant. Central topics include skepticism and the limits of knowledge, the expansion of science and its relationship to Christianity, the mind-body problem, causation and theistic arguments. Since all of these themes are still of central significance, they will be related to present-day discussions.

**PHI3014 History of Philosophy: Contemporary\*** . . . . . 2 cr

An overview of 19th- and 20th-century philosophy in Europe and America. Anglo-American philosophers will be studied, including Russell, Moore, Wittgenstein and Plantinga. Special attention will be paid to “analytic” trends in philosophy of language and philosophy of science, including the 20th-century renaissance in Christian philosophy. Continental philosophers such as Kierkegaard, Nietzsche, Sartre and Derrida will be examined, with an emphasis on existentialism, postmodernism and ethical and epistemic relativism.

**PHI3025 God and Philosophy** . . . . . 4 cr

(PQ: ENG2205 or ENG2825) This course engages in philosophical reflection on God and related concepts. Arguments for the existence of God, the possibility of religious knowledge, puzzles about divine attributes, the relation of faith and reason, the nature of God’s action in the world, the problem of evil, religious pluralism, and non-Christian notions of divinity and salvation are all explored.

**PHI3028 The Problem of Suffering** . . . . . 2 cr

This course examines the various solutions to the problem of suffering. In particular, if God is all-good and all-powerful, then why do people still suffer?

**PHI3035 Metaphysics** . . . . . 2 cr

This course surveys metaphysics as the study of the nature of reality and is concerned with identifying and understanding the fundamentally distinct sorts of things that exist such as properties, relations, time, causality, freedom, mind, numbers, sets and possible worlds. The course attempts to relate these things to the doctrine of creation and to the dynamics of God’s acting according to his plan for his purposes in Christ. This is a course in worldview integration for those majoring in physical and social science, mathematics, or in any of the humanities.

**PHI3036 Jonathan Edwards Seminar\*\*** . . . . . 4 cr

This course examines the Christian philosophy and theology of Jonathan Edwards (1703–1758) in its early modern setting. It critically evaluates his theses, argumentation and practical implications regarding God’s motive and purpose in creation as it is expressed in his *Dissertation of the End for which God Created the World*. (The first half of the course explores Edwards’ philosophical argument as expressed in the introduction and Chapter One. The second half examines his biblical and theological argument as expressed in Chapter Two.) This work is the centerpiece of his life-long interest in understanding how science, metaphysics, history, ethics and especially religious experience are rooted in his view of the dynamics and purpose of God’s acting.

**PHI3037 Science and Theology** . . . . . 4 cr

Course also listed as SCI3037. In this course, students will explore the interdisciplinary dialogue between scientists and theologians on critical, moral, ethical, scientific and theological issues. The course will read and discuss current literature in Science and Theology and explore major issues in context of the historical and contemporary framework of both disciplines.

**PHI3057 Christian Apologetics#** . . . . . 2 cr

This course explains and argues for Christian beliefs about such topics as the existence of God, the reliability of Scripture, miracles, the problem of evil, science and the Bible, and other religions. Students will be introduced to different approaches to apologetics and investigate the relationship between apologetics and saving faith.

**PHI3145 The Nature of Knowledge<sup>OCE</sup>** . . . . . 2 cr

(PQ: SPE1075 or SPE1825) This course examines the question, When does a belief count as knowledge? It addresses the relevance of the knower in knowing, the role of proof and evidence, and the major historical and contemporary theories of epistemology such as skepticism, relativism, and empiricism.

**PHI3165 Political Thought** . . . . . 4 cr

(PQ: ENG1105 or ENG1825, and HIS1005, HIS1825, or HIS1826) Course also listed as POS3165. This course considers how individuals have thought and written about politics from a philosophical perspective. It seeks to understand both Ancient and Modern perspectives, and it will emphasize Christian political thought. It will also consider normative considerations about justice and the nature of political rights.

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## Physical Education Activity Courses

NOTE: SOME PHE COURSES MAY REQUIRE A FEE.

**PHE1005 Basketball\*\*** . . . . . 1 cr**PHE1007 Volleyball** . . . . . 1 cr**PHE1015 Aerobics** . . . . . 1 cr**PHE1016 Fitness\*\*** . . . . . 1 cr**PHE1018 Power Walking** . . . . . 1 cr**PHE1019 Weight Training** . . . . . 1 cr**PHE1021 Beginning Tennis** . . . . . 1 cr**PHE1025 Badminton\*** . . . . . 1 cr**PHE1026 Racquetball\*** . . . . . 1 cr**PHE1031 Beginning Swimming\*\*** . . . . . 1 cr**PHE1035 Canoeing\*\*** . . . . . 1 cr**PHE1056 Bowling\*\*** . . . . . 1 cr**PHE1057 Golf<sup>S</sup>** . . . . . 1 cr**PHE1065 Lifetime Fitness and Wellness#** . . . . . 1 cr

This course is an introduction to fitness and health principles with an emphasis on physical activity, nutrition, weight management and health related fitness concepts. Students will have the opportunity to assess their current levels of physical fitness, nutrition and activity patterns in order to develop a personalized health and fitness program. Students will be required to participate in a variety of physical fitness activities as well as the study of pertinent principles governing fitness.

**PHE1066 Fitness and Health for Life<sup>#</sup> . . . . . 2 cr**

This course is designed to motivate and enable students to improve their knowledge and application of lifelong and optimal fitness and health. Students will learn how to assess themselves in the fitness areas of cardiovascular, body composition, muscular strength and endurance and flexibility within the FITT formula. This course will also cover topics such as body image, weight control, nutrition, emotional health, sleep habits and personal relationships as they affect the vigor and vitality that is needed to function physically, psychologically and socially. Only offered through Dual Enrollment.

**PHE2075 Athletic Performance Development\* . . . . . 1 cr**

This course is designed specifically for the athlete or the coach of athletes who want a better understanding of the unique underlying principles of athletic conditioning, fitness and improvement of athletic performance.

**PHE2085 Theory of Coaching Baseball\* . . . . . 1 cr**

Students will learn the strategies and techniques to teach the game of baseball. Students will develop drills and philosophies to assist the student in their development as a baseball coach.

**PHE2086 Theory of Coaching Basketball\* . . . . . 1 cr**

The student who successfully completes this course will be able to use coaching theories and techniques in coaching middle age and high school basketball.

**PHE2087 Theory of Coaching Football\*\* . . . . . 1 cr**

Students will learn fundamental strategies and techniques to teach the game of football. Students will develop drills and philosophies to assist the student in their development as football coach.

