ACCOUNTING (ACCT)

ACCT 221 Financial Accounting (3)
Survey of financial accounting and reporting for all business division majors: accounting terminology and concepts, tax and payroll requirements, internal controls, interpretation of financial statements prepared by business and nonprofit organizations.

ACCT 222 Managerial Accounting (3)
Accounting information used for purposes of planning and control: product costing, breakeven, budgeting, performance evaluation, pricing, decision analysis. Prerequisite: ACCT 221

ACCT 321,322 Intermediate Accounting I, II (3,3)
In-depth study of financial accounting and reporting emphasizing both practice and underlying theory: review of the accounting cycle; control of cash, receivables and bad debts; inventory systems and valuation; payroll accounting; fixed assets; depreciation and amortization; bonds and notes payable; capital stock and retained earnings; earnings per share; income taxes; pensions; leases; cash flow statements; and reporting requirements. Prerequisite: ACCT 222

ACCT 330 Cost Management (3)
In-depth study of the controllership functions in organizations, emphasizing analysis and decision-making. This course focuses on manufacturing and cost accounting: product costing, types and behavior of costs, absorption and variable costing, job shop and batch processing, allocating overhead costs to products, activity-based costing and management, analysis of customer profitability, budget analysis, and allocation of service costs to operations.

ACCT 340 Federal Taxation (3)
A survey of federal taxation of individuals, corporations, and partnerships. Preparation of Form 1040, including taxation of wages, dividends, interest, pensions, capital gains and losses, and business income; deductions and tax credits. Taxation of corporate and partnership income; allocation of partnership income to partners. Prerequisite: ACCT 221

ACCT 370 Accounting Information Systems (3)
An introduction to the common body of knowledge of accounting information systems (AIS). This course emphasizes the user of information systems approach with an emphasis on the resources, events, agents, (REA) model. The student will learn the terminology, reports, documents, procedures, and controls inherent in a modern AIS. Prerequisite: ACCT 322

ACCT 380 Forensic Accounting (3)
A study of occupational fraud and abuse including asset misappropriation, corruption, and fraudulent statements. The course provides an understanding of fraud examination methodology, and sets forth the schemes used by executives, managers, and employees to commit fraud against their organizations. It provides an analysis of various kinds of frauds and includes cases that illustrate and help the student understand each type of fraud. Based on extensive empirical research in forensic accounting, the course aids the student in identifying exposure to loss and appropriate prevention, detection, and investigation approaches.

ACCT 381 Fraud Detection and Deterrence (3)
The opportunity to commit and conceal fraud exists only when there are assets susceptible to misappropriation and a lack of internal controls to prevent or detect fraud. This course will focus on the high-risk fraud environments wherein assets are more vulnerable to misappropriation and fraud environments heightened by either a lack of, or non-functioning of, internal controls. Various fraud investigative methods and the process for communicating an expert report will play an essential role in these studies.

ACCT 382 Legal Elements of Fraud (3)
There are four general elements under common law, all of which must be present for fraud to exist: (1) a material false statement, (2) intent, (3) reliance on the false statement by the victim, and (4) damages. This course takes an in-depth look at each of these components in relation to crimes that fall under the umbrella of fraud. It also emphasizes federal legislation related to fraud
examinations including coverage of laws that preserve the rights of individuals suspected of committing fraud and laws that govern civil prosecutions, the admittance of evidence, and the testimony of expert witnesses. Prerequisites: BUS 140, 363.

**ACCT 429 Auditing and Accounting Ethics (3)**
Introduction to auditing and the professional work of Certified Public Accountants; auditing standards and procedures, evaluation of internal control, legal liability, professional ethics, and auditor opinions. Prerequisite or concurrent: ACCT 322.

**ARTS AND HUMANITIES (HUM)**

**HUM 375 Topics in Film (1)**
This course examines films representing contemporary issues in culture or the arts. Meeting approximately once every three weeks for film viewings and discussions, this course is taught by professors from a variety of majors and incorporates readings on the chosen topic. Topics vary from year to year. Offered spring semester. (Graded Pass/Fail). Pre-requisite: sophomore standing.

**HUM 498 Liberal Arts Interdisciplinary Seminar (3)**
The student will develop a topic of interest which will require cross-disciplinary critical thinking skills and/or research. The course may include presentations by outside speakers, faculty members, and students with particular skills and knowledge within the humanities and arts.

**ATHLETIC TRAINING (ATH)**

**ATH 100 Introduction to Athletic Training (3)**
This course is an introduction to the basic concepts of athletic training within the realm of sports medicine. The course will orient the student to the athletic training knowledge and skills needed for the prevention, evaluation, and treatment of athletic injuries. Offered in the fall semester. This is a pre-professional course and must earn a minimum grade of B- for admission into the Athletic Training Program.

**ATH 200 Orthopedic Injury Pathology (3)**
This course will instruct the student about the mechanisms, development, and progression of injuries sustained during athletic activity. Taping, bandaging, and bracing skill are also developed. Offered in the spring semester. This is a pre-professional course and must earn a minimum grade of B- for admission into the Athletic Training Program. Prerequisite: successful completion of ATH 100.

**ATH 210 General Medical Conditions (3)**
This course will instruct the student about the knowledge and skills needed to recognize, treat, and refer, when appropriate, general medical conditions and disabilities of athletes and others involved in physical activity. Offered in the fall semester. Prerequisite: acceptance into the major.

**ATH 250 Therapeutic Modalities (3)**
Examination of the application and physiological responses to selected therapeutic modalities including cold, heat, electrical, traction and massage to the athletic trainer. This course requires two hours of class time and one and one half hours of laboratory time to provide the student with the opportunity to learn about modalities in athletic training. Offered in the fall semester. Prerequisite: acceptance into the major.

**ATH 260 Acute Care of Athletic Injuries (3)**
Course will prepare the athletic trainer and sports medicine team to manage emergency situations. The course focuses on preparedness of staff, equipment and facilities. Topics include: risk management, blood-borne pathogens, life-threatening conditions and management of head, internal, spinal and musculoskeletal injuries. Students will be expected to recognize unsafe environments and develop critical thinking strategies to act appropriately during emergencies. Course includes certification by the American Heart Association as a Healthcare Provider.
ATH 290, 292 Practicum I and II (1,1)
These courses are for the sophomore level ATP students only. The courses will allow the ATP students to develop clinical skills while working under the supervision of a certified athletic trainer/clinical instructor. The students’ proficiency in the clinical skills will also be evaluated. ATH 290 is offered in the fall and ATH 292 is offered in the spring. Prerequisite: acceptance into the major.

ATH 310, 311, 312 Evaluation of Athletic Injuries I – II - III (3, 3, 3)
These courses will be completed in consecutive semesters. The course will provide students the opportunity to learn about commonly accepted techniques and procedures for clinical evaluation and recognition of the signs and symptoms of athletic injuries. This course requires two hours of class time and one hour of laboratory time each week to instruct the students in the evaluation process. Prerequisites – Acceptance into the major

ATH 390, 392 Practicum III and IV (1,1)
These courses are for the junior level ATP students only. The courses will allow the ATP students to develop clinical skills while working under the supervision of a certified athletic trainer/clinical instructor. The students’ proficiency in the clinical skills will also be evaluated. ATH 390 is offered in the fall and ATH 392 is offered in the spring. Prerequisite: successful completion of Practicum I and II while obtaining a minimum grade of “B-“.

ATH 400 Therapeutic Exercise (3)
Essential components of a comprehensive rehabilitation program including goals, objective, exercise selection, methods of evaluating and recording progress and development of criteria for progression and return to competition. This course requires two hours of class time and one and one half hours of laboratory time each week to instruct students in the rehabilitation process. Offered in the spring semester. Prerequisite: acceptance into the major.

ATH 450 Kinesio Taping Certification (2)
The Kinesio Taping® Method fosters the body’s natural ability to heal itself by activating neurological and circulatory systems to correct biomechanical dysfunction, relieving pain, and other symptoms. Participants will learn the fundamental concepts of Kinesio Taping® as well as advanced corrective techniques for mechanical, fascial, tendon/ligament, and lymphatic problems. In KT3, participants will learn Clinical Application Techniques. This non-invasive, easy-to-use modality is preferred by Physical & Occupational Therapists and other health professionals worldwide. Upon completion of this three-day course, participants will be eligible for Certified Kinesio Taping® Practitioner (CKTP) status. Prerequisite: BIO 229 and ESCI 290 or ATH 310, 311 and 312.

ATH 481 Organization and Administration of Health, Physical Education and Sport (3)
This course will instruct the student in the knowledge and skills needed to properly administrate the policies, facilities, and equipment required to offer athletic training services. The first five weeks of the course will discuss concepts pertaining to everyone in the Exercise Science department. The remaining ten weeks will be spent with a certified athletic trainer discussing those concepts pertaining specifically to athletic training. Offered in the fall semester.

ATH 485 NATA BOC Test Prep (3)
This course will prepare students to sit for the National Athletic Trainers Association Board of Certification Exam (NATABOC Exam). This course will discuss study strategies, the examination format, review the content areas of the NATA Educational Competencies, and discuss the process of licensure in the different states. Prerequisites: Senior standing within the Defiance College Athletic Training Program. Appropriate progression of coursework is required.

ATH 490, 492 Practicum V and VI (1,1)
These courses are for the senior level ATEP students only. The courses will allow the ATEP students to develop clinical skills while working under the supervision of a certified athletic trainer/clinical instructor in on and off-campus settings. The students’ proficiency in the clinical skills will also be evaluated. ATH490 is offered in the fall and ATH492 is offered in the spring. Prerequisites: successful completion of Practicum I-IV while obtaining a minimum grade of “B-“.

AUTISM STUDIES (AUT)
AUT 110 Introduction to Autism Spectrum Disorder (3)
This course will focus on the history, symptoms, diagnosis, behavioral assessment, and treatment of autism spectrum disorder (ASD). Issues common to ASD as they apply to each stage of the lifespan will be discussed. Students will complete assignments that directly link the material they learn in the course to their respective fields of study.

AUT 210 Applied Behavior Analysis for Autism Spectrum Disorder (3)
This course will provide an overview of the basic principles of applied behavior analysis, behavior measurement, and evidence based interventions for autism spectrum disorders. Critical evaluation of interventions for ASD, professional judgment, and the ethics of intervention will be emphasized. The involvement of the individual, family, and other stakeholders in selecting interventions and intervention targets will be discussed. Prerequisites: AUT 110

AUT 250 Families and Communities (3)
This course will provide an understanding of the impact of a person with autism spectrum disorder (ASD) on the family system. Family strengths, resources, and stressors will be examined in the context of the larger community. Students will learn about the professionals that make up the interdisciplinary teams that serve individuals with ASD and their families. Additional topics include public policy and community resources. Students will work as a class to plan a community outreach event that will be held at the end of the semester. Prerequisites: AUT 110

AUT 390 Behavior Intervention Practicum (3)
Students will apply their knowledge and skills in a supervised setting which provides services to persons with autism and/or other intellectual and developmental disabilities. Through observation and consultation with professional staff, students will receive 120 hours of experience with direct service provision and enhanced training on effective assessment, planning and intervention strategies. (Graded Pass/Fail) Prerequisites: AUT 110, 210.

BUSINESS ADMINISTRATION (BUS)

BUS 140 Foundations of Business (3)
This course is an introductory course in business and provides a general overview of the business environment and the practical vocabulary needed in actual work situations. This course offers information and career suggestions on functional business areas such as accounting, information systems, management, marketing, finance and economics. Required for all freshman business majors and recommended for those students who are undecided. (Course may be waived by advisor for transfer and adult students).

BUS 212 Business Statistics (3)
Statistical measures and analysis, probability, sampling, hypothesis testing, regression, and correlation applied to business decision-making.

BUS 214 Quantitative Business Analysis using Spreadsheets (3)
This course covers mathematical techniques applied to management and business decision-making. Concepts and application of time-value-of-money, matrix algebra, functions, graphs, linear programming, business decision models and other math models are discussed. Problem-solving and data analysis will be completed using spreadsheets. The course will combine lecture and laboratory components. Prerequisite: BUS 212.

BUS 228 Business Communication (3)
A study of the principles of effective written communication and their application to business situations. A comprehensive study of business writing including letters, memos, interoffice correspondence and complete analytical report writings. A study of technology and the use of electronic devices to aid in business communication will be completed. Prerequisite: CORE 125.
BUS 260 Business Ethics (3)
This course examines corporate citizenship and social responsibility in a business context. It is designed to broaden and deepen a student’s understanding of ethical issues that businesses need to consider as part of responsible decision-making. Analysis of stakeholders integrates the external and internal factors such as political factors, global forces, employee issues, etc.

BUS 350 Business Finance (3)
Financial aspects of business management: financial ratios, financial forecasting and budgeting, breakeven analysis and operations leverage, working capital management, cash and credit management, short-term and long-term sources of financing, stocks and bonds, capital budgeting, lease financing, and dividend policy. Prerequisite: ACCT 222

BUS 363 Business Law and Legal Process (3)
Introduction to commercial law: torts, contracts, sales, negotiable instruments, agency, patents, copyrights, and bankruptcy. Prerequisite: junior standing.

BUS 365 International Business (3)
Introduction to the field of International Business. This course examines the broad perspective of international business related to the internal and external forces impacting global operations of domestic and multinational businesses.

BUS 397 Management Internship (3)
Students work at no pay for local employers in a management trainee capacity; designed mainly for students without previous full-time experience. (Graded Pass/Fail) Prerequisites: junior standing and major in Business Administration department.

BUS 490 Business Capstone Seminar (3)
A senior capstone course which applies what has been learned in previous courses to realistic business situations. Business strategies, policy-making, and management philosophy are developed by means of case studies of actual companies. Prerequisites: senior standing and completion of substantially the entire business Core.

BUS 194, 294, 394, 494 Cooperative Education (1-8)
Cooperative Education is a supervised work experience related to a student’s major or field of interest. A student should be employed full-time with pay and should not be enrolled in other courses except by special permission of the Program Director of Business. A student may earn up to 16 credits upon completion of two, three-month summer terms (four credits each) and one six-month internship (eight credits). Other work arrangements must be approved by the coordinator of cooperative education and the Registrar. (Graded Pass/Fail)

BUS 199, 299, 399, 499 Independent Research (1-3)
Independent research may be either project or research-oriented. Such topics are not a normal part of the curriculum and serve two needs: first, the student investigates an area of special interest; and second, the student works closely with a faculty member in planning, executing and evaluating the program.

BIOLOGY (BIO)

BIO 110 Introduction to Biology (4)
A study of life as an evolving system and the way biologists investigate the various aspects of such a multidimensional, dynamic system. Particular emphasis is placed on the nature and function of man as such a system. Credit does not apply to the Natural Science majors.

BIO 113 Environment Around Us (4)
This course examines the characteristics of communities, ecosystems, and landscapes, the ways in which they change with time, and the impact of human activities on those changes. Included will be the study of the science behind current issues such as resource management, pollution, and global climate change, etc. In this course students will be introduced to the basic principles of ecology and
environmental science, investigate how these affect the Earth’s capacity to sustain life, and be able to apply these principles to understanding the environmental consequences of human activities.

**BIO 120 Principles of Biology I (4)**
The primary goal of the course is to provide natural science majors with a sound basis in basic biological concepts that will serve them well in their academic track that lies ahead. It will cover the following topics: structure and function of macromolecules, cellular respiration, communication and cycle; photosynthesis; Mendelian genetics, inheritance, and DNA structure and function; and evolution, speciation, phylogenetics, and sysmatics. To maximize success in this course, successful completion of high school biology and chemistry are recommended. There is a 3-hour laboratory.

**BIO 125 Modern Genetics (4)**
The fundamentals of classical genetics and the basic principles of human genetics are presented for the non-science major. Genetic engineering in bacteria, domestic plants and animals, and in human medicine will be discussed with the ethical issues raised by this new technology. Credit does not apply to the Natural Science majors.