**PHE2088 Theory of Coaching Volleyball\* . . . . . 1 cr**

Students will learn the strategies and techniques to teach the game of volleyball. Students will develop drills and philosophies to assist the student in their development as a volleyball coach.

**PHE2089 Theory of Coaching Youth Sports\*\* . . . . . 1 cr**

To develop hands on knowledge on the basics to coach youth sports. This course acquaints students with necessary skills to coach youth sports.

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## Physics

**Note: For all natural science courses, the student must earn a “C-” or better in all prerequisite courses.**

**PHY1005/1005L Concepts of Physics\*\* \$ . . . . . 3 cr**

(NOT available to students who have received a grade of C or better in any PHY course) A topical study of physics at the introductory level with some applications to contemporary society. Concepts covered are selected from: history, methods, motion, energy, electricity and magnetism, light, the atom, the nucleus and some current areas of research in physics. Three lectures and one two-hour lab per week. A \$200 laboratory fee required. Concurrent registration required in lecture and lab.

**PHY1101/1101L Fundamentals of Physics I<sup>\$</sup> . . . . . 4 cr**

(PQ: C- or better in MAT1126 or ACT Math score of 24 or above [SAT-I Math score of 580 or above], or B- or higher in high school (or college-equivalent) pre-calculus, trigonometry, or advanced algebra with trigonometry) This course stresses the use of fundamental principles to solve quantitative problems. Mechanics, rotations and waves. Motion in one dimension, vectors, motion in two and three dimensions, force and Newton’s laws, particle dynamics, work and energy, conservation of energy, rotational kinematics, rotational dynamics, angular momentum, fluids, oscillations, gravitation and other topics as time permits. Three lectures and one two-hour lab per week. A \$200 laboratory fee required. Concurrent registration required in lecture and lab.

**PHY1102/1102L Fundamentals of Physics II<sup>\$</sup> . . . . . 4 cr**

(PQ: C- or better required in PHY1101 or PHY1201) This courses stresses the use of fundamental principles to solve quantitative problems. Electricity and magnetism; optical phenomena; modern physics. Three lectures and one two-hour lab per week. A \$200 laboratory fee required. Concurrent registration required in lecture and lab.

**PHY1101/1201L Engineering Physics I<sup>\$</sup> . . . . . 4 cr**

(PQ: C- or better in MAT2121; MAT2122 recommended or may be taken concurrently; one year of high school physics or PHY1101 recommended) Calculus-level general physics course stressing the use of fundamental principles to solve quantitative problems. Mechanics, rotations and waves. Motion in one dimension, vectors, motion in two and three dimensions, force and Newton’s laws, particle dynamics, work and energy, conservation of energy, rotational kinematics, rotational dynamics, angular momentum, oscillations, gravitation and fluid statics. Three lectures and one two-hour lab per week. A \$200 laboratory fee required. Concurrent registration required in lecture and lab.

**PHY1202/1202L Engineering Physics II<sup>\$</sup> . . . . . 4 cr**

(PQ: C- or better in MAT2122 and C- or better in PHY1201) Second semester of calculus-level general physics course stressing the use of fundamental principles to solve quantitative problems. Electric circuits, electricity and magnetism. Current and resistance, DC circuits, electric charge, Coulomb’s Law, the electric field, Gauss’ Law, electric potential, capacitors and dielectrics, the magnetic field, Ampere’s Law, Faraday’s Law, inductance, AC circuits, magnetic properties of matter and waves. Three lectures and one two-hour lab per week. A \$200 laboratory fee required. Concurrent registration required in lecture and lab.

**PHY2203/2203L Engineering Physics III\*\* \$ . . . . . 4 cr**

(PQ: C- or better in PHY1202) Third semester of calculus-level general physics course stressing the use of fundamental principles to solve quantitative problems, optics and waves. Modern physics, including quantum mechanics, special relativity and the atomic structure of materials. Three lectures and one two-hour lab per week. A \$200 laboratory fee required. Concurrent registration required in lecture and lab.

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## COURSE DESCRIPTIONS

## Political Science

**POS1005 Introduction to Political Science** . . . . . 4 cr  
An introduction to the study of political power, political groups and parties and political ideologies. The modern state and its relationship to the individual and to political groups will be discussed. Constitutions, branches of government, bureaucracy and international politics will also be studied.

**POS2005 U.S. National Government**# . . . . . 4 cr  
The study of the structure and processes of American national government and its political processes and institutions. Particular attention is paid to constitutionalism, federalism, the presidency, the Congress, the Judiciary, bureaucracy, interest groups and policy formation.

**POS2625 Workshop in Student Government** . . . . . 0–1 cr  
(PQ: consent of instructor) For student government members only. **Note:** This course is designated as repeatable and may be repeated five times after the original taking of the course.

**POS2695 Minnesota Legislative Internship** . . . . . 1–8 cr  
(PQ: POS1005 or POS2005 or consent of instructor; internship forms required) Supervised work experience in the Minnesota legislature. Designed to provide a variety of experiences in the legislative process, research and political activity. Requires application both to the internship program at the State Capitol and to the university for approval. Credits may not be used to satisfy core curriculum requirements. May not be repeated for credit.

**POS3165 Political Thought** . . . . . 4 cr  
(PQ: HIS1005, HIS1825, or HIS1826) Course also listed as PHI3165. This course considers how individuals have thought and written about politics from a philosophical perspective. It seeks to understand both Ancient and Modern. It will also consider normative considerations about justice and the nature of political rights.

**POS3205 International Relations since World War II**\*\* . . . . . 4 cr  
A study of the international community since the end of World War II with attention focused on national security in geopolitical terms, interdependence and the international economic system. Attention is paid to the United States, Russia, Europe, the Middle East, Central America, the Persian Gulf, Japan, international law and the United Nations.

**POS4625 Workshop in Student Government** . . . . . 0–1 cr  
(PQ: consent of instructor) For student government members only. **Note:** This course is designated as repeatable and may be repeated five times after the original taking of the course.

**POS4995 Political Science Internship** . . . . . 1–8 cr  
(PQ: POS1005 or POS2005 and consent of faculty supervisor, and internship registration form) Supervised work experience in political science. **Note:** See page 25 for note regarding internships.

## Psychology

**PSY1005 Introduction to Psychology**# . . . . . 4 cr  
A study of human behavior. Consideration is given to methodology and concepts in the areas of learning, motivation, emotions, perception, intelligence and personality. Equivalent to PSY1009 (see College of Graduate, Online, & Adult Learning catalog).