**BIO 129 Principles of Biology II (4)**
This course is intended for students majoring in a natural science and is the continuation of Biology 120. The course deals mainly with the organismal and supra-organismal levels of biological organization. Evolution will be the unifying theme. The course will cover the following topics: origin of life, prokaryotic and eukaryotic diversity; plant evolution and diversity; fungi, invertebrate and vertebrate diversity and evolution; plant and animal form and function; circulation and gas exchange, homeostasis, reproduction and development, nervous system and special senses; and behavior, population and community ecology and conservation biology. There is a 3-hour laboratory. **Prerequisites: BIO 120, minimum grade of “C” required.**

**BIO 190 Medical Terminology (2)**
Through the study of medical terminology the student will be introduced to the language of medicine. Students will gain an understanding of basic elements, rules of building and analyzing medical words, and medical terms associated with the body as a whole. Utilizing a systems approach, the student will define, interpret, and pronounce medical terms relating to structure and function, pathology, diagnosis, clinical procedures, oncology, and pharmacology. The student will be able to recognize, spell, pronounce and define medical words by combining prefixes, suffixes, and roots. In addition to medical terms, common abbreviations applicable to each system will be learned. This course does not satisfy the biological science general education requirement.

**BIO 195 Biological Science (4)**
This course provides a basic understanding of biological concepts. It will cover cell function, plants, animals, genetics, gene technology, evolution and a description of the human body systems. Current issues in science will also be covered. The laboratory component will explore the scientific method and develop an understanding of how experimentation answers questions in biology.

**BIO 229 Essentials of Human Anatomy and Physiology (4)**
This one-semester lecture and lab course will provide the essential knowledge required to understand human anatomy and various physiological processes. Major topics include cell structure and function, tissues, organ systems, homeostasis, and disease. The organ systems covered are: integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive.

**BIO 235, 236 Human Anatomy and Physiology I, II (4,4)**
A systematic approach to the structure and function of the human body. This two course sequence will cover the structure of the human body and a systems approach to the functions, homeostatic mechanisms, and the interrelationships of human organ systems. **BIO 235 must be taken first with grade of “C” or higher.**

**BIO 250 Field Zoology (4)**
Identification and ecological relationships of the fauna of Northwestern Ohio, and methods of designing research projects, collecting and analyzing data, to monitor these populations. Offered in alternate years. **Prerequisite: BIO 129 with grade of “C” or higher.**
BIO 270 Field Botany (4)
The study of plant communities and ecosystems in the field. Taxonomy, collection, and preservation for the College herbarium, and additional laboratory exercises using keys are included. Offered in alternate years. Prerequisite: BIO 129 with grade of “C” or higher.

BIO 320 Ecology (4)
Principles of ecology including the organization, interrelationships, and dynamics of populations, communities, and ecosystems. Local terrestrial and aquatic communities will be studied in the field and laboratory. Offered in alternate years. Prerequisite: BIO 129 with grade of “C” or higher.

BIO 338 Histology (4)
Examines the microscopic anatomy of major cell types and tissues of the human body. Their form and function will be examined as observed with slides of human and animal cells and tissues. Relationships of cell types and tissues structures to physiological functions will also be studied. Offered in alternate years. Prerequisite: BIO 129 with grade of “C” or higher.

BIO 350 Fisheries and Wildlife Management (4)
Foundational and applied aspects of the management of fisheries and wildlife are covered within this course. Application of ecological principles to fisheries and wildlife management, technical aspects of fisheries and wildlife management, and fisheries and wildlife legislation, organizations, and agencies are also covered. Offered in spring of alternate years. Prerequisite: BIO 129 with grade of “C” or higher.

BIO 357 Comparative Vertebrate Anatomy (4)
The phylogenetic relationships of vertebrates, living and extinct, as revealed by their morphology. Offered in alternate years. Prerequisite: BIO 129 with grade of “C” or higher.

BIO 358 Microbiology (4)
Morphology, physiology, genetics and taxonomy of microorganisms affecting humans and their environment. Culture methods and laboratory techniques for studying bacteria will be introduced. Offered in alternate years. Prerequisites: BIO 129 and CHEM 124 with grades of “C” or higher.

BIO 367 Vertebrate Physiology (4)
Physiology is the study of the physical and chemical processes underlying biological function. The focus of the course will be on the physiology of vertebrates, primarily mammals. Offered alternate years. Prerequisite: BIO 357 with a grade of “C” or higher.

BIO 420 Restoration Ecology I (4)
An introduction to the new science of restoration ecology. The most recent research regarding the rebuilding of complete ecosystems will be reviewed and basic ecological restoration principles studied. Laboratories will include using applied research techniques at the Thoreau Wildlife Sanctuary located near Defiance College. Offered in alternate years. Prerequisite or concurrent: BIO 320 with a grade of “C” or higher.

BIO 421 Restoration Ecology II (4)
Advanced principles and techniques of restoring damaged or destroyed ecosystems will be studied. Emphasis will be placed upon restoration of both terrestrial and aquatic ecosystems. Extensive field work will include hands on experience at various ecological restoration sites. Offered in alternate years. Prerequisite: BIO 420 with a grade of “C” or higher.

BIO 431 Molecular Biology (4)
An in depth study of modern laboratory techniques used in recombinant DNA technology. Emphasis is placed on cloning strategies and nucleic acid detection schemes. Laboratory 3 hours. Offered alternate years, spring semester. Prerequisite: CHEM 234 with a grade of “C” or higher.
BIO 462 Immunology (4)
Study of the human immune system. Includes innate and adaptive immunity, vaccination and immunity, autoimmune disease, hypersensitivity, and immunodeficiency. Immunological laboratory methods and cell culture techniques will be introduced. Offered in alternate years. Prerequisites: BIO 129 and CHEM 124 with grades of “C” or higher.

BIO 480 Genetics (4)
Mechanisms of inheritance in bacteria, plants, and animals. Emphasis on genetic inheritance in man. The current DNA technology and the ethical concerns surrounding these methods will be discussed. Laboratory will introduce genetic crosses, mitosis and meiosis and current DNA techniques. Offered in alternate years. Prerequisites: BIO 120, 129, and CHEM 124.

BIO 481 Pathogenic Microbiology (4)
The etiology of human pathogens. Emphasis on bacterial and viral diseases, and host-parasite relationships. Laboratory methods for identifying and isolating pathogenic organisms will be introduced. Offered in alternate years. Prerequisites: BIO 358 and 129 with grade of “C” or higher.

BIO 490 Honors Anatomy and Physiology (1-3)
An advanced human anatomy and physiology course designed for upper level students who have demonstrated the ability and desire to learn these subjects in lower level classes. The course uses a number of excellent teaching modalities including human cadaver as the primary teaching instrument. Enrollment is limited to a maximum of four students and the final selection is based upon invitation by the course professor with final approval by the Chairperson of the Division of Natural Science, Applied Science, and Mathematics Division. Course may be repeated for up to six credit hours. Prerequisites: BIO 236.

CHEMISTRY (CHEM)

CHEM 103, 104 Chemistry Skills (1)
This course is intended to compliment and provide supplemental instruction for the principles and techniques presented in the general chemistry sequence. An emphasis is placed on the application of such principles in problem solving, as well as developing problem solving and critical thinking skills. Co-requisite: CHEM 103 should be taken along with CHEM 123 and CHEM 104 should be taken with CHEM 124.

CHEM 113 Chemistry Around Us (4)
This course and corresponding lab will facilitate a better understanding of the world in which we live through chemistry, suitable for students pursuing studies outside of the sciences. An exploration of the basic principles of chemistry and the scientific method will unravel the mysteries behind topics such as nuclear energy, alternative fuels, nutrition, biochemistry and pharmacology. Through observation, experimentation, and application students will gain an appreciation for how atoms and molecules, the basis for all matter interact, cause reactions and impact their everyday lives.

CHEM 123, 124 General Chemistry I and II (4,4)
A two-semester course dealing with the fundamental principles of chemistry, including chemical stoichiometry; understanding and balancing the major reaction types, the properties of gases (emphasizing gas laws), liquids and solids; solutions; atomic and molecular structure, the periodic table, Quantum understanding of atomic and molecular systems, reaction kinetics, chemical equilibria; an introduction to thermodynamics, discussion of the chemical properties of selected elements and the laws and rules that presently form our understanding of basic chemistry. The course emphasizes scientific problem-solving skills as well as those topics which are essential for further work in chemistry and for professional school. The laboratory is designed to support and illustrate chemical concepts studied in the lecture portion of the course, as well as to introduce important laboratory techniques and encourage analytical thinking. The laboratory work emphasizes physio-chemical measurements, basic quantitative analysis and synthesis. In order to maximize success in this two-semester course, high school chemistry, physics, and a strong background in mathematics are recommended. Prerequisite for CHEM 123: Acceptable Math and Science ACT scores are set by Science and Math Division. Prerequisite for CHEM 124: CHEM 123 with a grade of “C” or higher.

CHEM 233, 234 Organic Chemistry I and II (4,4)
A two-semester progressive study of structure, property, spectroscopy and reactivity of organic compounds. Students will learn nomenclature, covalent and ionic bonding, reaction mechanisms, functional groups with special emphasis on mono and polyfunctional compounds, stereochemistry, interactions and laws and rules governing aromatic reactions. Prerequisites for CHEM 233: CHEM 124 with a grade of “C” or higher. Prerequisite for CHEM 234: CHEM 233 with a grade of “C” or higher.

CHEM 233L, 234L Organic Chemistry I and II lab (1,1)
Required laboratory components for Organic Chemistry I and II.

CHEM 368 Biochemistry I (4)
An introduction to the biochemical principles including: macromolecules (proteins, lipids, carbohydrates and nucleic acids), enzyme structure, function and regulation, energy transformations, and carbohydrate, protein, and lipid metabolism. Offered in alternate years. Prerequisites: CHEM 234 with a grade of “C” or higher and BIO 129.

CHEM 369 Biochemistry II (4)
An introduction to the biochemistry of the cell including: nucleic acids, nucleic acid metabolism, gene regulation, membranes, membrane transport, organelle biology, signal transaction and cancer biology. Emphasis on theoretical and practical use of molecular biological research techniques. Offered in alternate years. Prerequisite: CHEM 368 with a grade of “C” or higher.

CHEM 455 Quantitative Analysis (4)
An intensive study of four places to the right of the decimal including precise laboratory methods; infra-red analysis, chromatography, volumetric, gravimetric methods, acid-base theory and equilibrium reactions. Special emphasis is placed on data collection and statistical analysis. The rules and laws governing science are explored and explained. Prerequisites: CHEM 124 with a grade of “C” or higher.

COMMUNICATION ARTS (COMM)

COMM 123 Media Writing (3)
An introduction to the process of writing for the mass media. Students will learn to report, write, and edit stories for print and broadcast media. The course also emphasizes specific skills in interviewing and basic principles of communication law. Prerequisite: CORE 125.

COMM 130 Introduction to Film (3)
This course provides an introduction to the history and techniques of film and includes the study of the purposes of film and influence of film upon varied audiences. Students will learn to appreciate film as an aesthetic medium and develop strategies to comprehend, interpret, and evaluate contemporary motion pictures.

COMM 140 Introduction to Communication and Media Studies (3)
Examination of the theoretical developments in communication and media studies. This course explains the many dimensions of the communication discipline and the implication communication has on the human condition. The course also provides the foundational knowledge of what it means to be a major in the field. Offered alternate years. Prerequisite: CORE 125.

COMM 220 Philosophy of Communication (3)
Explores the epistemological, ontological, and axiological philosophical foundations of communication research. The course examines the varying approaches to research in communication and why the major takes a critical/rhetorical approach. Emphasis will be placed on developing the skills necessary to read, conduct, and write academic research. Offered alternate years. Prerequisite: CORE 125.

COMM 230 Communication Law and Ethics (3)
Students will examine topics such as copyright laws, the first amendment, collective intelligence, and social and cultural norms. Emphasis will be placed on understanding and critiquing the legal and ethical implications of communication in different contexts. Offered in alternate years.

COMM 240 Interactive Media (3)
Focus is placed on the new technological and theoretical developments in media. Students will explore how the Internet, social media, mobile applications, and other trends in interactive media impact them personally as well as the influence interactive media has on cultures, societies, and globalization. Offered in Spring.

COMM 245 Culture and Communication (3)
What is culture? What does it mean to say that communication creates culture, or vice versa? This course explores these questions, focusing particularly on the ways in which our world is created, organized, and transformed through communication. Areas of study will include but are not limited to popular culture, business culture, and political culture. Students will investigate the impact of culture on notions of race, sexuality, gender, and class in both national and global contexts. They will engage a variety of texts which examine how humans can understand and contribute to the production of culture.

COMM 250 Introduction to Rhetoric (3)
This course offers an introduction to rhetorical theory and rhetorical criticism. The history of rhetoric is examined, including its shifting purpose, definition, and application. Students are also given an introduction to textual analysis for the purposes of studying and producing rhetoric. Offered in alternate years. Prerequisite: CORE 125.

COMM 310 Convergent Journalism (3)
This course tackles the convergent nature of the media in the 21st century by exploring the ways news evolves as it builds from multiple sources. Focus is also placed on media production through backpack journalism—the process of using minimal equipment to produce and distribute media content. Offered alternate years. Prerequisite: COMM 123.

COMM 320 Media Literacy and Society (3)
Media literacy is concerned with understanding the role media plays in equipping citizens for living. Students will critique how media creates culture as well as reflects and shapes society. The course will also help students learn how to use the media to influence perceptions in society through critique of issues such as education, government, and everyday struggles over power. Offered in alternate years. Prerequisite: CORE 225

COMM 330 Audio and Video Production (3)
Fundamentals of audio and video equipment operation and production principles. Includes the basics of writing, producing and directing video; pre-production, production and editing techniques. Offered in fall of odd alternate years.

COMM 340 Relational and Interpersonal Communication (3)
The course involves theoretical backgrounds as well as practical applications. It is designed to provide students an improved awareness and understanding of themselves as communicators. Emphasis will be placed on the influence of culture and society on how relationships are formed and maintained in a variety of contexts. Offered in alternate years.

COMM 360 Topics in Film Studies (3)
Going beyond the foundational knowledge provide in Intro to Film, this course delves into a specific aspect of film theory. Topics vary each offering and may include but are not limited to film history, auteur theory, adaptations, screenwriting, and film genres. See the Course Schedule for topics choices. Course may be repeated if topic is different from that completed. A film lab accompanies this course. Offered in Fall.

COMM 365 Comedy, Conflict, and Critique (3)
This course uses texts that would be described as comedic or humorous to begin an investigation of how the term comedy is used in rhetorical criticism, specifically as a means to challenge the prevailing way of seeing the world as good versus evil. The class will study the works of Kenneth Burke and related scholars to explore how comedy in communication can serve to help people accept or reject prevailing perspectives. Comedic methods of critique such as irony, satire, and parody are emphasized for their ability to produce commentary on social conflict and share judgment.
COMM 370 Topics in Rhetoric and Media (3)
This course is a study of the role of rhetoric and/or media in culture and society. Emphasis is placed on finding connections between the theories associated with the topic of study and the lived experiences of the students. Major assignments will vary but will often include a project that attempts to foster active citizenship. Topics vary from section to section. See the Course Schedule for topics choices. Course may be repeated if topic is different from that completed. Prerequisite: CORE 225

COMM 380 Rhetorical Criticism (3)
A study of the philosophy and methods of rhetorical criticism. Students will explore the transition from neo-Aristotelian criticism to the prevalent methods of today. This course prepares students to read, analyze, and conduct rhetorical criticism as it applies to a diverse range of texts. Offered in Fall.

COMM 385 Free Speech and Democracy (3)
This course explores democratic deliberation through an examination of relevant theories, doctrines, and arguments about freedom of speech. Students will study legal and scholarly interpretations of the First Amendment alongside rhetorical theories of democracy and case studies in censorship. Themes discussed will include (but are not limited to) freedom of speech in war time, censorship of art, and dissent as a democratic value. The course functions to prepare students for active, engaged participation in democratic life.

COMM 390 Junior Capstone Preparation (1)
The goal of this course is to get junior level students prepared for the senior capstone course. Students will explore the options available for communication majors after graduation and plan a paper or project suitable for their post-college ambitions. Offered in Spring.

COMM 391 / 491 Internship (1-3)
This is an on-the-job learning experience related to the study of communication. An internship is supervised by both a college faculty sponsor and a qualified person in the field where the student is working as an intern. No salary is received for an internship. (Graded Pass/Fail)

COMM 400 Advanced Topics in Communication Research (3)
This course asks students to become critics of communication through the study of a specific communication problem. Students in this course develop their research and writing skills as they delve into the selected topic. Emphasis is placed on conducting and producing research that will make a contribution to the understanding of communication’s role in society. Topics vary from section to section. See the Course Schedule for topics choices. Course may be repeated if topic is different from that completed.

COMM 499 Seminar/Capstone (3)
This senior capstone experience involves independent research that may be either a project or research oriented. Seniors will work closely with a communication arts faculty member in planning, executing, and evaluating the project.

CORE CURRICULUM (CORE)

CORE 100 College Engagement Seminar (2)
Designed for first year students to successfully engage in college life, including both the academic and social arenas. This course focuses on exercising academic skills, fostering social competencies, and understanding and accepting diversity as a foundation for developing the student’s engagement in the community and the world.

CORE 110 World Issues (3)
This course introduces students to the philosophy of an integrated liberal arts education through the focused, critical investigation of an impactful global issue. Throughout the semester students will study this issue through a variety of texts, ranging from social discourse to scholarly articles. Using approaches that include the exercise of curiosity about the world, self-reflection, analytical reasoning, and communication practices, students will interrogate this world issue. They will work toward a greater understanding of their roles in perceiving and even shaping perception about issues locally as well as globally.
CORE 115 Foundations of Academic Inquiry (3)
This course focuses on major approaches to research and the skills necessary to conduct research. Students will learn types of sources, how to acquire and judge sources, and how to use sources to prepare and support research. These skills will be practiced as part of the introduction to deductive reasoning methods, inductive reasoning methods, and the logic of each involved in valid hypothesis generation, support, or refutation. Students will work with skills and foundations in the context of major naturalistic, social scientific, interpretivist, and critical philosophies of research.

CORE 120 Introduction to Human Communication (3)
This course addresses the fundamentals of relational and public communication. Students will participate in informative, group, and persuasive public presentations as well as interpersonal engagement activities. Focus will be on the way communication needs shift in varying contexts and the significant role of the audience in communication exchanges.

CORE 125 Composition I (3)
This is a writing class that engages students in the study of a core-curriculum theme while focusing on the writing, reading, and thinking skills needed for college-level written communication. Writing is taught as a self-reflective process that involves the development of analysis, synthesis, audience-awareness, paraphrase, and summary skills. The self-reflective process integrates these skills into the drafting, revising, and editing of expository, critique, and argument essays focused on the thematic content and attending to various writing situations and audiences.

CORE 215 Critical Reasoning (3)
This course prepares students to approach understanding from a critical analysis perspective. Advanced approaches to argumentation concerned with ethics, logic, and reasoning are emphasized throughout the semester. Through discussions, readings, and activities students will develop self-aware perspectives that reflect understanding of the rigors of reasoning. Prerequisite: CORE 115

CORE 225 Composition II (3)
This is a writing-and-research-intensive interdisciplinary theme course that uses a twofold approach. First are activities to deepen analysis, synthesis, audience-awareness, paraphrase, and summary skills and to integrate them fully into expository, critique, and argument essay writing. Second is the self-aware, purposeful use of research to develop thematic understanding through writing, as well as to exercise the intellectual curiosity needed to understand our diverse world and communicate well in it. Prerequisite: CORE 125.

CORE 220 Inquiry in Science (4)
This course allows for the exploration of the scientific method, the development of hypotheses, an understanding of the physical universe, an understanding of the diversity of life, and the mechanisms that organisms use to adapt to their environments. A laboratory component is required.

CORE 210 Presenting the Diverse Self (3)
This course is designed to help students examine critically the ways in which they would position themselves in the larger public world and to develop culturally sensitive self-presentation skills for a variety of real-world situations. It is designed to help students apply their critical and creative thinking skills in four strategic contexts: mediated, such as engaging in a political discussion through social networking or creating a blog to present a digital resume; cultural, such as proper etiquette at the theatre or the choice of music in the office; interpersonal, such as interviewing for a job or addressing a relationship conflict; and global, such as dining in a culturally diverse city or presenting a business plan to an international audience. In-class readings, discussions, and activities will be complemented by required participation in co-curricular events that enhance exposure to these four contexts.

CORE 310 Integrated World Issues (3)
Using the knowledge, philosophies, and skills gained throughout the core, students will approach a world issue from a perspective that matches their intentional, self-reflective approach to understanding the world. Students will complete projects, put out for the world to see, that exemplify what they can entrepreneurially contribute to the public discourse or the good of the community beyond the classroom.
CRIMINAL JUSTICE (CRJU)

CRJU 111 Introduction to Criminal Justice (3)
The philosophical, historical and operational aspects of criminal justice in present society. The administration and definition of scope of interest of criminal justice agencies and how they interrelate.

CRJU 127 Introduction to Juvenile Delinquency (3)
The philosophical, historical and operational aspects of justice in juvenile law enforcement and courts.

CRJU 155 Criminal Law (3)
This course is focused upon the study of elements and proof in crimes of frequent concern, procedural consideration of criminal law, and rules of law. Prerequisite: CRJU 111.

CRJU 217 Criminal Investigation (3)
Introduction to criminal investigation procedures including theory of investigation, conduct at crime scene, collection and preservation of physical evidence, introduction to related forensic science, and follow-up legal investigation. Prerequisite: CRJU 155.

CRJU 221 Criminal Evidence and Procedure (3)

CRJU 223 Introduction to Corrections (3)
An introduction to the various aspects of correctional systems and their historical development and an examination of societal influences and reactions to treatment of offenders and victims.

CRJU 352 Police-Community Relations (3)
The professional concept in policing and its implications; changing nature of social controls; community and police allocation of resources to deal with problems. Offered in alternate years. Prerequisite: CRJU 111.

CRJU 353 Institutional Corrections (3)
Historical examination and development of correctional institutions and jails. An examination of various types of current jails and penal institutions and their functions. The course will include a discussion of past and present issues of correctional institutions, a brief look at international approaches and future trends. Offered in alternate years. Prerequisites: CRJU 111, 223 and SOC 120.

CRJU 354 Non-institutional Corrections (3)
Examination of all non-institutional correction programs including pre-trial diversion, probation, parole, community-based correction programs, innovative approaches, and correctional counseling. A discussion of problems, concerns, and trends. Offered in alternate years. Prerequisites: CRJU 111, 223 and SOC 120.

CRJU 355 Ethical Issues in Criminal Justice (3)
This course is designed to identify and examine ethical issues among practitioners and students in the criminal justice fields. Such issues may include the discretionary power of arrest, the use of deadly force, the decision to prosecute, participation in plea bargaining, representation of the guilty, and the imposition of punishment, to name a few. The course will promote inquiry that combines ethical analysis with a practical awareness of the realities of the criminal justice system. Prerequisite: junior or senior standing.

CRJU 361 Delinquency Prevention and Control (3)
A critical evaluation of delinquency causation theories and the social structures and their interrelationships with delinquency prevention and control. Prerequisites: CRJU 111 and SOC 120.
CRJU 373 Civil Liability (3)
Study of the general concepts of state tort law, negligence, search and seizure violations, deadly force, and jail management. The student will also examine the basis of civil liability grounded with federal law under 42 U.S.C. ~1983. The concept of liability will then be studied as it pertains to criminal justice supervisors, including a discussion of defenses and policy decisions involving civil liability. Offered in alternate years.

CRJU 413 Criminal Justice Organization and Administration (3)
Principles of organization and management as applied primarily to law enforcement and correctional agencies. Practical and theoretical aspects of management, such as organization, decision making, human relations, and values. Prerequisite: CRJU 217.

CRJU 451 Juvenile Probate System (3)
Examines the legal principles and procedures of the juvenile and probate courts as it relates to the criminal justice and educational systems. The basic structure and operation of the American legal system is considered along with legal provisions related to: crime and delinquency; child welfare; education; family; mental health; guardianships, and the alternatives to these procedures. Offered in alternate years.

CRJU 471 Criminology (3)
An analysis of the sociocultural factors leading to crime with an emphasis on crime causation theories and methods used to prevent and control criminal behavior. Offered in alternate years. Prerequisites: CRJU 111 and SOC 120.

CRJU 472 Social Deviance (3)
An analysis of the sociocultural factors leading to deviant behavior with an emphasis on deviance causation theories and prevention, control, and treatment of deviant behavior.

CRJU 474 Terrorism (3)
This course provides a basic introduction to terrorism, which will include definitions, criminological political and religious background, the organization and financing of terrorism and the media. Examples will be provided that will enable students to understand how terrorism rises and how it functions. It will also give an essential historical (pre 1908) background on the phenomenon of terrorism and the roots of contemporary conflicts, will include detailed descriptions of recent and contemporary conflicts shaping the world’s stage and will present theoretical and concrete information about homeland security organizations. The history will also include the beginning of modern terrorism, the Irish troubles, Latin America and beyond, the Middle East, and terrorism today, including Israel/Palestine, Al Qaeda, Persian Gulf, Africa, Southeast Asia, Europe, Russia and domestic terrorism. Students learn how terrorism has been used as a political tool throughout history, and how terrorism has influenced the course of world events. Emphasis is on the political dimension of terrorism. Prerequisite: Student should be junior or senior standing.

CRJU 478 Criminal Justice Seminar (3)
Senior capstone experience. Completion of a major paper and a presentation of this paper to a professional panel on an approved topic. Discussion and evaluation of policies and practices in the field with accepted theories and procedures. Prerequisites: CRJU 217, 223 and 413.

CRJU 495 Special Topics
Although frequently presented in a manner comparable to regularly listed courses, the subject matter of special topics is often of a more timely nature, or for some other reason, is not a regular part of the curriculum. Special topics are usually designed by a faculty member and are listed with the other courses in the schedule.

CRJU 194, 294, 394, 494 Cooperative Education
A cooperative Education course is a supervised work experience related to a student’s major or field of interest. A student should be employed full-time or part-time with pay. A student must complete 120 hours of work for each academic credit hour and may earn up to 16 credits. Other work arrangements must be approved by the coordinator of cooperative education and the Registrar. (Graded Pass/Fail)
CRJU 247 Field Experience (Lower-Level) (3)
A basic exposure to a particular criminal justice agency through observation and limited participation. This course will provide an understanding of how this agency fits into the entire criminal justice system and the local community. (Graded Pass/Fail)

CRJU 497 Field Experience (Upper-Level) (3-9)
This level meets the same basic objectives as the lower-level, as well as working directly with offenders under supervision when possible. (Graded Pass/Fail)

CRJU 199, 299, 399, 499 Independent Research
Independent research may be either project or research-oriented. Such topics are not a normal part of the curriculum and serve two needs: first, the student investigates an area of special interest; and second, the student works closely with a faculty member in planning, executing and evaluating the program.

DIGITAL FORENSIC SCIENCE (DFS)

DFS 105 CompTIA A+ Computer Essentials Exam Preparation (2+2) (3)
This is the first of two courses intended to prepare students to earn the CompTIA A+ 2009 certification: a prerequisite to enter the Digital Forensic Science major of study. In this course, the student learns the basics of computer hardware and operating systems, covering skills such as installation, building, upgrading, repairing, configuring, troubleshooting, and preventive maintenance. At the end of the course, the student should be prepared to complete the CompTIA A+ Essentials Exam (220-701), validating the basic skills needed by an entry-level service technician. (2 hours lecture, 2 hours lab).

DFS 106 CompTIA A+ Practical Application (3)
This is the second of two courses intended to prepare students to earn the CompTIA A+ 2009 certification: a prerequisite to enter the Digital Forensic Science major of study. In this course, the student continues to develop and refine abilities in installation, building, repairing, configuration, troubleshooting, optimizing, diagnosing and preventive maintenance, preparing for such activities in an enterprise environment or interacting with customers. At the end of the course, the student should be prepared to complete the CompTIA A+ Practical Application Exam (220-702), earning the 2009 A+ certification. (2 hours lecture, 2 hours lab) Prerequisite: DFS 105 with grade of “C” or better.

DFS 110 Introduction to Computer and Digital Forensics (3)
This course will provide students with a working foundation of the types of computer and electronic crimes being committed today. This course will identify techniques used by offenders to compromise computer systems as well as vulnerabilities of computer and electronic systems. Emphasis will be placed on criminal theory/behavior of this type of offender.

DFS 205 Computer Security Fundamentals (3)
This course will introduce students to a variety of commonly used computer software systems and their respective security concerns. Specific areas to be studied include wireless technology, PDAs, remote computer access, file transfer mechanisms, networking tools, and various backup devices. Prerequisites: “A+ certification” or completion of DFS 105 and DFS 106 with a grade of “C” or higher in both courses.

DFS 210 Operating Systems (3)
This course provides an overview of operating systems with an emphasis on widely used operating systems and how operating systems manage memory and file allocation. Prerequisites: “A+ certification” or completion of DFS 105 and DFS 106 with a grade of “C” or higher in both courses.

DFS 213 Data Storage Foundations (3)
This course addresses the implementation details of computer file system storage. Topics will include media layout (DOS/GPT partitioning, HPA/DCO, RAID, CHS/LBA mapping), file system structures and metadata for commonly found file systems (FAT family, NTFS, Ext family, HFS family), file deletion artifacts and recovery, and the mappings among byte offsets, absolute/relative sector addresses, clusters and blocks. Students will also be introduced to several forensic tools that operate at the file system artifact
level. This course prepares students for DFS305 and DFS310 by providing the detailed knowledge necessary to understand data recovery and forensic analysis. Prerequisites: DFS 105, 106 and 210 with a grade of “C” or higher each course.

DFS 215 Computer Forensics and Security Ethics (3)
This course brings together philosophy, law and technology to provide a rigorous, in-depth exploration and analysis of a broad range of topics regarding the ethical implications of widespread use of computer technology. It is designed to provoke students to reflect upon the social and ethical ramifications of managing information. Special consideration will be given to current topics involving computer forensics or computer security issues.

DFS 225 Introduction to Human Trafficking (3)
This course will examine the underlying factors that contribute to the continued existence of slavery, and the prosperity of traffickers. Students will gain insight into the mechanisms of the enslavement process, the tactics used by traffickers to control their victims, and methods by which slavery can be attacked. An emphasis will be placed on the methods employed by traffickers and how those methods may create opportunities for detection and the collection of evidence in support of trafficking investigations. The content has many emotionally charged elements; students should be prepared to address deeply disturbing issues in classroom discussions and assignments.

DFS 247 Law Enforcement Field Experience (1)
This elective course provides basic exposure to a law enforcement agency through 50 hours of observation and limited participation, such as “ride-alongs.” It will provide students with a better appreciation for how their field of study fits with other elements of law enforcement. (Graded Pass/Fail) Prerequisites: Sophomore standing in the Digital Forensic Science major.

DFS 305 Seizure and Forensic Examination of Computer Systems (3)
This course will introduce students to the processes involved in seizing hardware, computer equipment and data, and searching them for evidence. This includes how information can be altered, deleted and hidden on various digital media. Topics to be covered will include: establishing probable cause for a search, evidence protection, and the chain of evidence. This includes the industry best practices for examining computers that might contain crime related information. This course will involve hands-on experience using software to capture and search for evidence. Prerequisites: DFS 110, 205, 210, 213, 217 and 221 with a grade of “C” or higher in DFS110, 210 and 213. Prerequisite: SWK 301. May also take SWK 301 concurrently.

DFS 307 Advanced Topics in Computer Data Analysis and Recovery (3)
This course will build on the fundamentals covered in DFS 305. Students will continue the examination of digital evidence, using commercially available and alternative tools. Advanced topics will include: cell phone and Personal Data Assistant (PDA) forensics. Operating system specifics will be explored. Cryptography and steganography will be studied along with password defeating strategies. Lab management utilizing the Scientific Working Group on Digital Evidence (SWGDE) guidelines, along with technical writing and case organization will also be covered. Prerequisite: DFS 305 with a grade of “C” or higher.

DFS 313 Mobile Device Forensics (3)
This course will provide an in-depth treatment of the forensic examination of mobile devices, particularly smart phones. These devices have become the dominant source of digital evidence for law enforcement due to their pervasiveness in all aspects of modern society. Students will learn how to acquire and analyze evidence from a variety of current and recently popular mobile devices, while developing the ability to adapt the methods learned in the course to future devices and tools. Prerequisites: DFS 213 and 305 with a grade of “C” or higher in each course.