**PSY1106 Applied Psychology**\*\* . . . . . 2 cr  
An examination of the personal, social and professional applications of psychological concepts. Emphasis is upon personal growth and maturity.

**PSY2105 Social Psychology**\*\* . . . . . 4 cr  
(PQ: PSY1005) A study of behavior and cognition as a function of interpersonal relationships and group contexts. Topics include person perception, attitudes and attitude change and motivation of social behavior.

**PSY2108 Lifespan Psychology**# . . . . . 4 cr  
A study of the nature and implications of development from conception through death. Emphasis is upon cognitive, moral, spiritual, emotional, interpersonal and self development. Topics to be addressed include: stages of development from birth through adolescence; maturation during the college years; critical periods of adulthood, marriage and parenting; ageism and physiological processes of aging; death and dying.

**PSY3135 Positive Psychology** . . . . . 4 cr  
(PQ: PSY1005) Positive psychology encompasses the study of positive experiences, positive character strengths, positive relationships, and the institutions and practices that facilitate their development, (including spiritual institutions and practices). This course will examine these positive domains that lead to human flourishing. Throughout the course students will engage in experiential learning and practical exercises to increase well-being, which will inform our theoretical and empirical understanding of important questions in positive psychology.

**PSY3206 Psychology of Learning**\*\* . . . . . 2 cr  
(PQ: PSY2108) An examination of various learning theories. Attention is given to the behavioral, cognitive, social learning and information processing approaches to learning. Students are encouraged to apply their understanding of different learning theories to clinical situations.

**PSY3207 Abnormal Psychology**° . . . . . 4 cr  
An examination of the multidimensional determinants which influence the development of psychopathology. Students will explore assessment, diagnosis, and the conceptualization of disorders as defined by the Diagnostic Statistical Manual classification system. An exploration of etiology, diagnostic considerations, and cultural factors will be emphasized. Clinical and scientific research will be examined to understand psychopathology and mental health.

**PSY3208 Statistics for the Social Sciences**° . . . . . 4 cr  
(PQ: recommend PSY2108; and ACT Math score of 18 or above [SAT Math score of 470 or above], C- or better in any college-level mathematics course, or high school cum GPA of 2.67 or higher) A course designed to introduce students to descriptive and inferential statistics used in research in the social sciences. Students will gain conceptual and working knowledge of measures of central tendency, standard deviation, z-scores, t-scores, correlation and regression, hypothesis testing, chi-square and one-way analysis of variance.

**PSY3209 Physiological Psychology** . . . . . 4 cr  
(PQ: PSY2108) An examination of how psychological functioning impacts and is impacted by physiological functioning. Areas studied include central and peripheral nervous systems, sensation and perception and neuropsychological functioning, with an emphasis on brain-behavior relationships.

**PSY3215 Interpersonal Psychology** . . . . . 4 cr  
(PQ: PSY2108 or consent of instructor) A survey of the various dimensions of human intimacy. The impact of psychological, biological and theological factors on relationships is examined with emphasis given to sexual function and dysfunction.



- PSY3218 Psychology of Gender** . . . . . **2 cr**  
(PQ: PSY2108) An examination of current approaches associated with the psychological and sociological study of gender. In this course we explore the ways in which men and women are different, study and critique theories that attempt to explain those differences and recognize how and when those differences are meaningful.
- PSY3305 Research Methods in Psychology** ◊ . . . . . **4 cr**  
(PQ: PSY3208) A course designed to acquaint students with the scientific method as it is applied to research in psychology. Application of research statistics is stressed. Students are taught to write their results according to A.P.A. guidelines.
- PSY3308 Principles of Counseling** ◊ . . . . . **4 cr**  
A study of the clinical types of mental illness, the schools of psychotherapy and the theories and techniques of counseling. Emphasis is upon personality integration and the principles of mental health. Consideration is given to the legal, ethical and practical implications of counseling relationships. Reference is made to various personality tests.
- PSY3315 Counseling Children** . . . . . **4 cr**  
(PQ: PSY3308) Identification of childhood disorders and the development of appropriate treatment plans. Study of techniques of play therapy, art therapy and cognitive behavioral theory.
- PSY3317 Treatment of Special Populations.** . . . . . **4 cr**  
(PQ: PSY3308) An examination of issues and dynamics associated with understanding and treating persons dealing with death, dying, bereavement, child abuse and substance abuse.
- PSY3326 Psychology of Stress Management\*\*** . . . . . **4 cr**  
This course examines the physiological, psychological and spiritual dimensions of stress and its management. Students are trained in practical stress management techniques. The relationship between stress, illness and pain management are considered.
- PSY3327 Psychology of Pain Management\*\*** . . . . . **4 cr**  
This course examines various theories of pain and the use of the biopsychosocial model in the treatment of pain. Physiological, psychological and social causes of pain are considered in the context of a Christian worldview. Attention is given to the role of personality characteristics and pain. Methods of treating pain are examined.
- PSY3329 Professional Issues in Psychology** . . . . . **4 cr**  
(PQ: PSY3308) This course will consider the American Psychological Association's published Ethical Principles of Psychologists and the application of these principles in a clinical setting. This course will also address issues of cultural competence, limits of competence and topics in preparation for graduate school.
- PSY3615 Health Psychology Practicum\*\*** . . . . . **2 cr**  
(PQ: PSY3326, PSY3327 and PSY3328) Supervised observation and experience in applications of health psychology concepts.
- PSY3835 Career Competencies Seminar.** . . . . . **0 cr**  
(PQ: minimum of junior standing) Orientation and preparation for an academic internship. To be completed the semester prior to enrolling in the internship course offered by the academic department.
- PSY4025 Foundations of Health Psychology** ◊ . . . . . **4 cr**  
An overview of the field of health psychology. Attention is given to the psychological factors related to the diagnosis, treatment, and prevention of disease and illness. The psychosocial factors that contribute to health and disease, health promotion, mind-body relationships, and various approaches to the prevention and treatment of physical illness will be examined. A Christian perspective on health and wellness is developed. Only offered through Adult Undergraduate (see College of Graduate, Online, & Adult Learning catalog).
- PSY4026 Stress Management Strategies** ◊ . . . . . **4 cr**  
Practical stress management techniques are addressed along with the relationships among stress, lifestyle, and chronic illness. A Christian worldview is explored as a foundation for stress management. Only offered through Adult Undergraduate (see College of Graduate, Online, & Adult Learning catalog).
- PSY4027 Pain Management Strategies** ◊ . . . . . **4 cr**  
Pain theories and interventions are explored through the biopsychosocial model and a Christian worldview. Various causes of pain are examined in relation to personality characteristics as well physiological and psychological dimensions. Only offered through Adult Undergraduate (see College of Graduate, Online, & Adult Learning catalog).
- PSY4305 Measurement and Assessment\*** . . . . . **4 cr**  
(PQ: PSY3207 and PSY3208) Survey of basic concepts and principles of psychological measurement, including factors influencing validity and reliability. The student becomes acquainted with the administration and interpretation of tests which assess intellectual and personality functions.
- PSY4306 History and Philosophy of Psychology** . . . . . **4 cr**  
(PQ: PSY2108) An overview of the major schools of psychology and an examination of their philosophical, scientific and religious foundations. Students apply critical thinking skills to identify, compare, contrast and evaluate the underlying assumptions of the various schools of psychology and formulate their own philosophy of social science research.
- PSY4316 Marriage and Family Counseling** ◊ . . . . . **4 cr**  
(PQ: PSY3308 recommended or may be taken concurrently) Students examine theories and intervention techniques in marriage and family counseling. Methods of assessment are addressed. Specific issues facing couples and families are considered.
- PSY4318 Marriage and Family Dynamics** ◊ . . . . . **4 cr**  
(PQ: PSY3308 recommended or may be taken concurrently) This course examines the nature of marriage and family dynamics from a systems perspective. Sexuality and the role of marital quality upon the family unit are considered. Biblical principles for developing positive marriage and family dynamics are addressed.
- PSY4365 Family Communication and Relationships** ◊ . . . . . **4 cr**  
(PQ: PSY3308 recommended or may be taken concurrently) This course focuses on the psychosocial and spiritual foundations for healthy communication and interpersonal relationships within families. Strategies for developing appropriate problem solving and communication patterns are discussed.
- PSY4367 Intervention Strategies with Families** ◊ . . . . . **4 cr**  
(PQ: PSY3308 recommended or may be taken concurrently) This course is an examination of effective methods for addressing problems within families. Forms of neglect and abuse are examined and crisis intervention techniques are also considered. Case studies are used to apply interventions from a Christian worldview.
- PSY4407 Integration of Psychology and Theology\*\*** ◊ . . . . . **4 cr**  
(PQ: PSY3207, ENG2205 or ENG2825, and junior standing) A study of the models, levels and areas in which integration of psychology and theology can occur. Particular attention is given to the biblical and psychological theories on motivation.
- PSY4425 Clinical Health Psychology\*\*** ◊ . . . . . **4 cr**  
(PQ: PSY4025) This course addresses the common health psychology-related medical conditions and biopsychosocial treatments within a primary care context. A Biblical perspective is applied and integrated with prevention and intervention recommendations. Only offered through Adult Undergraduate (see College of Graduate, Online, & Adult Learning catalog).