DFS 315 Fundamentals of Computer Networks (3)
This course is a study of data communication concepts, network topologies, transmission media, wireless transmission, network access control, communication protocols, network architecture, LANs, and WANs. Emphasis is placed on analysis of common communication protocols. Topics covering managing the network will also be covered. Prerequisites: “A + or Network certification” or completion of DFS 105 and DFS 106 with a grade of “C” or higher in both courses.
DFS 405 Network Forensics (3)
Computer and network forensics studies cyber-attack prevention, planning, detection, and response with the goals of counteracting cybercrime, cyberterrorism, and cyberpredators, and making them accountable. It incorporates many areas of concern, including network security, intrusion detection, incident response, infrastructure protection, and computer crime investigation. The topics covered in this course include fundamentals of computer and network forensics, forensic duplication and analysis, network surveillance, intrusion detection and response, incident response, anonymity and pseudonymity, cyber law, computer security policies and guidelines. Emphasis will be placed on hands-on laboratory exercises to learn to effectively use tools such as WireShark/Ethereal for analyzing network packet data. **Prerequisites:** DFS 205 and 315 with a grade of “C” or higher in both courses.

DFS 410 Intrusion Detection (3)
This course will introduce students to the various methods used to detect external and internal intrusion of computer systems. The importance of setting up anomaly and misuse detection measures, host based, multi-host based and network based monitoring strategies and techniques and types of responses will be covered. Various investigative tools will be presented. This course will involve hands-on experiences using intrusion detection software. **Prerequisite:** DFS 205 and DFS 315 with a grade of “C” or higher.

DFS 450 National Certification (2)
Each student must earn one of the nationally recognized, vendor-neutral, digital forensic certifications from an approved list. The approved list includes, but is not limited to, the International Association of Computer Investigative Specialists (IACIS-Law Enforcement personnel only), the Seized Computer Evidence Recovery Specialist (SCERS-Law Enforcement personnel only), the SANS GIAC Certified Forensic Analyst (GCFA), the ISFCE Certified Computer Examiner (CCE), and the DFCB Digital Forensics Certified Associate (DFCA). Note. This is a graded course with an automatic “A” given for earning the certification. Should the student not pass the certification exam, a lesser grade will be issued based on the pre-exam preparation course work. **Prerequisites:** DFS 305 and 310 with a grade of “C” or higher in both courses. Other applicable courses may be required depending on the selected certification.

DFS 497 Computer Forensic Field Experience and Seminar (4)
This course will serve as the capstone course and will require a final paper to demonstrate completion of the learning outcomes of the program. The student gains a basic exposure to an agency involved in computer forensics, and experiences the investigation of high-tech crimes through observation and participation. This course will allow the student to observe professionals at work, and to test out their own computer forensics skills for a minimum of 120 hours. **Prerequisites:** complete a sufficient number of the computer forensics courses to prepare for the specific agency’s requirement. This course is not Pass/Fail thus students will earn a letter grade.

DFS 199, 299, 399, 499 Independent Research (1-3)
Independent research may be either project or research-oriented. Such topics are not a normal part of the curriculum and serve two needs: first, the student investigates an area of special interest; and second, the student works closely with a faculty member in planning, executing and evaluating the program.

**DESIGN (DSGN)**

DSGN 110 2D Design (3)
Art fundamentals and principles of design are explored in two-dimensional media.

DSGN 111 3D Design (3)
The elements of art fundamentals and principles of design are explored in three-dimensional media.

DSGN 112 Design Drawing (4)
This course introduces students to drawing from observation, perspective drawing, and sketching as an ideation tool in design. Students will explore various levels of rendering using charcoal, pencils, markers, and collage.

DSGN 114 Introduction to Graphic Design (3)
An introduction to the principles and theories of design, this course covers elements of layout, typography, imagery, and visual communications. Most projects are completed digitally.

**DSGN 115 Photography (4)**
An introduction to the fundamentals of camera operation, file manipulation, printing, and the history of photography.

**DSGN 116 Introduction to Ceramics (4)**
An introduction to the history and various ceramic processes, including hand building, wheel throwing, decorating and glazing.

**DSGN 130 Social Goods (4)**
This course introduces students to social goods, or designed products for human use. Students learn about the relationship between the physical form of an object and its function, both from an emotional and practical standpoint. Students design their own social goods, engaging an iterative design process that incorporates mood boards, sketching and model-building.

**DSGN 210 Special Topics in Art/Design (3)**
An in-depth exploration in a specific area or genre throughout and within the history of art and design. Class topics may vary from semester to semester. Course may be repeated once for a total of six (6) hours.

**DSGN 211 Design Portfolio (1)**
The first course in the design professionalism sequence, this class explains the diverse career paths available to designers and helps students refine their educational and career goals. Emphasis is placed on introductory portfolio development and networking.

**DSGN 220 Design Thinking (3)**
Design Thinking is a two-part course. The first part aims to expose students to the many kinds of design and the role of designers in current society. Students will gain a greater knowledge of the field of design through examples, case studies, presentations, readings, and in-class discussions. The second part of the course deals with design thinking: the process designers use to solve problems with creative outcomes. Students will learn different techniques and methodologies of problem seeking/problem solving through brainstorming, ideation, and supportive group work.

**DSGN 224 Intermediate Graphic Design (3)**
This course focuses on the mastery of rasterized graphics, including editing, integration, formatting, and use in wider design projects. *Prerequisite: DSGN 114.*

**DSGN 225 Introduction to Web Design (3)**
An introduction to web design, the course presents practical application of commercial web design software. It includes discussion of the aesthetic factors considered when creating multimedia using the web and the internet. Students will design and develop web pages and place them on a server.

**DSGN 226 Applied Graphic Design (4)**
In this course design theory is applied to visual communication problems, including web, print, package, and display. *Prerequisite: DSGN 224.*

**DSGN 230 History of Design (3)**
This course examines historical and technical development in the areas of graphic and product design, beginning from the industrial revolution to contemporary design practices of the 21st century. This course gives students a perspective of the evolution of form and materials, and the meaning of objects and graphics within a specific historical and cultural context.

**DSGN 231 Emotional and Sustainable Design (4)**
In this course, students explore the emotional and sustainable aspects of design, with an emphasis on emotional durability of objects and the environmental impact of materials. Students will learn beginning Computer Aided Design (CAD) software, with an introduction to 3D printing/Rapid prototyping.
DSGN 232 Materials and Manufacturing (4)
This course focuses on the materials and processes used in manufacturing. Topics include appropriateness of material, sustainable methods of production, and working with outside manufacturers and craftspeople. Prerequisite: DSGN 130.

DSGN 233 Metaphor and Relationship (4)
Throughout this course, students will explore the object semantics, using visual metaphors to give meaning and form to objects. They will also observe user object relationships through ethnographic studies and product testing. Students will design social goods using Computer Aided Design (CAD), and produce prototypes using both handcraft and 3D printing methods. Prerequisite: DSGN 232.

DSGN 235 Typography (3)
This course covers the history, theory, and practice of letterforms and typography as they apply to graphics, advertising, and other areas of design and visual communication. Topics include principles of typography, letter structure, typeface selection, fundamentals of computer typesetting, and typographic layout. Prerequisite: DSGN 114.

DSGN 323 Document Production (3)
This course explores designing longer, text focused documents, such as books, magazines, and annual reports. Advanced typography, binding, presentation, eBook formatting, and prepress issues will be covered. Prerequisite: DSGN 235.

DSGN 325 Advanced Graphic Design (4)
This course focuses on students solving difficult or lengthy design issues, such as branding and cross-promotional projects. Prerequisite: DSGN 226.

DSGN 330 Design Research and Writing (4)
Students will explore a variety of research methods employed by designers, including visual, historical and user research. Students will learn to find relevant information through current articles and non-design studies, and will use writing to articulate decisions in their creative process. Prerequisite: DSGN 233.

DSGN 331 Developing Social Goods for Market (4)
Students will use an iterative design process to identify a need and develop at least one refined social good. Using design methodologies that include problem seeking, user interviews, ideation, prototyping, and testing, students will create objects using Computer Aided Design (CAD), 3D printing, and traditional manufacturing methods. This course may be repeated once for a total of eight (8) hours. Prerequisite: DSGN 233.

DSGN 410 Professional Practice in Design (1)
This is a professionalization course for developing the necessary tools for success and exploring the diverse paths for a designer. The focus is on presentation, marketing, and documentation of design work as well as networking within the field. Prerequisite: DSGN 330.

DSGN 425 Advanced Web Design (3)
A continuation of the concepts covered in DSGN 225 Introduction to Web Design, this course focuses on implementing site-wide solutions for dividing content and formatting. Creation of dynamic sites and using scripting to create a more interactive user experience is emphasized. Maintaining and planning for the life cycle of web sites is covered. Prerequisite: DSGN 225.

DSGN 430 Product Development Portfolio (4)
Students will prepare designed social goods for their portfolio, developing skills in product photography, product naming/branding, and online presence. Special emphasis will be placed on designer individuality and using the portfolio as a self-promotional tool. Prerequisite: DSGN 331.

DSGN 431 3D Design Internship (3)
Students will be assigned to either an ongoing project or an external client, incorporating their 3D design skills to suit the needs of their clients or employers. Topics may include designing products, exhibitions, and experiences. This course must be repeated once to
complete the six (6) hours required for the major and may be repeated up to three times for a total of twelve (12) semester hours. (Graded Pass/Fail). Prerequisite: DSGN 331.

DSGN 434 Exhibition Planning (1)
This is the final professionalization course, focused on curating and hanging the senior show. Students will network within the design field and learn the basics of gallery preparation. Prerequisite: DSGN 410.

DSGN 426 Graphic Design Internship (3)
Students will work for a variety of on-campus and off-campus clients as intern designers. (Graded Pass/Fail). Course may be repeated for a total of 12-hours.

ECONOMICS (ECON)

ECON 201 Microeconomics (3)
An investigation of the principles of production, distribution, consumption, and price as they relate to the individual consumer or firm. Prerequisite: Not open to freshmen.

ECON 205 Macroeconomics (3)
Analysis of national economic policies: laissez-faire, Keynesian, and monetarist theories applied to the questions of inflation, unemployment, government spending and taxation, world trade and finance, the Federal Reserve, and monetary policy. Prerequisite: Not open to freshmen.

ECON 205 Money and Banking (3)
Role and uses of money, the flow of funds, concepts of the money supply, the Federal Reserve system, tools and effects of monetary policy, international monetary relations. Offered in alternate years. Prerequisites: ECON 201 and ECON 205.

ECON 310 Intermediate Microeconomics (3)
This course examines utility maximization, profit maximization, and price theory at levels consistent with articles published in scholarly journals. Concepts are investigated through application to concrete microeconomic issues. Prerequisite: ECON 201

ECON 320 Intermediate Macroeconomics (3)
This course concentrates on the empirical evidence behind key macroeconomic relationships. Accordingly, significant attention will be paid to implications for monetary and fiscal policies. A review of constitutional and legislative constraints on policy will be undertaken as well. Prerequisites: ECON 205 and BUS 212.

ECON 355 Public Finance (3)
Economic aspects of government spending, taxation, and indebtedness; allocation of resources between public and private goods. Offered in alternate years. Prerequisites: ECON 201 and 205.

ECON 375 International Trade (3)
Economic and political aspects of world trade: free trade vs. protectionist policies, institutions affecting world trade, currency exchange rates, and world economic development. Offered in alternate years. Prerequisite: junior standing

ECON 452 Investment Analysis (3)
Functioning of stock exchanges and other capital markets; financial analysis from the investor’s point of view. Emphasis is on security analysis, valuation, investment timing, and portfolio theory. Offered in alternate years. Prerequisites: ECON 205, BUS 212 and 350.
EDUCATION (EDUC)

EDUC 202 Instructional Technology (3)
This course is designed to provide experiences to teacher candidates in the use of technology in teaching and learning. Data collection, software selection, production and application of technologies in lesson plans for use in classrooms will be studied. In this course, students will explore critical issues surrounding the use of technology in educational settings. Students will also cultivate skills in the use of technological advances relevant to current and future educational and professional experiences. Students will develop a practical understanding of the use of technology in the classroom environment through a 10-hour clinical experience. This course will be required of all license-seeking students Pre-K to Young Adult. **Students may register for no more than two of the following courses in a given semester: EDUC 202, 221, 228 and 229.**

EDUC 218 Social Studies Content: K-3 (3)
Using the Ohio Academic Content Standards in Social Studies as the foundation, Early Childhood majors will learn about the content that is specific to Ohio and US History, World Geography, major economic concepts, Government and Citizenship that are needed for teaching Pre-K through Grade 3. A Problem Based Learning Approach will be used in order to integrate and coordinate the content from areas listed above. **Successful completion (C or better) of this course is a prerequisite for EDUC 334, Early Childhood Social Studies Methods.**

EDUC 219 Science Content: K-3 (3)
Using the current Ohio New Science Standards as the foundation, Early Childhood majors will learn about topics including but not limited to earth, life and physical science while incorporating environmental and technology literacy and 21st Century Skills. Focusing on inquiry, content vocabulary and integration with other content area will be incorporated.

EDUC 221 Foundations of American Public Education (3)
Provides a historical, philosophical, legal, and social overview of education examined through the lens of socio-cultural diversity and democratic principles. Students will examine how schools are organized, administered and financed. In addition, students will explore the professional skills, competencies and dispositions necessary to provide an effective and meaningful democratic education to a diverse student body. This course emphasizes the research and study of these principles as they relate to modern trends and issues in Pre-K-12 educational environments. Students may register for no more than two of the following courses in a given semester. **Prerequisites EDUC 202, 221, 228 and 229.**

EDUC 222 Reading Principles and Practices (3)
The course will include the theories of phonemic awareness, phonics, vocabulary, fluency and comprehension and the relation to language acquisition and history related to language development. Students will use the Common Core Standards in Language Arts and recommendations from the National Reading Panel. Best practices in reading acquisition will be applied to designing instruction for specific learners including English language learners and students with dyslexia. **Prerequisites: EDUC 202, 221, 228, 229**

EDUC 223 HPE / Expressive Arts Practicum (1)
Students will spend five weeks (40 hours total) in a K-3 physical education, art and music settings for a total of 15 weeks. During the fifth week in each placement students will design and implement one lesson. Best practices will be incorporated when designing and implementing lessons. Abbreviated lesson plan will be utilized. Will be taken concurrently with EDUC 235 and EDUC 238  **Prerequisites: EDUC 230 and 231 (Graded Pass/Fail)**

EDUC 228 Educating the Exceptional Student (3)
A study of the characteristics of children with disabilities including those who are at risk, those with developmental variations and those with specialized abilities (gifted) will be addressed. The related services and adaptive technologies for children with exceptionalities as well as the impact of family, cultural, racial, and ethnic diversity on learning are explored, as well as coverage of Response to Intervention and Universal Design. The course also addresses the history, law, and philosophy of special education as it relates to services for children with disabilities and the role of the classroom teacher in the process. Students will have the opportunity to develop a practical understanding of course concepts through a 10-hour clinical experience in a classroom environment. **Students may register for no more than two of the following courses in a given semester: EDUC 202, 221, 228 and 229. Prerequisites: EDUC 221 and PSY 110**
EDUC 229 Educational Psychology (3)
The course gives teacher education majors the opportunity to learn about developmental stages of children, the study of theories and principles of learning and ways these theories impact learning and teaching. Theories of motivation, impact of learner diversity (ethnic, socioeconomic and cultural) learning style variations, multiple intelligences, brain hemisphericity, physically challenging conditions, and cognitive styles are all addressed as ways that classroom practice is influenced and changed. Students will have the opportunity to develop a practical understanding of course concepts through a 10-hour clinical experience in a classroom environment. Students may register for no more than two of the following courses in a given semester: EDUC 202, 221, 228 and 229. Prerequisites: EDUC 221, PSY 225 or 227.

EDUC 230 Principles of Early Childhood Education (3)
The study of the nature, history, philosophy and organization of early childhood programs including the characteristics of effective teachers of young children and the ethical principles they uphold. Introduction to the concepts of developmentally appropriate practices and teaching approaches that support learning and the developmental needs of children ages three through eight. Must be taken concurrently with EDUC 232. Prerequisites: EDUC 221 and PSY 110.

EDUC 231 Curriculum and Practices of Early Childhood Including Emergent Literacy (3)
A study of the guidelines of developmentally appropriate curriculum to meet the needs of all learners including the culturally diverse, at risk and exceptional learners (including gifted) and consideration of the context of the children including multicultural perspectives, socioeconomic status, home language, and home cultural practices as part of curriculum development. The course includes planning, implementation, and evaluation of learning experiences to facilitate play, cooperative learning environments, inquiry and problem solving in early childhood classrooms. A study of the impact of the diversity of language in the home is addressed. Reading acquisition and development from linguistic, cognitive, psychological and curricular perspectives, and developmentally appropriate activities involving literature, patterns, games, and writing to foster literacy development are explored. Must be taken concurrently with EDUC 234. Prerequisites: EDUC 230, 232 and PSY 225.

EDUC 232 Early Childhood Practicum (1)
Students observe (one half day per week) in a variety of early childhood classrooms to understand the scope and variety of programming that is available for young children and to observe and discriminate aspects of appropriate practice in early childhood programs. (Graded Pass/Fail) Prerequisites: EDUC 230, 231 and PSY 225.

EDUC 234 Early Childhood Practicum II (1)
Students will spend two half days per week (40 total hours) in a pre-k through third grade, classroom serving as an apprentice to a master teacher. Pre-candidates will have the opportunity to work with students in individual, small group, or whole class settings. Students will also learn about: the school’s philosophy, curriculum (scope and sequence), human and physical resources and school classroom procedures. (Graded Pass/Fail). Must be taken with EDUC 231. Prerequisites: EDUC 230, 232, PSY 225.

EDUC 235 Expressive Arts (2)
A study of the young child’s artistic, symbolic, and aesthetic development in art, music, and movement. Students will experience, critique, and develop appropriate expressive art experiences. Techniques for adapting materials and activities for special needs learners will also be explored. Prerequisites: EDUC 221 and PSY 225. Students must take this course prior to the internship.

EDUC 237 Children’s Literature (3)
A survey of literature appropriate for children ages three through grade three with emphasis on identification of quality literature within several genres and a variety of ways to incorporate literature into the curriculum within group and classroom settings. Interactive technology will be explored. Students will have opportunities to read to children in a variety of contexts.
EDUC 238 Health and Physical Education for the Classroom Teacher (2)
The course is designed for the Early Childhood Education teacher (Pre K-3). It will provide an understanding of the importance of health and physical education for youngsters of this age. The students will develop learning goals and instructional plans within both areas along with exploring school laws topics and current issues. Prerequisites: EDUC 221 and PSY 225

EDUC 243 Foundations and Survey of Reading and Phonics: Middle Childhood (4)
The Common Core State Standards in English Language Arts are used to organize the instruction in the course. The course includes a study of the sounds (phonemes) of the English language and the developmental sequence of teaching these sounds to children. The course also emphasizes reading strategies that are validated by scientifically based research in the teaching of reading and phonics. It presents research-based perspectives about readers and programs designed to meet reader needs. Knowledge of the reading process is addressed through understanding its relationship with phonemic, morphemic, semantic, and syntactic systems of language. Attention is given to word recognition, vocabulary and comprehension strategies used to develop fluent readers. Prerequisites: EDUC 202, 221, 228, and 229.

EDUC 255 Lifespan Development (3)
This course emphasizes the study of psychological research and theory from birth through young adulthood and integrates the study of developmental issues within a lifespan approach. Students will study the physical and psychological changes that occur from birth through young adulthood. Topics include: perceptual and cognitive abilities, moral reasoning, emotional functioning, and social skills and relationships. Prerequisite: PSY 110

EDUC 282 Introduction to Students with Mild to Moderate Disabilities (3)
The course gives teacher education majors the opportunity to learn about the academic and behavioral characteristics of students with mild and moderate disabilities. Pre-candidates will also learn about the IEP process. In addition the teacher education majors will learn about collaborative practices and specialized technology and resources. Included in this course: Ohio Standards for the Teaching Profession. Prerequisites: EDUC 228 and PSY 110.
NOTE: Prerequisites for 300 and 400 level Methods classes include ED202, 221, 228, 229, PY225 or PY227, appropriate 200 level prerequisites and admission to the Teacher Education Program. Students who register for 300 and 400 level courses and do not have admission to the Teacher Education Program will be withdrawn from those courses.

EDUC 307 Phonics and Word Study (3)
The theoretical and historical aspects of phonemic awareness and phonics will be studied. Students will examine phonemic awareness and phonics as related to language development and reading achievement. Identification of the grapheme, phoneme and morphological skills in relation to reading development and language acquisition for English language learners and dyslexic students will be addressed. The recommendations of the National Reading Panel and Common Core Standards will be incorporated. Must be taken concurrently with EDUC 310 Prerequisites: EDUC 230, 231 and PSY 225

EDUC 308 Math, Social Studies and Science Methods for Students with Mild/Moderate Learning Needs (3)
This course gives teacher education majors the opportunity to learn about best practices in teaching math, science, and social studies to K-12 students with mild/moderate disabilities. Included in this course: Ohio Standards for the Teaching Profession, Ohio Academic Content Standards, and ed TPA. Prerequisites: EDUC 202, 218, 228, 229, 320, PSY 110, 225, 227, CORE 220.

EDUC 309 Reading and Writing Methods for Students with Mild/Moderate Learning Needs (4)
The course gives teacher education majors the opportunity to learn about best practices in teaching reading and writing to K-12 students with mild/moderate disabilities. Included in this course: Ohio Standards for the Teaching Profession, Ohio Academic Content Standards, and ed TPA, and dyslexia. Prerequisites: EDUC 202, 228, 229, PSY 225, 227

EDUC 310 Phonics Practicum (1)
Students facilitate small group instruction in a school setting (two half days per week/40 hours total). Student led instruction will focus on literacy skills including but not limited to phonemic awareness and phonics. Students will incorporate best practices when designing and implementing lessons. Will be taken concurrently with EDUC 307. Prerequisites: ED 230, 231 and PY 225 (Graded Pass/Fail)
EDUC 317 Principles of Math (3)
A study of basic mathematical concepts and processes in the areas of Number, Measurement, Geometry, Patterns and Algebra, and Data and Probability (which are compatible with the Ohio Academic Content Standards) and designed for early childhood pre-service teachers preparing for early childhood licensure. This course must be taken and passed (with a C or better) before students may take EDUC 330 (Beginning Integrated Practicum) and EDUC 332 (Math Methods).

EDUC 320 Principles of Middle Childhood Math (3)
This course is designed to provide education students in the MC math licensure program with opportunities to study the topics of number, number sense and operations, measurement, patterns, functions and algebra, and data analysis and probability. Process skills addressed are problem solving, reasoning, communications, connections, and representation. The focus will be on the conceptual understanding of these math contents and processes. Content will be aligned with the Common Core State Standards in Mathematics.

EDUC 329 Beginning Practicum: Mild to Moderate (1)
Teacher education candidates will spend 40 hours in PreK-12 Mild to Moderate special education classrooms serving as apprentices to master teachers. Students will learn about: the school’s philosophy, curriculum (scope and sequence), human and physical resources and school classroom procedures. Students will be expected to rework a teacher’s or commercial lesson(s) into written format and teach the lesson(s) as appropriate to the classroom situation. **Co-requisite: EDUC 308**

EDUC 330 Beginning Integrated Practicum (1)
Teacher education candidates will serve as an apprentice to a master teacher. Candidates will plan, implement and evaluate their teaching of a set(s) of lessons and/or units as appropriate to the school’s curriculum content and/or school context. They will demonstrate ability to sequence instruction that is developmentally appropriate; develop appropriate methods for students to demonstrate learning; and will be videotaped during the semester and jointly critique the tapes with college supervisors. (Graded Pass/Fail). Must be taken concurrently with EDUC 334. **Prerequisites: EDUC 202, 228, 229, 231, 234, 235; and admission to the Teacher Education Program.**

EDUC 332 Math Methods (3)
The Common Core State Standards in Mathematics and the Ohio Teacher Standards will be used to learn about content curricular planning, teaching methodologies and implementation. Students will critique and evaluate curriculum materials. Students learn about the development of numeric and mathematical concepts, how best to facilitate their development with young learners and the characteristics of what is called “reform” math. Emphasis will be placed on both skill-based learning and integrating math content to other curricular areas to provide “real-life” experiences. In addition, student will become familiar with the Standards for Ohio Educators and the Continuum of Teacher Development. Candidates will continue to learn, understand and use the rubrics associated with the Ohio Teacher Performance Assessment program and how that will be used to assess their practice in the internship and during the Ohio Teacher Residency program. **Prerequisites: EDUC 202, 228, 229, 231, 234, 235, PSY225 and admission to the Teacher Education Program.**

EDUC 333 Science Methods (3)
The Revised Ohio Academic Content Standards in Science and the Ohio Teacher Standards will be used to learn about content curricular planning, teaching methodologies and implementation related to science. Students will critique and evaluate curriculum materials. Students will learn how to plan and implement curriculum that relies on inquiry-based “minds on, hands on learning” and is appropriate for young learners using concrete materials and experiences to build science concepts. Emphasis will be placed on integrating science content with other areas to provide meaningful, “real life” experiences. In addition, student will become familiar with the Standards for Ohio Educators and the Continuum of Teacher Development. Candidates will continue to learn, understand and use the rubrics associated with the Ohio Teacher Performance Assessment program and how that will be used to assess their practice in the internship and during the Ohio Teacher Residency program. **Prerequisites: EDUC 202, 228, 229, 231, 234, 235, 330 and PSY 225 and admission to the Teacher Education Program.**
EDUC 334 Social Studies Methods (3)
The Revised Ohio Academic Content in Social Studies and the Ohio Teacher Standards will be used to learn about content curricular planning, teaching methodologies and implementation. Students will critique and evaluate curriculum materials. In social studies, students will learn how to plan and implement curriculum that relies on inquiry-based “minds on, hands on learning” and is appropriate for young learners. Emphasis will be placed on integrating social studies content to provide meaningful, “real-life” experiences. Prerequisites: EDUC 202, 228, 229, 231, 233, 234, 235 and PSY 225 and admission to the Teacher Education Program.

EDUC 339 Middle Childhood Beginning Practicum (1)
Students will spend 40 hours in middle childhood classroom(s) (grades 4 to 9 in the content areas of licensure) serving as apprentices to master teachers. Students will learn about: the school’s philosophy, curriculum (scope and sequence), human and physical resources and school classroom procedures. Students will be expected to rework a teacher’s or commercial lesson(s) into written format and teach the lesson(s) as appropriate to the classroom situation. (Graded Pass/Fail). Prerequisites: EDUC 202, 228, 229, 243, PSY 227, and admission to the Teacher Education Program. Corequisite: ED340.

EDUC 340 Planning and Instruction for Middle Level (3)
An examination of the nature, philosophy, and organization of the middle school: the nature of the middle school learner; characteristics of effective middle school administrators and teachers; buildings and specific room utilization, interdisciplinary team organization, block scheduling, exploratory curriculum time, teaching methodologies, advisor-advisee programs, family/house identity. Development of appropriate programs in a supportive school environment along with the exploration of classroom and behavior management strategies which uniquely serve middle school students are also addressed. Students will have training in the Ohio Teacher Standards. This course emphasizes the planning and implementation of developmentally appropriate instruction for the middle school classroom. Prerequisites: EDUC 228, 229, PSY 227.

EDUC 341 Middle Childhood and Adolescent Literature (3)
An overview of quality literature that is appropriate for use with preadolescent and adolescent readers. Focus on understanding and application of evaluative criteria, successful techniques for incorporating literature across the curriculum, analysis of elements of literature, and ways of encouraging enjoyment and appreciation of literature. Interactive technology will be explored.

EDUC 347 Reading in the Content Field (3)
Using the Academic Content Standards in Reading/English as a focus, the course highlights the principles, techniques, strategies and resources which aid teachers in developing and strengthening student reading ability within school content areas. Focus on comprehension through attention to textbooks and their organizations, readability, student interests, schema theory and cultural factors. Visual literacy is addressed. Prerequisites: EDUC 202, 228, 229, and admission to the Teacher Education Program.

EDUC 349 Intermediate Practicum: Middle Childhood (2)
Teacher education candidates will serve as an apprentice to a master teacher. They will plan, implement and evaluate their teaching of a set(s) of lessons and/or units as appropriate to the school’s curriculum content and/or school context. They will demonstrate ability to sequence instruction that is developmentally appropriate, develop appropriate methods for students to demonstrate learning and use that information to alter future instruction. Students will be videotaped at least twice during the semester and jointly critique the tapes with college supervisors. (Graded Pass/Fail) Prerequisites: EDUC 202, 228, 229, 339, 340, PSY 227, most of the content courses, and admission to the Teacher Education Program. Corequisite: EDUC 380

EDUC 350 Intermediate Integrated Practicum (2)
Teacher education candidates will serve as an apprentice to a master teacher. Candidates will plan, implement and evaluate their teaching of a set(s) of lessons and/or units as appropriate to the school’s curriculum content and/or school context. They will demonstrate ability to sequence instruction that is developmentally appropriate; develop appropriate methods for students to demonstrate learning; and will be videotaped during the semester and jointly critique the tapes with college supervisors. (Graded Pass/Fail). Prerequisites: ED202, 228, 229, 231, 234, 235 and admission to the Teacher Education Program.
EDUC 370 Planning and Instruction for Secondary Students (3)
An examination of the nature, philosophy, and organization of the secondary school: the nature of the adolescent learner; appropriate teaching methodologies; characteristics of effective administrators and teachers; buildings and specific room utilization, interdisciplinary team organization, block scheduling, exploratory curriculum time, advisor-advisee programs, and integrated curriculum. How to develop appropriate programs in a supportive school environment along with the exploration of classroom and behavior management strategies for high school students are also addressed. Students will have training in the Ohio Teacher Standards. This course emphasizes the planning and implementation of developmentally appropriate instruction for secondary school environment. Prerequisites: EDUC 202, 228, 229, PSY 227.

EDUC 371 Beginning Practicum; Grade 7-12 (1)
Students will spend 40 hours in a high school classrooms (grades 7 to 12 in the content areas of their licensure areas) serving as apprentices to master teachers. Students will learn about: the school’s philosophy, curriculum (scope and sequence), human and physical resources and school classroom procedures. Students will be expected to rework a teacher’s or commercial lesson into a written format and teach the lesson as appropriate to the classroom situation. (Graded Pass/Fail). Prerequisites: EDUC 202, 228, 229, PSY 227 and admission to the Teacher Education Program. Corequisite: EDUC 370.

EDUC 372 Literacy Practicum (1)
Students facilitate small group and individual instruction in a school setting (one half day per week/40 hours total). Student led instruction will focus on literacy skills including fluency. Assessment of motivation and interest will be collected, analyzed and addressed in planning. Students will incorporate best practices when designing and implementing lessons. Prerequisites: EDUC 230, 231 and PY 225 (Graded Pass/Fail).

EDUC 373 Beginning Practicum; Multi-Age (1)
Students will spend 40 hours in a K-12 classrooms serving as apprentices to master teachers. Students will learn about: the school’s philosophy, curriculum (scope and sequence), human and physical resources and school classroom procedures. Students will be expected to rework a teacher’s or commercial lesson into a written format and teach the lesson as appropriate to the classroom situation. Prerequisites: ED202, 228, 229, PSY 227 and admission to the Teacher Education Program. Corequisite: EDUC 370 (Graded Pass/Fail).

EDUC 380 Assessment of Teaching and Learning (3)
Students will examine the role of assessment in teaching and learning and best practices for using assessment to inform teaching practices. Students will examine in depth formative, summative, performance-based and non-cognitive forms of assessment and how to create alignment between learning objectives and those assessments. Prerequisite: ED340 or 370.