## COURSE DESCRIPTIONS

**PSY4835 Senior Seminar in Psychology**<sup>OCE WCE</sup> . . . . . **4 cr**  
**(PQ:** PSY3308; BIB4360 or BIB4825 or BIB4365 or BIB4460; ENG2205 or ENG2825; SPE1075 or SPE1825; senior standing) This seminar emphasizes the skills of critical thinking and oral and written communication at the senior level. Students investigate a variety of critical and controversial issues in psychology and conceptualize an integrative Christian response. Students are engaged in discussion groups, writing projects and a formal presentation to facilitate skill development.

**PSY4841 Directed Psychological Research I** . . . . . **1–4 cr**  
**(PQ:** PSY3305 and consent of instructor) Students work in a laboratory setting to develop and conduct an empirical research project. Students conduct background literature reviews in their specific area of interest, design an appropriate research method, obtain IRB approval of research, recruit participants and begin

testing participants. Students will also complete the first half of the psychological research report, which includes the literature review and the Method section. **Note:** This course is designated as repeatable and may be repeated for up to 4 total credits.

**PSY4842 Directed Psychological Research II** . . . . . **1–4 cr**  
**(PQ:** PSY3305 and consent of instructor) Students complete testing of study participants, analyze testing data, complete the written report (Results and Discussions sections) and submit the report for professional publication/presentation. **Note:** This course is designated as repeatable and may be repeated for up to 4 total credits.

**PSY4995 Psychology Internship** . . . . . **1–8 cr**  
**(PQ:** consent of faculty supervisor and internship registration form) Supervised work experience in psychology. **Note:** See page 25 for note regarding internships.

## Public Relations

Directed studies are available. See pages 26–27.

**PRL2061 Multimedia Writing** . . . . . **4 cr**  
 An introduction to journalistic writing for various media platforms, with an emphasis on print and web. Basic news and feature writing are done as students consider structure, organization, fact-gathering and other components of the journalistic story.

**PRL2085 Public Relations and Social Media Strategies** . . . . . **4 cr**  
 The nature and role of public relations, activities of public relations professionals, major influences which affect organizational behavior and the ethics of public relations professionals. Examination and practice of skills and techniques used in the practice of public relations. Students begin developing a professional portfolio.

**PRL2625 Public Relations Workshop** . . . . . **0–1 cr**  
 This course provides a hands-on experience in the operation of an in-house public relations agency. The main client is promoting and publicizing the activities of the Department of Communication and partnering with the other student-led workshops including Radio, TV/Video, Journalism and Film. Students choose from various PR activities including web strategy and content, social media, publicity, news, and research.

**PRL3035 Nonprofit PR\*\*** . . . . . **2 cr**  
 This course is structured to provide students with a thorough grounding in the principles and practice of two distinctive PR aspects of nonprofit organizations: fundraising (development) and volunteer relations. Students will consider development planning frameworks and a variety of conceptual tools before moving on to consider donor behavior (the underlying psychology and sociology) and each major form of fundraising in turn. The course will include an examination of the critical managerial and sectoral issues affecting the fundraising function, such as campaign integration and public trust and confidence. The course will then conclude with a discussion of best practices in volunteer recruitment, training, management, motivation, recognition, and relationship development.

**PRL3187 Sport Public Relations\*\*** . . . . . **2 cr**  
 This course focuses on developing the essential capabilities needed to serve as a communications consultant or employee for in the sports industry. The course is designed to help students gain experience in researching, planning, staging, scripting and critiquing the types of communications used by sports public relations professionals. Students should develop a strong understanding of the importance of communications—especially ethical communications—in sport public relations.

**PRL3386 PR Events: Planning and Management\*** . . . . . **4 cr**  
**(PQ:** consent of instructor) This course focuses on developing the essential capabilities needed to stage and execute a wide variety of events relevant to the public relations profession. The course is designed to help students gain experience in researching, planning, staging, scripting and executing an array of events used by public relations professionals. These include press conferences, speeches, ceremonies, media tours, professional conferences, events sponsorship and coordination with partner organizations. Discussion of public relations tactics is integrated into the course. Students should develop a strong understanding of the public relations process.

**PRL3387 Political Communication\*** . . . . . **2 cr**  
 This course focuses on developing the essential capabilities needed to serve as a communications consultant or employee on a political campaign or for a public affairs or public policy organization (special interest group). The course is designed to help students gain experience in researching, planning, staging, scripting and executing an array of communications used by public office seekers. Discussion of both political campaign principles and tactics is integrated into the course. Students should develop a strong understanding of the importance of communications in the political process.

**PRL4308 Public Relations Research Methods** . . . . . **4 cr**  
**(PQ:** COM2107 and MAT2055 or PSY3208) Course also listed as COM4308. A survey and analysis of the most commonly used methods of social science inquiry relating to the public relations field. Both qualitative and quantitative methods are examined. Students produce and present original research projects.

**PRL4385 Public Relations Cases and Crisis Communication** . . . . . **4 cr**  
 This course focuses on the analysis of public relations case studies with a special emphasis on strategic communication and crisis communication. Students should develop a strong understanding of the strategic communication planning process, including research, SWOT analysis, objective development, strategy and tactic development, budgeting, calendaring and evaluation.

**PRL4625 Public Relations Workshop** . . . . . **0–1 cr**  
**(PQ:** PRL2625 or consent of instructor) This course provides advanced hands-on leadership experience in the operation of an in-house public relations agency.

**PRL4855 Senior Capstone** . . . . . **3 cr**  
**(PQ:** PRL4385 or concurrently enrolled) A capstone experience for Public Relations students in their senior year. An original, individual project is planned and completed during the semester.

**PRL4995 Public Relations Internship** . . . . . 1–4 cr  
(PQ: junior or senior standing, consent of faculty supervisor, and internship registration form) Supervised work experience in public relations. **Note:** See page 25 for note regarding internships.

**PRL4996 Event Planning Internship** . . . . . 1–4 cr  
(PQ: junior or senior standing, consent of faculty supervisor, and internship registration form) Students gain hands-on experience in off-campus businesses and organizations, based on student interest and career objectives in event planning and management. **Note:** See page 25 for note regarding internships.

## Reading Strategies

**RDG0009 College Reading Strategies** . . . . . 1 cr  
(Required of all new or transfer students with ACT Reading score of 18 or below [SAT EBRW score of 480 or below, or CLT Verbal Reasoning score of 18 or below] or if the student's high school cum GPA is 2.66 or below. An exception is new transfer students who

have 30 or more cumulative earned college-level credits at the time of matriculation to Northwestern.) A course designed to foster the development of college-level reading skills. Credits do not apply to degree requirements.

## Science – General

**SCI1006 Creative Explorations of Earth Science** . . . . . 2 cr  
An introduction to earth science, including comparison of the standard evolutionary-uniformitarian interpretation of earth features with the catastrophic-creation account. The claims of both philosophies are examined by the observations of science. Includes rock formation, fossils, critique of dating methods and the geologic time column.

**SCI1008/1008L Introduction to Scientific Thought\*\* \$** . . . . . 4 cr  
(PQ: one year of high school algebra and one year of high school geometry) An examination of the history, development, philosophy and practice of the natural sciences in the Western world from prehistory to the present day. Laboratory sessions will focus on fundamental concepts in astronomy, biology, chemistry, geology and physics. Three lectures and one two-hour lab per week. A \$200 laboratory fee required. Concurrent registration required in lecture and lab.

**SCI1010/1010L Environmental Science<sup>s</sup>** . . . . . 4 cr  
Principles of the interrelationships between organisms and their environment. Discussion of issues including air and water pollution, waste disposal, population growth, resource management, public policy, ethics, and environmental stewardship. Three lectures and one two-hour lab per week. A \$200 laboratory fee required. Credit from SCI1029 (see College of Graduate, Online, & Adult Learning catalog) may **not** count toward/for SCI1010. Equivalent to SCI1015/1015L. Concurrent registration required in lecture and lab.

**SCI1015/1015L Environmental Science and Sustainability<sup>#</sup>** . . . . . 5 cr  
A study of the principles of sustainability and the effect of human systems on the interrelationships between organisms and their environment. Discussion of issues including air and water pollution, climate change, waste disposal, population growth, resource management, public policy, and ethics. This course fulfills the core curriculum Natural Science requirement within the Scientific & Quantitative Literacy section. Equivalent to SCI1010/1010L. Only offered through Dual Enrollment. Concurrent registration required in SCI1015 and SCI1015L.

**SCI1045/1045L Medicinal Chemistry and the Drug Discovery Process<sup>s</sup>** . 4 cr  
(PQ: One year of high school algebra recommended) Centered around a reading and discussion of *The Billion Dollar Molecule* by Barry Werth (a dramatic account of the race to develop a lifesaving immunosuppressant drug), this course offers a minimally technical treatment of the full sequence of events in the drug development pipeline from early discovery research through animal models, human clinical trials, regulatory approval, and postmarket analyses with accompanying dimensions of practical and subjective ethical significance. The scientific foundation includes introductory organic chemistry and exploration of how to quantify and control pharmacokinetic and pharmacodynamic properties such as absorption, distribution, metabolism, excretion, toxicity, and potency. The associated lab trains students in basic operations for the synthesis, purification, and characterization of chemical substances. A \$200 laboratory fee required. Concurrent registration required in lecture and lab.

**SCI2108/2108L Concepts of Astronomy<sup>#</sup>** . . . . . 5 cr  
(PQ: ACT Math score of 18 or above [SAT Math score of 470 or above], or high school cum GPA of 2.67 or higher, or consent of instructor) Fundamental concepts in astronomy. Topics covered will be selected from: the solar system, stellar objects, stellar systems, constellations, galaxies and cosmology. There will be some exploration of how the study of the heavens has informed religious thought. Only offered through Dual Enrollment. Includes lab. Concurrent registration required in lecture and lab.

**SCI3037 Science and Theology** . . . . . 4 cr  
Course also listed as PHI3037. In this course, students will explore the interdisciplinary dialogue between scientists and theologians on critical, moral, ethical, scientific and theological issues. The course will read and discuss current literature in Science and Theology and explore major issues in context of the historical and contemporary framework of both disciplines.