EDUC 382 Learning Environments & Behavior Management for Students with Mild/Moderate Learning Needs (3)
The focus of this course is basic classroom management theories and strategies for students with mild and moderate disabilities, effective management of teaching and learning, creating a respectful classroom and social skill development.

EDUC 390 Intermediate Practicum: Mild to Moderate (2)
Teacher education candidates will spend 80 hours in a PreK-12 Mild to Moderate classroom(s) serving as an apprentice to a master teacher. They will plan, implement and evaluate their teaching of a set of lessons and/or units in the content area of their licensure area as appropriate to the school’s curriculum content and/or school context. They will demonstrate ability to sequence instruction that is developmentally appropriate, develop appropriate methods for students to demonstrate learning and use that information to alter future instruction. Corequisite: EDUC 382

ED393 Intermediate Practicum; Multi-Age (2)
Students will spend 80 hours in K-12 classroom(s) serving as an apprentice to a master teacher. They will plan, implement and evaluate their teaching of a set(s) of lessons and/or units in the content area of their licensure area as appropriate to the school’s curriculum content and/or school context. They will demonstrate ability to sequence instruction that is developmentally appropriate, develop appropriate methods for students to demonstrate learning and use that information to alter future instruction. Students will be videotaped at least twice during the semester and jointly critique the tapes with college supervisors. Must be taken concurrently with

EDUC 397 Intermediate Practicum; Grades 7 to 12 (2)
Students will spend 80 hours in a high school classroom(s) serving as an apprentice to a master teacher. They will plan, implement and evaluate their teaching of a set(s) of lessons and/or units in the content area of their licensure area as appropriate to the school’s curriculum content and/or school context. They will demonstrate ability to sequence instruction that is developmentally appropriate, develop appropriate methods for students to demonstrate learning and use that information to alter future instruction. Students will be videotaped at least twice during the semester and jointly critique the tapes with college supervisors. Prerequisite: EDUC 202, 228, 229, 370, 371, most of the content, and admission to the Teacher Education Program. Corequisite: EDUC 380. (Graded Pass/Fail).

EDUC 402 Advanced Practicum: Middle Childhood (3)
Students will spend 120 total hours in middle school classroom(s) serving as an apprentice to a master teacher during a daily 3-hour block. They will plan, implement and evaluate their teaching of a set(s) of lessons and/or units in the content area of their licensure area as appropriate to the school’s curriculum content and/or school context. They will demonstrate ability to sequence instruction that is developmentally appropriate, develop appropriate methods for students to demonstrate learning and use that information to alter future instruction. Students will be videotaped at least twice during the semester and jointly critique the tapes with college supervisors. (Graded Pass/Fail) Prerequisite: EDUC 340 and 380. Corequisite: Appropriate content methods.

EDUC 407 Assessment for Students with Mild/Moderate Learning Needs (3)
The focus of this course is assessment and the development of academic and social planning for the learning of students with mild/moderate disabilities. Student growth measures and values added will be discussed in this class.

EDUC 411 Advanced Practicum: Multi-Age (3)
Students will spend 120 total hours in K-12 classroom(s) serving as an apprentice to a master teacher during a daily 3 hour block. They will plan, implement and evaluate their teaching of a set(s) of lessons and/or units in the content area of their licensure area as appropriate to the school’s curriculum content and/or school context. They will demonstrate ability to sequence instruction that is developmentally appropriate, develop appropriate methods for students to demonstrate learning and use that information to alter future instruction. Students will be videotaped at least twice during the semester and jointly critique the tapes with college supervisors. (Graded Pass/Fail). EDUC 370 and 380. Corequisite: Appropriate content methods.

EDUC 412 Advanced Practicum: Grades 7-12 (3)
Students will spend 120 total hours in a high school classroom(s) serving as an apprentice to a master teacher during a daily 3 hour block. They will plan, implement and evaluate their teaching of a set(s) of lessons and/or units in the content area of their licensure area as appropriate to the school’s curriculum content and/or school context. They will demonstrate ability to sequence instruction that is developmentally appropriate, develop appropriate methods for students to demonstrate learning and use that information to alter future instruction. Students will be videotaped at least twice during the semester and jointly critique the tapes with college supervisors. (Graded Pass/Fail). EDUC 370 and 380. Corequisite: Appropriate content methods.

EDUC 430 Assessment of Young and Atypical Children (3)
Concepts and principles of measurement and active participation in assessing young and atypical children ages three through eight for the purpose of strategic program planning, developing individualized educational plans (IEPs-IFSPs), transition planning and interpreting assessment results to parents and professionals. The need and use of curriculum embedded authentic assessment strategies as well as adaptation for learners with special needs are included. Prerequisites: EDUC 202, 228, 229, 231, 234, 235, 237 and admission to the Teacher Education Program.

EDUC 431 Family, School and Community Collaboration (3)
The focus of this course is the understanding of the family and community as partners with the schools in the education of students with mild and moderate disabilities. In addition, candidates will learn about the Ohio Standards for the Teaching Profession.
EDUC 432 Family and Community Relationships (2)
Approaches for educators in collaborating with parents, agencies, and other professionals, in addressing the identified needs of all children. Students will learn about the procedures used for IEP conferences and how to conduct parent conferences. Students will be expected to conduct at least one parent conference and/or home visit. Prerequisites: EDUC 202, 228, 229, 231, 234, 235, 237 and admission to the Teacher Education Program.

EDUC 433 Early Childhood Internship (11)
An intensive, 15 week, full day teaching experience in a pre-k, kindergarten or primary classroom (must be a different age level than in EDUC 338.) Students will work in partnership with a master teacher to practice the art and craft of teaching and develop skills of planning and facilitating learning that are transferable to multiple early childhood contexts. Students will be assessed using the Ohio Teacher Standards. (Graded Pass/Fail). Prerequisites: EDUC 202, 229, 231, 234, 235, 237, 335, 430 and admission to the Teacher Education Program.

EDUC 435 Integrated Reading/Language Arts Methods: Early Childhood (4)
The Common Core State Standards in English Language Arts are used to organize the instruction in the course. The course emphasizes reading strategies that are validated by scientifically based research in the teaching of reading and the use of phonics. Provides the pre-service teacher with competency in the methods of teaching reading and language arts to early learners. The course emphasizes comprehensive, creative approaches and specific techniques involved in integrating listening, speaking, writing, grammar, reading, spelling and handwriting experiences for the young child. Focus on integrated development of communication skills. Prerequisites: EDUC 202, 229, 231, 234, 237 and admission to the Teacher Education Program.

EDUC 436 Reading Diagnosis and Remediation with Early Childhood Practicum (4)
The study of appropriate reading and reading readiness diagnostic and remedial procedures for assessing strengths and weaknesses in young learners are included. The use of the results of these procedures to create appropriate teaching strategies is addressed. Students will have the opportunity to develop and implement diagnostic and remedial strategies during a 40-hour field placement. (Graded Pass/Fail). Prerequisites: EDUC 202, 229, 231, 234, 237 and admission to the Teacher Education Program.

EDUC 438 Advanced Practicum: Early Childhood (3)
Students will spend 120 total hours in a high school classroom(s) serving as an apprentice to a master teacher during a daily 3-hour block. They will plan, implement and evaluate their teaching of a set(s) of lessons and/or units as appropriate to the school’s curriculum content and/or school context. They will demonstrate ability to sequence instruction that is developmentally appropriate, develop appropriate methods for students to demonstrate learning and use that information to alter future instruction. Students will be videotaped at least twice during the semester and jointly critique the tapes with college supervisors. (Graded Pass/Fail). Prerequisites: EDUC 202, 229, 231, 234, 235, 237 and admission to the Teacher Education Program.

EDUC 442 Teaching Mathematics in Middle School (3)
Senior level candidates will learn about and integrate best practice content based pedagogies in instructional planning and implementation. The source of best practice pedagogies in math is the National Council of Teachers of Mathematics. The Common Core Standards in Math and Math Model Curriculum are used as the source of content and organization for the course. In addition, student will become familiar with the Standards for Ohio Educators and the Continuum of Teacher Development. Candidates will continue to learn, understand and use the rubrics associated with the Ohio Teacher Performance Assessment program and how that will be used to assess their practice in the internship and during the Ohio Teacher Residency program. Pre-service teachers will continue to develop competency in instructional planning, instructional implementation including the use of academic language, assessment, developmentally appropriate practice, differentiated instruction, and professionalism including reflection. Prerequisites: EDUC 202, 228, 229, 243, 340, 380, PSY 227 and admission to the Teacher Education Program.

EDUC 443 Teaching Science in Middle School (3)
Senior level candidates will learn about and integrate best practice content based pedagogies in instructional planning and implementation. The source of best practice pedagogies in science is the National Science Teachers Association. The Academic Content Standards in Science (revised edition) and Science Model Curriculum are used as the source of content and organization for the course. In addition, student will become familiar with the Standards for Ohio Educators and the Continuum of Teacher Development. Candidates will continue to learn, understand and use the rubrics associated with the Ohio Teacher Performance Assessment program and how that will be used to assess their practice in the internship and during the Ohio Teacher Residency program. Pre-service teachers will continue to develop competency in instructional planning, instructional implementation including the use of academic language, assessment, developmentally appropriate practice, differentiated instruction, and professionalism including reflection. Prerequisites: EDUC 202, 228, 229, 231, 234, 235, 237 and admission to the Teacher Education Program.
Assessment program and how that will be used to assess their practice in the internship and during the Ohio Teacher Residency program. Pre-service teachers will continue to develop competency in instructional planning, instructional implementation including the use of academic language, assessment, developmentally appropriate practice, differentiated instruction, and professionalism including reflection. Prerequisites: EDUC 202, 228, 229, 243, 340, 380, PSY 227 and admission to the Teacher Education Program.

EDUC 444 Teaching Social Studies in Middle School (3)
Senior level candidates will learn and integrate best practice content based pedagogies in instructional planning and implementation. The source of best practice pedagogies in social studies is the National Council of Social Studies. The Ohio Academic Standards in Social Studies (revised edition) and the Social Studies Model Curriculum are used as the source of content and organization for the course. In addition, student will become familiar with the Standards for Ohio Educators and the Continuum of Teacher Development. Candidates will continue to learn, understand and use the rubrics associated with the Ohio Teacher Performance Assessment program and how that will be used to assess their practice in the internship and during the Ohio Teacher Residency program. Pre-service teachers will continue to develop competency in instructional planning, instructional implementation including the use of academic language, assessment, developmentally appropriate practice, differentiated instruction, and professionalism including reflection. Prerequisites: EDUC 202, 228, 229, 243, 340, 380, PSY 227 and admission to the Teacher Education Program.

EDUC 445 Integrated Reading/Language Arts Methods: Middle School (4)
The study of appropriate reading diagnostic and remedial procedures for assessing strengths and weaknesses in middle-aged learners are included. The use of the results of these procedures to create appropriate teaching strategies is addressed. Students will have the opportunity to develop and implement diagnostic and remedial strategies during a 40-hour field placement. Prerequisites: EDUC 202, 228, 229, 243, 340, 380, PSY 227 and admission to the Teacher Education Program.

EDUC 446 Reading Diagnosis and Remediation: Middle Childhood with Practicum (4)
The study of appropriate reading diagnostic and remedial procedures for assessing strengths and weaknesses in middle-aged learners are included. The use of the results of these procedures to create appropriate teaching strategies is addressed. Students will have the opportunity to develop and implement diagnostic and remedial strategies during a 40-hour field placement. Prerequisites: EDUC 202, 228, 229, 243, 340, 380, PSY 227 and admission to the Teacher Education Program.

EDUC 448 Middle Childhood Internship (11)
An intensive, 15 week, full day teaching experience in a middle school classroom(s) (must be in both content areas of the license). Students will work in partnership with a master teacher(s) to practice the art and craft of teaching and develop skills of planning and facilitating learning that are transferable to multiple contexts. Students will be assessed using the the Ohio Teacher Standards. The student must meet the requirements for the Internship as described in the Teacher Education Handbook including passage of the appropriate Praxis II content test(s). (Graded Pass/Fail) Must be taken concurrently with EDUC 346, 348, and 498. Prerequisites: EDUC 202, 228, 229, 243, 339, 340, 449, PSY 227; and admission to the Teacher Education Program.

EDUC 452 Mathematics Methods: 7-12 (3)
Senior level candidates will learn about and integrate best practice content based pedagogies in instructional planning and implementation. The source of best practice pedagogies in math is the National Council of Teachers of Mathematics. The Common Core Standards in Math and Math Model Curriculum are used as the source of content and organization for the course. In addition, student will become familiar with the Standards for Ohio Educators and the Continuum of Teacher Development. Candidates will continue to learn, understand and use the rubrics associated with the Ohio Teacher Performance Assessment program and how that will be used to assess their practice in the internship and during the Ohio Teacher Residency program. Pre-service teachers will continue to develop competency in instructional planning, instructional implementation including the use of academic language, assessment, developmentally appropriate practice, differentiated instruction, and professionalism including reflection. Prerequisites: EDUC 202, 228, 229, 347, 380, PSY 227 and admission to the Teacher Education Program.

EDUC 453 Science Methods (7-12) (3)
Senior level candidates will learn about and integrate best practice content based pedagogies in instructional planning and implementation. The source of best practice pedagogies in science is the National Science Teachers Association. The Ohio Academic Standards in Science (revised edition) and Science Model Curriculum are used as the source of content and organization for the
course. In addition, student will become familiar with the Standards for Ohio Educators and the Continuum of Teacher Development. Candidates will continue to learn, understand and use the rubrics associated with the Ohio Teacher Performance Assessment program and how that will be used to assess their practice in the internship and during the Ohio Teacher Residency program. Pre-service teachers will continue to develop competency in instructional planning, instructional implementation including the use of academic language, assessment, developmentally appropriate practice, differentiated instruction, and professionalism including reflection.

Prerequisites: EDUC 202, 228, 229, 347, 380, PSY 227 and admission to the Teacher Education Program.

EDUC 454 Social Studies Methods (7-12) (3)
Senior level candidates will learn about and integrate best practice content based pedagogies in instructional planning and implementation. The source of best practice pedagogies in social studies is the National Council of Social Studies. The Ohio Academic Standards in Social Studies (revised edition) and the Social Studies Model Curriculum are used as the source of content and organization for the course. In addition, student will become familiar with the Standards for Ohio Educators and the Continuum of Teacher Development. Candidates will continue to learn, understand and use the rubrics associated with the Ohio Teacher Performance Assessment program and how that will be used to assess their practice in the internship and during the Ohio Teacher Residency program. Pre-service teachers will continue to develop competency in instructional planning, instructional implementation including the use of academic language, assessment, developmentally appropriate practice, differentiated instruction, and professionalism including reflection. Prerequisites: EDUC 201, 228, 229, 347, 380, PSY 227 and admission to the Teacher Education Program.

EDUC 455 Language Arts Methods (3)
Senior level candidates will learn about and integrate best practice content based pedagogies in instructional planning and implementation. The source of best practice pedagogies in language arts is the National Council of Teachers of English. The English Language Arts Core State Standards (revised edition) and the English Language Arts Core Curriculum are used as the source of content and organization for the course. In addition, student will become familiar with the Standards for Ohio Educators and the Continuum of Teacher Development. Candidates will continue to learn, understand and use the rubrics associated with the Ohio Teacher Performance Assessment program and how that will be used to assess their practice in the internship and during the Ohio Teacher Residency program. Pre-service teachers will continue to develop competency in instructional planning, instructional implementation including the use of academic language, assessment, developmentally appropriate practice, differentiated instruction, and professionalism including reflection. This course must be taken concurrently with EDUC 497. Prerequisites: EDUC 202, 228, 229, 341, 347, 380, PSY 227 and admission to the Teacher Education Program.

EDUC 458 Internship in Adolescent/Young Adult (11)
An intensive, 15 week, full day teaching experience in a high school classroom(s). Students will work in partnership with a master teacher(s) to practice the art and craft of teaching and develop skills of planning and facilitating learning that are transferable to other contexts. Students will be assessed using the Ohio Teacher Standards. The student must meet the requirements for the Internship as described in the Teacher Education Handbook including passage of the appropriate Praxis II content test(s). (Graded Pass/Fail) . Must be taken concurrently with EDUC 498. Prerequisites: EDUC 202, 228, 229, 347, 497, PSY 227, and admission to the Teacher Education Program.