## Sociology

**SOC1035 Introduction to Sociology<sup>#</sup>** . . . . . 4 cr  
A study of social organization, processes and control. Consideration is given to methodology and concepts in the areas of role and status, social and cultural change, deviancy and disorganization, urbanization and minority groups and primary groups and socialization. Equivalent to SOC1039 (see College of Graduate, Online, & Adult Learning catalog).

**SOC2035 Social Problems** . . . . . 4 cr  
A study of sociological and psychological concepts relating to social pathology, deviance, disorganization and control. Topics include problems such as chemical dependencies, suicide, family maladjustment, crime and juvenile delinquency and discrimination. Attention is given to the implications for various institutions.

## COURSE DESCRIPTIONS

**Spanish** Directed studies are available. See pages 26–27.

**SPA1001 Beginning Spanish I<sup>#</sup>** . . . . . **4 cr**  
An introduction to the Spanish language, its sounds, structures and vocabulary and to the culture of the Hispanic world. Emphasis on the use of the present tense. Students make use of the online program MySpanishLab. SPA1001 is the first of a two-semester course sequence.

**SPA1002 Beginning Spanish II<sup>#</sup>** . . . . . **4 cr**  
(PQ: SPA1001 or consent of instructor) An introduction to the Spanish language, its sounds, structures and vocabulary and to the culture of the Hispanic world. Emphasis on the use of the preterit and imperfect tenses and the distinction between the present indicative and subjunctive moods. Students make use of the online program MySpanishLab. SPA1002 is the second of a two-semester course sequence.

**SPA2101 Intermediate Spanish I** . . . . . **4 cr**  
(PQ: SPA1002 or completion of three years of Spanish during high school with minimum course grade average of B- or consent of instructor) This course reviews material and expands target language skills: reading, writing, listening, speaking. Authentic experiences, class discussions, and independent interests provide opportunities for individual oral and written expression. This course is virtually enhanced: approximately 20% of activity takes place in an online environment.

**SPA2102 Intermediate Spanish II** . . . . . **4 cr**  
(PQ: C or better in SPA2101 or consent of instructor) This course continues the development of target language communicative modes: presentational, interpretive, and interpersonal. A wide variety of topics provide opportunity for personalized oral and written expression. This course is virtually enhanced: approximately 20% of activity takes place in an online environment.

**SPA3201 Spanish Grammar** . . . . . **4 cr**  
(PQ: C or better in SPA2102 or waiver for SPA2102 by placement examination or consent of instructor.) The primary goal of this course is to solidify the students' linguistic foundation by refining and deepening their grammatical knowledge, integrating this syntactical and semantic framework into their language production, and increasing their understanding of languages as dynamic systems thereby improving their Spanish language abilities in each communicative mode ultimately resulting in a fuller understanding of the Spanish language and its speakers. Course provides ample opportunities for cultural exploration and vocabulary development.

**SPA3202 Spanish Conversation and Composition<sup>OCE WCE</sup>** . . . . . **4 cr**  
(PQ: ENG2205 or ENG2825; SPE1075 or SPE1825; C or better in SPA3201; or consent of instructor) Advanced practice in speaking and writing Spanish. Class discussions, compositions and individual presentations on cultural topics and contemporary issues in the Spanish-speaking world.

**SPA3325 Latin American Short Stories** . . . . . **4 cr**  
(PQ: C or better in SPA3201) A study of the Spanish short story with particular emphasis on the works of Latin American authors. In-depth study of a full length literary work of the student's choosing.

**SPA3335 Spanish through Service** . . . . . **1–5 cr**  
(PQ: consent of course instructor and internship registration form) Acquisition of knowledge of the Hispanic culture and application of Spanish communication skills in authentic contexts through service work in Spanish-speaking communities. **Note:** This course is designated as repeatable and may be repeated four times after the original taking of the course. See page 25 for note regarding internships.

**SPA4845 Senior Project** . . . . . **2 cr**  
(PQ: 20 credits of 2000-, 3000-, or 4000-level SPA-prefix courses and 8 credits of Semester in Spain [SIS] or Students International [SPN] courses) An individualized course in which the student researches an aspect of the language, culture, or people of the Spanish-speaking world. The student prepares a written report and gives a public presentation in the Spanish language.

**Speech** Directed studies are available. See pages 26–27.

**SPE1075 Public Speaking<sup>#</sup>** . . . . . **3 cr**  
An introductory study and analysis of basic principles of effective communication with emphasis on public address, interpersonal and group communication. Class activities provide opportunities to develop skills in speech preparation and delivery, interpersonal and group communication. Students deliver self-introduction, informative, persuasive, group, and ceremonial speeches. Equivalent to SPE1079 (see College of Graduate, Online, & Adult Learning catalog).

**SPE1825 Honors Public Speaking** . . . . . **3 cr**  
(PQ: ACT Composite score of 27 or above [SAT score of 1280 or above or CLT score of 85 or above], or high school cum GPA of 3.7 or higher, or consent of instructor) An introductory study and analysis of basic principles of effective communication with emphasis on public address, interpersonal and group communication. Emphasis will be placed on research and critical thinking skills. Students deliver self-introduction, informative, persuasive, group, and ceremonial speeches. Attention will also be given to rhetorical analysis of contemporary speeches and to comparing Christian rhetoric and secular rhetoric. SPE1825 is a repeat of SPE1075.

**SPE2625 Speech Workshop<sup>\*\*</sup>** . . . . . **0–1 cr**  
Active participation in intercollegiate forensics competition as scheduled by the faculty. **Note:** This course is designated as repeatable.

**SPE3176 Advanced Public Speaking and Speech Writing** . . . . . **4 cr**  
(PQ: SPE1075 or SPE1825) Students build upon fundamental principles of effective speech preparation and delivery, applying them to professional contexts. Students learn how to write speeches for others considering the speaker's personality, style and the expectations created by the specific topic, audience, and occasion. Students view a number of great speeches of this century, critically analyzing the speeches and speakers.

**SPE4625 Speech Workshop<sup>\*\*</sup>** . . . . . **0–1 cr**  
Active participation in intercollegiate forensics competition as scheduled by the faculty. **Note:** This course is designated as repeatable.

## Study Strategies

### STS0009 Study Strategies . . . . . 1 cr

(Successful completion of this course is required of new students admitted transitionally into the university. Transitionally admitted students who fail this course must repeat it in the subsequent semester. Required of all new or transfer students with ACT Composite score of 17 or below [SAT total of 940 or below], or high school cum GPA of 2.66 or below.) This course is designed to prepare students for college-level academic work and to improve study skills. Credits do not apply to degree requirements.

## Theatre

### THE1035 Introduction to Dance<sup>§</sup> . . . . . 2 cr

This course is an introduction to dance designed to broaden student perspective on dance as an art form by examining dance from a critical perspective, surveying dance traditions from around the world and placing dance in a social, historical and cultural context. Students will also have the opportunity to explore movement through a basic introduction to theatre dance styles. A \$75 course fee required.

### THE1045 Theatre Production and Performance . . . . . 0–2 cr

An experiential learning course to provide the student with a practical application of theatrical theory. The student will develop skills and abilities for the theatre through supervised experience in a selected topic including: Performance, Stage Management, Costume Crew, Scene Crew, Lighting Crew, Sound Crew, Props Crew, Hair and Make-up Crew, or Stage Crew, etc. Student attends rehearsals and/or designated crew hour in regards to their assigned area. **Note:** This course is designated as repeatable.

### THE1051 Acting I<sup>§</sup> . . . . . 4 cr

Creative methods of role development, styles of acting from major periods of the theatre and play analysis. A \$75 course fee required.

### THE1055 Introduction to Theatre<sup>§#</sup> . . . . . 2 cr

The experience and nature of theatre art and functions of the audience, actor, director, designer and playwright in contemporary drama. A \$50 course fee required.

### THE1057 Improvisation<sup>§</sup> . . . . . 2 cr

This course is designed to introduce students to the art of improvisation. Students will learn to work creatively without a script. The focus of the class will be on theatre games and improvisational exercises. There will be some emphasis on character development and rehearsal techniques. Students will work extensively with acting partners and improvisational teams. This course is designed for students desiring to enhance their communication skills, acting skills and overall performance effectiveness. A \$75 course fee required.

### THE2035 Movement for the Actor<sup>§</sup> . . . . . 2 cr

(PQ: THE1051) An investigation into the fundamentals of human movement and issues of movement in performance. Exercises concentrate on the development of spatial and self-awareness, ensemble skills and group problem solving. A \$75 course fee required.

### THE2037 Tap Dance<sup>§</sup> . . . . . 2 cr

This course is an introduction to the basic components of Broadway style tap dance technique with an emphasis on basic terminology, foot and leg coordination, rhythmic awareness and timing and standard tap dance combinations. **Note:** This course is designated as repeatable. A \$75 course fee required.

### THE2038 Ballet<sup>§</sup> . . . . . 2 cr

This course is an introduction to ballet technique, based on the study of the fundamental principles, practices and vocabulary from the Russian school. Emphasis is placed on establishing proper alignment, rotation/turnout, increasing flexibility, building core strength and stamina and developing artistry. **Note:** This course is designated as repeatable. A \$75 course fee required.

### THE2039 Jazz Dance<sup>§</sup> . . . . . 2 cr

This course introduces students to the movement style of the jazz vernacular. Dancers engage in classical jazz technique rooted in the combination of both European and African dance traditions embodying syncopated rhythms and musicality, body isolation and improvisation. **Note:** This course is designated as repeatable. A \$75 course fee required.

### THE2045 Children's Theatre\* <sup>§</sup> . . . . . 2 cr

The course focuses on the methods and materials of producing plays for children, including audience analysis, script analysis, design, rehearsal and performance. A \$75 course fee required.

### THE2055 Stage Combat<sup>§</sup> . . . . . 2 cr

An introduction and exploration of technical and aesthetic aspects of stage combat. Goals include developing the ability to safely portray violence onstage within the context of a play with specificity and dramatic power, as well as to understand how stage combat fits into the practice of theater as a whole. Other aspects include the development of strength and flexibility, eye/hand coordination, understanding and applications of principles of safety in working with a partner and learning how to advance a character journey and develop ensemble work through each individual move in a fight sequence. A \$75 course fee required.

### THE2065 Stage Management . . . . . 2 cr

This course will explore the tools and techniques involved in stage-managing a theatrical production. Subjects will include effective communication with directors, designers and actors; managing rehearsals, production meetings, keeping a prompt book and calling the cues for a production.

### THE2152 Acting II<sup>§</sup> . . . . . 4 cr

(PQ: THE1051) Students will build upon precepts from Acting I to explore various acting methods from Stanislavski to Grotowski, expand analysis skills through scene study and continue to develop skills through monologue work. Students will also learn how to use their bodies and voices to develop flexible and expressive instruments that serve the text. A \$75 course fee required.

## COURSE DESCRIPTIONS

**THE2165 Introduction to Stage Technologies<sup>§</sup> . . . . . 4 cr**  
This course introduces students to the methods of designing, planning, construction, painting, rigging and shifting stage scenery for the theatre. A \$75 course fee required.

**THE3011 Directing<sup>§</sup> . . . . . 4 cr**  
Students will study the art of play analysis and directing live theatre for the stage through play analysis, leadership, interpretation, communication and staging. A \$75 course fee required.

**THE3037 Dance History and Perspectives . . . . . 2 cr**  
A survey of the history of dance beginning with its origins, through the evolution of dance as a theatre art form, including the history of European ballet traditions during the Renaissance through the 20th century, birth of modern dance, history of American jazz dance, American ballet traditions and Post Modern dance trends.

**THE3055 Theatrical Sound and Lighting Design . . . . . 2 cr**  
A course in the design of theatrical lighting and sound, and in the practical application of these designs on the stage, including churches. Students will develop skills in design, drafting and presentation; use current lighting and sound technology; and create lighting cues, lighting plots, electrician schedules, sound plots, sound cues and sound recordings based on the interpretation of a theatrical script.

**THE3067 Playwriting<sup>§</sup> . . . . . 2 cr**  
The study and practice of playwriting fundamentals; emphasizes the one-act play. A \$75 course fee required.

**THE3075 Theatre Study Tour . . . . . 2 cr**  
This course consists of touring a nationally or internationally prominent center of professional theatre activity. Participants will study theatre productions that have premiered in domestic and international markets. Participants will also meet current professionals in the field who apply their crafts in those markets. **Note:** This course is designated as repeatable.

**THE3125 Dance Theatre Ensemble . . . . . 0–1 cr**  
(PQ: audition required) Dance Theatre Ensemble serves as the official dance performance company of the Department of Music & Theatre. The ensemble includes the preparation and performance of varied styles of dance presented in a concert dance context culminating in a main stage performance. Students will perform the work of UNW dance faculty as well as guest artists. Interested students may also apply as a student choreographer to present original work through a mentorship process with faculty. **Note:** This course is designated as repeatable.