EDUC 468 Internship in Pre-K-12 (11)
An intensive, 15 week, full day teaching experience in the content area(s) of the license). Students will work in partnership with a master teacher(s) to practice the art and craft of teaching and develop skills of planning and facilitating learning that are transferable to multiple contexts. Assignments, depending upon the school district may be divided between age levels. Students will be assessed using the Ohio Teacher Standards. The student must meet the requirements for the Internship as described in the Teacher Education Handbook including passage of the appropriate Praxis II content test(s). (Graded Pass/Fail) Must be taken concurrently with EDUC 498. Prerequisites: EDUC 202, 228, 229, 497, PSY 225 and 227; and admission to the Teacher Education Program.

EDUC 498 Internship Seminar (2)
A weekly seminar designed to support the activities of the interns during the internship. Interns meet each week with their college supervisors and then participate in whole group activities including but not limited to teacher/principal panels, instruction in journaling, using the Ohio Teacher Standards for self-assessment, and making application for licensure. (Graded Pass/Fail) Must be taken with EDUC 433, 448, 458 or 468. Prerequisites: See prerequisites for the respective internships.
ENGLISH (ENGL)

ENGL 109 Writing Workshop (3)
Writing Workshop focuses intensively on college-preparation skills in reading, expository writing, and analytical thinking. Attention is given to development of reading comprehension and analysis of written texts as well as drafting, revising, and proofreading paragraphs and short essays in preparation for college-level coursework. Enrollment by placement only.

ENGL 220 Literature and the Ecological Self (3)
An in-depth literary study of ecologies, as broadly conceived in the human imagination. Topics in this course include the relationship between humans and the environment, matters of justice and diversity, and economic arenas. The method of study draws on a wide range of genres, literary modes of interpretation, and theories of ecology.

ENGL 260 Language Structure (3)
A study of theories that explore the nature of language. The areas studied include models of syntax, grammar, morphology, and phonology, with emphasis on form, function, and those relationships that can be explained through transformational and structural approaches. Offered in alternate years.

ENGL 265 Technical Writing (3)
Study and practice of writing in professional fields. Language and format style, layout, audience, and purpose are examined as students practice writing business proposals and reports, articles for professional journals and magazines, and popular magazines. Offered in alternate years. Prerequisite: CORE125.

ENGL 270 Advanced Composition (3)
A skills-development course that focuses on the conventions of a variety of disciplines, genres, and non-print electronic texts. Included are audience profiles, visual and written composing processes, formal research processes, and techniques of proofreading and documentation. Analysis, critique, and synthesis are practiced in ways that reflect a deepening understanding of a variety of purposes and audiences. Offered in alternate years. Prerequisite: CORE125.

ENGL 275 Creative Writing (3)
A course is designed to develop both the imaginative and technical resources of those students interested in creative writing. The course includes writing poetry, short stories, drama, and nonfiction essays as well as critiquing peer and professional writers’ works. Offered in alternate years and course may be repeated. Prerequisite: CORE125.

ENGL 290 Introduction to Language and Literary Criticism (3)
An overview of topics related to the study of language and literary criticism. Emphasis is on the social elements of language and criticism, including topics in sociolinguistics and developments in literary criticism as they relate to class, ethnicity, and gender. Offered in alternate years.

ENGL 325 Postcolonial Literature (3)
A study of texts created in response to colonization, emphasizing the indigenous writing of Africa, Asia, Ireland, and/or the Americas. The course includes representative colonial texts where appropriate. Offered in fall of alternate years. Open to non-majors with the understanding of junior-level major expectations. Prerequisites: CORE125.

ENGL 335 Shakespeare (3)
A study of representative plays of Shakespeare, including Comedy, Tragedy, History, and Romance. The course includes close reading and a study of critical responses to the plays and their social context. Attention is also paid to the element of performance, especially as it relates to critical interpretation. Offered in alternate years. Prerequisite: CORE125. Open to non-majors with the understanding of junior-level major expectations.

ENGL 345 American Literature (3)
A study of selected American literature. Representative texts are chosen to illustrate distinctive elements of genre and literary movements. Special attention is paid to the expanding canon of women and ethnic writers and to social and historical contexts. Offered in alternate years. **Prerequisite:** CORE125. Open to non-majors with the understanding of junior-level major expectations.

**ENGL 355 British Literature (3)**
A study of selected texts in British literature. A major concern is the canon, how it is defined, how it operates discursively, and how it has been undermined by postcolonial and feminist writers, among others. Each text is examined in its particular social and historical context. Offered in alternate years. **Prerequisite:** CORE125. Open to non-majors with the understanding of junior-level major expectations.

**ENGL 390 Disability Studies and Literature (3)**
This theory-based course focuses on disability studies with concrete application to literary and filmic texts, as well as to the world outside the text. There will be special emphasis on diversity, access, ableism, and the limits of the body’s social construction. This course is offered in spring semesters. **Prerequisites:** ENGL 290 and junior standing.

**ENGL 425 Modern and Contemporary Literature (3)**
A study of significant writers and texts of the twentieth century, including but not limited to American, British, and Commonwealth writers. When possible, emphasis will be placed on the relationship between literature and the other arts as well as on developments in cultural and intellectual history. Offered in alternate years. **Prerequisites:** Two ENGL courses numbered above 199 and junior standing.

**ENGL 490 Literary and Cultural Theory (3)**
The capstone of the English major. This course focuses on disability studies with concrete application to literary and filmic texts, as well as to the world outside the text. There will be special emphasis on diversity, access, ableism, and the limits of the body’s social construction. Offered in spring. **Prerequisites:** ENGL 290 and senior standing.

**ENGL 395 Special Topics (1-3)**
Although presented in a manner comparable to regularly listed courses, the subject matter is not part of the regular curriculum. Special topics courses are designed by a faculty member, and, when they are offered, they are listed with the other courses in the class schedules.

**ENGL 496 Readings (1-3)**
Through a readings program, students may explore a special literary or linguistic topic to fill a void in their background. The readings program is directed toward some specific goal or purpose. The student submits an application to the Division Chair and the Chief Academic Officer through a faculty supervisor.

**ENGL 499 Independent Research (1-3)**
Independent research may be either project or research oriented. The student plans and creates the final product in an area related to his or her major area of study. The faculty member who serves as an advisor for the project must approve the student-generated design for the project or research. The Division Chair and the Chief Academic Officer must also approve.

**EXERCISE SCIENCE (ESCI)**

**ESCI 121 Introduction to Exercise Science (3)**
The history and philosophy of health, physical education, and sport are presented with career research and planning along with the psychological and sociological implications of current physical education, health, and sport issues. Students are introduced to professionals in their major area of study. They will examine closely all professional organizations pertinent to their area of study.
ESCI 125 Personal and Community Health (3)
An overview of current personal and community health issues which enables students to understand causes of, and solutions to present-day health problems.

ESCI 130 Fitness for Life (2)
This course is designed to increase students' knowledge and appreciation of skill-related and health-related fitness principles. Students will develop and apply their knowledge of healthy lifestyles through lecture and laboratory opportunities by writing about, and engaging in their own fitness programs based on personal needs, interests, and expectations.

ESCI 131 Individual Fitness and Conditioning (1)
This course is designed to promote individual participation in fitness activities that will maintain or increase personal levels muscular strength, muscular endurance, muscular flexibility, and cardiovascular endurance. The instructor will work with students to develop a sound physical fitness regimen and will supervise biweekly exercise sessions. One credit ESCI 131, 132, 135 and 138 activity courses can be repeated up to a total of 3.0 credit hours. Course offered as needed, is not on a regular rotation. (Graded Pass/Fail)

ESCI 132 Racket Sport Activities (1)
This course is designed to promote small group participation in fitness activities that involve racket sports such as tennis, racquetball, badminton, or pickle ball. Students will learn about the rules and strategies involved with these racket sports and will have the opportunity to play them twice weekly. One credit ESCI 131, 132, 135 and 138 activity courses can be repeated up to a total of 3.0 credit hours. (Graded Pass/Fail)

ESCI 133 Lifetime Fitness (0)
This course is designed to allow students to complete an approved fitness activity course or program, offered outside of Defiance College. It must be approved by the Exercise Science Coordinator prior to registration and documentation of the course or program completion must be provided to fulfill the physical activity requirement. (Graded Pass/Fail)

ESCI 135 Group Recreational Activities (1)
This course is designed to promote small and/or large group participation in a variety of fitness activities that include volleyball, basketball, soccer, and other court games. Students will learn about the rules and strategies involved within these games and will have the opportunity to play them twice weekly. One credit ESCI 131, 132, 135 and 138 activity courses can be repeated up to a total of 3.0 credit hours. (Graded Pass/Fail)

ESCI 138 Strength and Conditioning (1)
This course is designed to promote individual participation in strength training activities that will maintain or increase personal levels of muscular strength and power. The instructor will work with students to develop a sound strength-training regimen and will supervise biweekly exercise sessions. One credit ESCI 131, 132, 135 and 138 activity courses can be repeated up to a total of 3.0 credit hours. (Graded Pass/Fail)

ESCI 190 Medical Terminology (2)
Through the study of medical terminology the student will be introduced to the language of medicine. Students will gain an understanding of basic elements, rules of building and analyzing medical words, and medical terms associated with the body as a whole. Utilizing a systems approach, the student will define, interpret, and pronounce medical terms relating to structure and function, pathology, diagnosis, clinical procedures, oncology, and pharmacology. The student will be able to recognize, spell, pronounce and define medical words by combining prefixes, suffixes, and roots. In addition to medical terms, common abbreviations applicable to each system will be learned. This course is double-listed with BIO 190 Medical Terminology. This is a pre-professional course for the Athletic Training major and must earn a minimum grade of B- for admission into the Athletic Training Program.

ESCI 234 Community First Aid and CPR (1)
Students can meet the requirements for Red Cross certification in community first aid and CPR, including infant, child, and adult CPR. The course concentrates on the immediate, temporary care given to the victim(s) of an accident or sudden illness until professional help is secured. After satisfactorily completing the practical requirements and tests, students will receive community first
aid and CPR cards. (Graded Pass/Fail). This is a pre-professional course for the Athletic Training major and must earn a minimum grade of B- for admission into the Athletic Training Program.

ESCI 237 Recreation for Special Populations (3)
Designed to provide the student with an understanding of activity analysis and selection for special populations. Students will present findings after evaluating the results from the screenings and appraisals.

ESCI 256 Evaluation and Measurement in Health and Physical Education (3)
Designed to develop philosophy and skills with measurement, evaluation, and testing in health, physical education, and sport. Students will have opportunities to collect and interpret data using descriptive and inferential statistical methods. Most assignments will be tailored to fit settings within the student’s area of study.

ESCI 290 Personal Training, Strength and Conditioning (3) This course introduces students to fitness and conditioning guidelines for general exercise populations as well as specialized and athletic populations. Standards and guidelines set by the American College of Sports Medicine (ACSM) and the National Strength and Conditioning Association (NSCA) are examined, discussed, and utilized for both individual and group training environments. Students are also expected to complete a self-reflection process regarding their individual fitness and wellness profile and behaviors.

ESCI 330 Pharmacology (2)
This course will instruct the student in the knowledge of medications used to treat injuries and illness. The course will also include the discussion of illicit drugs and how health care professionals can intervene on behalf of those individuals using illicit drugs. Offered in the spring semester in alternate years.

ESCI 340 Nutrition (2)
This course will instruct the student in the concepts of proper nutrition and how it can benefit physically active individuals. These concepts include the basic nutritional components (proteins, carbohydrates, fats, vitamins, minerals, and water), caloric intake, weight management, pre-game meals, and eating disorders. Offered in the spring semester in alternate years.

ESCI 355 Exercise Physiology (3)
Exercise physiology is the study of how the body adapts to the acute and chronic stress of physical activity. It develops a basic understanding of how the body works by incorporating anatomy, kinesiology, biomechanics, and systematic physiology. This is a pre-professional course for the Athletic Training major and must earn a minimum grade of B- for admission into the Athletic Training Program. Prerequisite: BIO 235 and BIO 236 or BIO 229

ESCI 356 Kinesiology and Biomechanics (3)
The course is designed to investigate four components of physical activity: a) location, origin insertion, and action of the major muscles involved in physical activity; b) principles of motion and how they apply in the physical education/sport domain; c) analysis of various aspects of human movement for efficiency and effectiveness; d) improvement of movement style based on application of physics principles to analysis of movement. Prerequisite: BIO 235 and BIO 236 or BIO 229

ESCI 390 Fitness Testing and Leadership (3)
This course will provide students with experience in planning and implementing fitness testing within a variety of individual and group environments. Both laboratory and field testing will be addressed for fitness components to include cardiorespiratory endurance, body composition, muscular strength, muscular power, muscular endurance, muscular power, agility, and sport-specific skills. Additionally, students will explore, discuss, and utilize fitness leadership strategies and motivational strategies in a variety of settings. Prerequisite: ESCI 290.

ESCI 397 Field Experience
Field experience affords students an opportunity to engage in non-classroom learning under the supervision of a qualified person. The program is designed to introduce students to a professional area before enrolling in professional courses and to enable the students who have completed some professional courses to apply the principles and techniques acquired to practical situations. Students are expected to analyze critically the situation and to evaluate the experience in light of their course work and career plans. Students must make arrangements with a faculty supervisor prior to enrolling. (Graded Pass/Fail).
ESCI 481 Organization and Administration of Health, Physical Education, and Sport (3)
Organization and administration of health, physical education, sports medicine, and wellness programs with an emphasis on facilities, equipment, budget, scheduling, community relationships, use of community resources, current issues, and ethical concerns. After the first five weeks, the course will involve team teaching. Students will be placed in groups according to their major area of study. 
Prerequisite: juniors and seniors status only.

ESCI 490 Fitness and Wellness Programming (3)
An in-depth look at current practices and procedures for the implementation of fitness and wellness programs in hospital, industrial, clinical, educational, and collegiate settings. Community-based scenarios will be addressed within group projects. A culmination of programming and management techniques will be implemented. Prerequisite: ESCI 290.

ESCI 491 Internship
An on-the-job learning experience related to the field of study. An internship is cooperatively supervised by a College faculty member and a qualified person in the field where the student is working. Each internship will culminate with a successful oral presentation (capstone experience) to the faculty of the Exercise Science Department. (Graded Pass/Fail)

FORENSIC SCIENCE (FNSC)

FNSC 343 Forensic Science I (3)
A study of modern techniques used in forensic science. Topics include evidence collection, proper processing and analytical instrumentation. Offered in alternate odd years. Prerequisite: CHEM 234 with a grade of “C” or higher.

FNSC 353 Forensic Science II (3)
An in depth study of modern techniques used in forensic science. Topics include evidence collection, proper processing and analytical instrumentation. Offered in alternate odd years. Prerequisite: FNSC 343 with a grade of “C” or higher.

GENERAL STUDIES (GEN)

GEN 111 Portfolio Development (1)
Covering the basics of portfolio design and content, this course includes the study of skills, values, methods, and objectives of a variety of disciplines in relation to individual competencies gained through work and/or life experience. There is a primary focus on the development of an effective portfolio. Offered in spring semester. (Graded Pass/Fail)

GEN 200 Career Exploration (1)
This course is designed for first and second year students who wish to explore majors and careers. Students will gain an understanding of the process of career decision-making. They will learn how interests, skills, and values relate to career choices, and acquire information about educational and career options. Emphasis will be placed on self-evaluation, decision-making and goal setting. Offered each spring.

GEN 281 Undergraduate Teaching Assistant (1)
Students participating in this course serve as Undergraduate Teaching Assistants (UTAs) for an instructor of an undergraduate course. Responsibilities include assisting the instructor with course activities and facilitating small group and individualized study sessions. UTAs gain experience leading group discussions, which can improve communication skills, increase specific content knowledge, and gives insight into what is involved in college-level teaching. A qualified student must have a 3.0 cum GPA and be approved by the instructor. This course may be repeated for a total of 2 credits (Graded Pass/Fail). Approval of the Director of Student Academic Support Services is required to schedule this course.