**THE3135 Modern Dance<sup>§</sup> . . . . . 2 cr**  
This course is a basic introduction to modern dance technique and is designed to heighten the awareness of the body, build physical and aesthetic movement skills and stimulate creativity. Emphasis will be placed on the study of the fundamental principles, practices and vocabulary that comprise modern dance technique through movement investigations that explore the basic principles of space, time and energy. **Note:** This course is designated as repeatable. A \$75 course fee required.

**THE3145 Advanced Theatre Production and Performance . . . . . 0–2 cr**  
(PQ: THE1045) An advanced practical experience utilizing theatrical theory. Students will build high-impact skillsets through hands-on learning in production leadership roles in a specific area: Performance, Design, Stage Management, Costume Crew, Scene Crew, Lighting Crew, Sound Crew, Props Crew, Hair and Make-up Crew, or Stage Crew, showing proficiency in production-specific duties, rehearsals and meetings, and designated crew hour in their assigned area/role. **Note:** This course is designated as repeatable.

**THE3152 Advanced Acting Styles<sup>§</sup> . . . . . 4 cr**  
(PQ: THE1051 or consent of instructor; may be repeated for credit) Advanced training techniques in acting applied to a wide range of dramatic genres. Students must participate in a semester recital. **Note:** This course is designated as repeatable and may be repeated four times after the original taking of the course. A \$75 course fee required.

**THE3155 Acting for the Camera<sup>§</sup> . . . . . 2 cr**  
(PQ: THE1051) A study of specific theories, techniques and approaches to acting for the camera. The emphasis will be on scene study and reacting to the works of others as well as your own. A \$75 course fee required.

**THE3158 Design for the Theatre\* <sup>§</sup> . . . . . 2 cr**  
(PQ: THE1055) Course will expand on design skills in the theatre by introducing students to the industry standard of Computer Aided Design (CAD), including how CAD operates and how theatrical design is accomplished. Students will use knowledge of theatrical lighting, scenic and props design, to draft and build designs within CAD. **Note:** This course is designated as repeatable and may be repeated one time after the original taking of the course. A \$75 course fee required.

**THE3166 Theatre Management\* . . . . . 4 cr**  
(PQ: THE1055) The course provides a comprehensive picture of theatre management, including current technologies used in theatre, efficient use and maintenance of physical space and organization and budgeting for shows.

**THE3181 Theatre History to 1850<sup>OCE</sup> . . . . . 4 cr**  
(PQ: SPE1075 or SPE1825) The course focuses on the development of theatre history from Greeks until the 1850s. Dramatic literature, production methods and key contributors of each period will be discovered and studied through reading, viewing and/or producing plays.

**THE3282 Theatre History after 1850<sup>WCE</sup> . . . . . 4 cr**  
(PQ: ENG2205 or ENG2825) The course focuses on the development of theatre history from the 1850s until today. Dramatic literature, production methods and key contributors of each period will be discovered and studied through reading, viewing and/or producing plays.

**THE3625 Music Theatre Workshop<sup>§</sup> . . . . . 4 cr**  
Designed to provide the singer/actor/dancer training in singing, acting and performance techniques using musical theatre literature research and material, emphasizing the coordination of dialogue, melody, lyric, staging and choreography. As a practical workshop course, students will prepare and present as soloists as well as members of small groups and larger ensembles for class presentation and critique. Additional focus includes the audition process, musical theatre history and repertoire. Finally, the class will participate in a working presentation and culminating showcase performance: Musical Cabaret at the end of the year. **Note:** This course is designated as repeatable and may be repeated one time after the original taking of the course. A \$75 course fee required.

**THE4135 Choreography<sup>§</sup> . . . . . 4 cr**  
(PQ: THE1035) This course is designed to give students the basic knowledge and skills they need to develop an independent creation of choreography and performance of choreographic work. Teaching studio techniques will also be explored. A \$75 course fee required.



**THE4312 Advanced Directing<sup>§</sup>** . . . . . **2 cr**  
**(PQ:** THE3011) Builds on Directing course and allows a workshop environment designed to provide the student-director with a high level of experimentation in solving more advanced problems and styles. Advanced Directing culminates in the direction of a one-act play in the spring festival offered every other year. A \$75 course fee required.

**THE4835 Senior Seminar<sup>§</sup>** . . . . . **2 cr**  
**(PQ:** senior standing) This seminar will serve as a culminating experience for theatre majors. Emphasis placed on Christian worldview in theatre arts and career. A \$75 course fee required.

**THE4995 Theatre Performance Internship** . . . . . **1–4 cr**  
**(PQ:** consent of faculty supervisor and internship registration form) Supervised advanced training in the performance theatre career; paid and unpaid experience; provides transition from educational to professional world in acting. **Note:** See page 25 for note regarding internships.

**THE4997 Dance Performance Internship** . . . . . **1–4 cr**  
**(PQ:** consent of faculty supervisor and internship registration form) Supervised advanced training in a performance dance career; paid and unpaid experience; provides transition from educational to professional world in acting. **Note:** see page 25 for note regarding internships.

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## Youth Studies

**YOU2205 Serving Youth and Emerging Adults\*** . . . . . **2 cr**  
 This course provides an introduction to biblical, philosophical, and theoretical foundations for serving youth and emerging adults. Various models of ministry are presented alongside current research and practice. Students consider their call to serve youth in various contexts alongside trends in social, cultural, and developmental norms. Students create a personal philosophy related to discerning how to effectively navigate discipleship, influence, and formation of youth.

**YOU3206 Contemporary Issues and Interventions with Youth\*** . . . . . **2 cr**  
 This course examines issues that youth encounter related to development, culture, social realities, family dynamics, trauma, and generational differences. The role contemporary issues play in the identity development and day-to-day lives of youth is also addressed alongside strategies for prevention, intervention, and referral.

**YOU3207 Spiritual Lives of Youth\*** . . . . . **2 cr**  
 This course examines healthy youth faith formation from biblical, theoretical, and practical lenses. The role faith formation plays in the overall development of youth is emphasized alongside effective models and typical challenges youth face related to faith formation. An emphasis on the impact of familial, peer, and faith community influence is emphasized.

**YOU3208 Leading Youth and Emerging Adults\*<sup>OCE</sup>** . . . . . **4 cr**  
**(PQ:** SPE1075 or SPE1825, or YOU3206 or YOU3207). This course is designed to prepare students for effective leadership with youth and emerging adults. Attention is given to effective ministry planning, practices, implementation, administration, leadership, and understanding the tasks of leading youth in the local church and parachurch/non-profit organizations. Students articulate their call and direction for leading youth and develop a philosophy of youth ministry to prepare them for leadership with youth and emerging adults.

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