GEN 299 Affiliated Program Year One (0):
Students participating in this course are students continuing their Defiance College education at other institutions, such as BSN 1-2-1 students and similar concurrent programs. Students will be scheduled in this course during the first year while in an affiliated program in order to continue their relationship and access to services with Defiance College. Students enrolled in this course are expected to return to Defiance College with transfer credit applicable toward their Defiance College major. This course does not count toward the total number of hours required or earned for a degree. The course is not graded and will not appear on a student’s transcript.

**GEN 300 Preparing for Graduate and Professional School (1)**
This course is designed to prepare students for the graduate and professional school application process. At the end of the course, students should be knowledgeable about the basic differences between Master’s, Doctoral and Professional degrees, information to include in a personal statement, when and how to apply, how many schools to apply to, preparing for standardized tests, asking for faculty letters of recommendation, preparing a curriculum vita (CV) or resume, and how to make oneself a strong candidate for admission. Teaching methodologies will include lecture, group discussion, oral presentations, journal entries and readings. Offered each fall.

**GEN 301 Professional Presentation (1)**
This one-credit course is designed to prepare junior and senior students for their job search. Upon completion of the course, students should be able to: Prepare a professional resume for use in job search, prepare a professional cover letter for use in job search, give a professional interview with their new interviewing skills, identify sources of job information and best methods to look for a job, utilize networking tools such as LinkedIn. Offered each fall.

**GEN 399 Affiliated Program Year Two (0)**
Students participating in this course are students continuing their Defiance College education at other institutions, such as BSN 1-2-1 students and similar concurrent programs. Students will be scheduled in this course for the second year within an affiliated program in order to continue their relationship and access to services with Defiance College. This course does not count toward the total number of hours required or earned for a degree. The course is not graded and will not appear on a student’s transcript.

**GEOGRAPHY (GEOG)**

**GEOG 132 Physical Geography (3)**
Landforms, weather and climate, soils and vegetation, and natural hazards. Nature and distribution of these environmental elements and their significance to man. Offered on demand.

**GEOG 231 Geography of the Americas (3)**
The natural resources, physical environment, economy, population, and cultural patterns of North and South America.

**GEOG 232 World Geography (3)**
The geography of Europe, Asia, Africa and Australia with emphasis on the natural resources, political conditions, economy, population and cultural patterns of each area. To a lesser extent the geography of the Americas will be studied.

**HEALTH AND PHYSICAL EDUCATION (HPE)**

**HPE 117 Secondary School Activities (3)**
This course is designed to give the prospective secondary physical education major or recreation specialist an understanding of fundamental sport skills, materials, and methods of presenting the various skills. Emphasis will be placed on skill-learning through maximum participation.
HPE 177 School Health, Safety, and Services (3)
This course provides an overview of health service programs including health appraisal, healthy environment, safety, and community agencies and how they relate to health education in school and community settings. Health history is emphasized, along with student interviews and observations of school personnel. Ohio school law is discussed with identification of mandated and permissive curriculum content.

HPE 183 Human Growth and Motor Development (3)

Part I: Analysis of the sequential progression of fundamental motor skills. Environmental factors that influence the development of fundamental motor skills.

Part II: Study of physical growth patterns and biological maturity as related to motor performance.
Presentation of variety of topics related to growth and motor development, such as self-concept, physical fitness, equity issues, and developmental issues related to children in sports.

HPE 222 Pre K-3 Field Experience (1)
This course is to be taken concurrently with PE224. The students will be placed in a partnership school, where they will be working with a physical education teacher at the Pre K-3 level. Students will be expected to develop and organize physical activities for these age levels, and apply them through appropriate methodology. Students will be videotaped, and specific assessments will be carried out by the physical education teacher and the college professor. (Graded Pass/Fail). Prerequisite: education major.

HPE 224 Health and Physical Activity for Pre K-3 (3)
Presentation of activities and methodology related to health and physical education Pre K-3. The methods and selected strategies will meet the growth and development needs of these children. Information included: basic health, safety, nutrition, communicable disease and abuse, basic rhythmic work, creative play-drama, body management, locomotor and non-locomotor and manipulative work, games of low organization. Must be taken concurrently with HPE 222. Prerequisite: education major.

HPE 248 Classroom Management and Curriculum, PreK-8 (3)
Students will develop pedagogical skills and strategies to effectively present information to students at a variety of developmental levels. Classroom routines, transitions, organization, and assessment will be developed in alignment with lesson objectives. The progression of classroom instruction over the Pre K-8 years will be identified and incorporated through classroom structure.

HPE 259 Adapted Physical Education, Recreation and Sport (2)
The study of challenged youth, identifying the characteristics of various groups and the challenges of meeting their needs through the selection of the appropriate activities. The students will learn about the importance of developing and working with the IEP, after working with a number of testing and screening devices. There is a field service component as part of the course requirements.

HPE 260 Physical Education in Grades 4-8 (3)
Presentation of skills and methodology in a variety of activities suitable to meet the needs and characteristics of youngsters in grades 4 through 8. The course will include tumbling, elementary gymnastics, rhythmic activities, team and individual sports, and wellness/fitness. Evaluation and testing procedures will be identified for the various activities. Prerequisite: education major.

HPE 271 History and Philosophy of Sport and Physical Education (2)
This course is designed to provide students with an understanding of the philosophical approach to sport, physical education, and leisure activity, from both historical and current perspectives. Responses to current mainstream ethical situations that may arise in a sport or exercise setting will be addressed and critically analyzed.

HPE 304 Psycho-Social Aspects of Sport and Physical Education (3)
This course examines psycho-social theories, practices, and research related to sport, exercise and physical education from a positive youth development perspective. The course is designed to introduce students to the field of sport and exercise psychology and
sociology by providing a broad overview of the major topics in the areas, including sport in society, sport as a social structure, mental skills in sport and physical education, and the influence of psychological characteristics on sport participation.

**HPE 317 Physical Education Methods (3)**
Senior level candidates will learn about and integrate best practice content based pedagogies in instructional planning and implementation. The source of best practice pedagogies in physical education will be the National Association of Sport and Physical Education. Additionally, the Ohio Academic Standards in Physical Education is used as the source of content and organization for the course. In addition, student will become familiar with the Standards for Ohio Educators and the Continuum of Teacher Development. Candidates will continue to learn, understand and use the rubrics associated with the Ohio Teacher Performance Assessment program and how that will be used to assess their practice in the internship and during the Ohio Teacher Residency program. Pre-service teachers will continue to develop competency in instructional planning, instructional implementation including the use of academic language, assessment, developmentally appropriate practice, differentiated instruction, and professionalism including reflection. The course must be taken concurrently with EDUC 497. *Prerequisites: EDUC 202, 221, 228, 229, 370, HPE 260, PSY225 and 227 and admission to the Teacher Education Program.*

**HPE 338 Instructional Methods of Movement Activities, Pre K-8 (2)**
This course is designed to provide students with an understanding of a variety of movement skills and activities, specifically how to present activities and methodologies related to health and PE from grades Pre K-8. Skills included will be fundamental motor skills, tumbling, rhythmic gymnastics, team and individual sports, and wellness/fitness. Emphasis will be placed on skill learning through participation and instruction. Students will demonstrate proficiency not only through instruction of skills but also the ability to perform skills themselves. Basic health and safety needs will also be included.

**HPE 358 Motor Learning and Movement Education (3)**
The general coaching theory and practice course will provide students with information relative to coaching that concerns training, conditioning, communication, motivation, ethics and organization. The course is required before the student schedules one of the following: HPE 362 through HPE 367. Offered in alternate years.

**HPE 361 Principles of Coaching (2)**
Methods and techniques for coaching the various track and field events. Practice organization and administration is stressed, with specific strategies and conditioning. *Prerequisite: HPE 361*

**HPE 362 Methods in Coaching Track (1)**
Methods and techniques for coaching basketball. Practice organization and administration is stressed, along with the specific strategies and conditioning. *Prerequisite: HPE 361*

**HPE 363 Methods in Coaching Basketball (1)**
Methods and techniques for coaching softball. Practice organization and administration is stressed, along with the specific strategies and conditioning. *Prerequisite: HPE 361*

**HPE 364 Methods in Coaching Softball (1)**
Methods and techniques for coaching football. Practice organization and administration is stressed, along with the specific strategies and conditioning. *Prerequisite: HPE 256*

**HPE 365 Methods in Coaching Baseball (1)**
Methods and techniques for coaching baseball. Practice organization and administration is stressed, along with the specific strategies and conditioning. *Prerequisite: HPE 361*
HPE 367 Methods in Coaching Volleyball (1)
Methods and techniques for coaching volleyball. Practice organization and administration is stressed, along with the specific strategies and conditioning. **Prerequisite: HPE 361**

HPE 376 School Health Methods (3)
Senior level candidates will learn about and integrate best practice content based pedagogies in health into their instructional planning and implementation. The source of best practice pedagogies in health education is the American Association of Health Education. In addition, student will become familiar with the Standards for Ohio Educators and the Continuum of Teacher Development. Candidates will continue to learn, understand and use the rubrics associated with the Ohio Teacher Performance Assessment program and how that will be used to assess their practice in the internship and during the Ohio Teacher Residency program. Pre-service teachers will continue to develop competency in instructional planning, instructional implementation including the use of academic language, assessment, developmentally appropriate practice, differentiated instruction, and professionalism including reflection. The course must be taken concurrently with EDUC 497. **Prerequisites: EDUC 202, 221, 228, 229, 370, PSY 225 and 227 and admission to the Teacher Education Program**

**HISTORY (HIST)**

HIST 201 US History to 1877 (3)
A survey of U.S history from European contact to 1877, covering the major themes and issues in this country’s early history. Major themes include the Colonial and Revolutionary Eras, Jacksonian America, and the Civil War.

HIST 202 US History from 1877 (3)
A survey of US history from Reconstruction covering the major themes and issues in this country’s post-Civil War period. Major themes include Populism, Westward Migration, Industrialization and America’s involvement in the wars of the late 19th and 20th centuries.

HIST 204 Europe: The Italian Renaissance to the Present (3)
A survey of European history from the Renaissance to the French Revolution and industrial ages, followed by the study of nation states, ideologies Imperialism and World Wars One and Two. Special attention is paid to European religious, cultural, political, social, and economic transformations that shaped the modern world.

HIST 205 The 20th Century World (3)
This survey of the 20th world is designed to provide an overview of one of the most tumultuous periods in human history. The 20th century was an era of horror violent massacres and worldwide wars and unprecedented economic prosperity, technological and scientific innovation, and social justice. Looking at this age of extremes renders one sure verdict: the world is decidedly more interconnected than ever before. The responsibility for horror, prosperity, and justice belong to us all. This course takes that interconnectedness and that responsibility as the starting point, examining specific events for their global circumstances and ramifications.

HIST 207 Ages of Empires (3)
This course will survey world civilizations of the Ancient Near-East, India, China, Greece, Rome, Islam and Africa from prehistory to 1500 CE. It will examine how and why human civilizations arise, the differences and similarities between civilizations of the world, and why some civilizations succeeded and others failed. The course will examine the development of politics, religion, philosophy, economic and the variety of cultures present in these regions. Offered in fall of alternate odd years.

HIST 311 Colonial America (3)
An in-depth study of the Colonial Era, from European contact through the Revolutionary War. Themes that will be investigated will be Indian-white relations, the role of women and minorities in colonial America, and the social and cultural institutions, which helped shape American culture and history.

HIST 315 Era of the American Civil War (3)
This course is an intensive study of the political, social, military, and economic aspects of the American Civil War period. Particular attention will be paid to the causes, conduct, and consequences of the war.

HIST 328 Political Geography (3)
Political geography will examine diplomacy and international relations in the last two centuries. The course will examine geopolitics from the local, national, and global perspectives and discuss how the world has been fundamentally “reordered.” A variety of themes will be discussed including, but not limited to, state building, the role of imperialism, colonial legacies, terrorism, and national self-interest. Offered in spring of odd alternate years.

HIST 336 History of the Constitution (3)
This course focuses on the historical ideas, events, and perceptions that led to the creation of the U.S. Constitution. Special emphasis will be placed on the motivations of the framers, the rationale of the Federalists and anti-Federalists, the Bill of Rights, the evolution of the government including the key concepts of liberty and freedom. Moreover, the course incorporates a degree of flexibility, which will allow for the accommodation of themes or issues in constitutional history that are of particular interest to the class participants. Offered in spring of even alternate years.

HIST 340 History of the Middle East (3)
A survey of the history of the Islamic Middle East and North Africa with special attention paid to the Arab expansion of the medieval period, the Ottoman Empire, and particularly the modern Middle East in crisis. Offered in alternate years. Prerequisites: CORE125, CORE310 and a 200-level history course.

HIST 345 The Ohio Area (3)
History of the Ohio area from prehistoric to post-Civil War times. A survey of regional geography and economic and social influences. Offered in alternate years.

HIST 350 History of Asia (3)
A survey of the early histories of China and India, followed by major developments in Asia before the modern period, and culminating with the emergence of modern Japan, India’s struggle for independence, China’s ongoing 20th century revolution, and the crisis in southeast Asia. Offered in alternate years. Prerequisite: CORE125, CORE310 and a 200-level history course.

HIST 395 Special Topics
Among others, the following courses may be offered periodically as special topic courses:
African-American History
The History of Women in America
Trans-Mississippi West
Social and Cultural History of the United States
Germany, from Bismarck to Hitler

HIST 398 Historical Methods and Public History (3)
This course introduces and reinforces the major skills and methods of the historical profession. Topics covered include historical writing and the proper documentation of that writing, advanced research skills, oral interview techniques, and basic archives and records management.

HIST 496 Readings
Through a readings program, students may explore the literature of a specific field in preparation for a later independent research project, can fill a void in their background, or read the literature of a subject for its own value. The program is directed toward some specific goal or purpose. The student is expected to submit application through a faculty supervisor.
HIST 498 Seminar: Senior Capstone Experience (3)
In a seminar for credit, the faculty leader selects a topic or theme which is published in the regular schedule. The student works independently to a greater degree than in a regular course. A seminar meets on a regular basis for discussion of materials relative to the topic.

HIST 199, 299, 399, 499 Independent Research
Independent research may be either project or research-oriented. Such topics are not a normal part of the curriculum and serve two needs: first, the student investigates an area of special interest; and second, the student works closely with a faculty member in planning, executing and evaluating the program.

GLOBAL STUDIES (GLST)

GLST 110 Introduction to International Relations (3)
This course provides an overview of the basic concepts and ideas of international relations. Topics may include any of the significant areas of political thought and political philosophy.

GLST 211 Introduction to Global Studies (3)
This course provides an overview of the multidisciplinary aspects of International and Global Studies including the following areas: business, religion, political science, history, environmental management, geography, communication and literature.

GLST 300 International Peace and Conflict Resolution (3)
This course discusses from a philosophical, moral, diplomatic, and historical-political point of view international conflict resolution strategy, with some case studies (e.g. South Africa), war and peace, violence and terror, and especially, issues in international law and human rights.

GLST 350 Comparative Issues and Politics (3)
This course compares and contrasts different nation-states, political systems, institutions, populations, and ideologies in the world. It emphasizes the use of comparative research both as a subject and as a method in the major.

GLST 425 Seminar on Global Security, U.S. Foreign Policy and 9/11 (3)
This course examines foreign policy decision making processes. It specifically examines the social, political and economic forces that shape the U.S. foreign policy in the face of global security challenges in the post 9/11 era.

GLST 450 Seminar on Global Studies (3)
A topics and methods course that examines current hotspots and conflicts around the world. Topics might include any of the significant areas of study in the major. The emphasis is on understanding the methods of the various disciplines of the major.

GLST 499 Senior Capstone Project (3-6)
The senior capstone serves to fully integrate the educational experiences and disciplinary approaches and topics of the major. The capstone incorporates both a classroom component and independent research. Students design and execute a research project that employs sound methodology and results in a comprehensive paper. The capstone culminates in a presentation at one of the honors symposia or other similar event.
LANGUAGE (LANG)

LANG 101, 102 Conversational Spanish I, II (2,2)
This course is designed to introduce students to phonics, vocabulary, and the ability to understand, read, write and speak simple Spanish as well as explore the cultures of the Spanish speaking world. With active participation in class and adequate practice out of class, students will increase not only the knowledge of Spanish vocabulary, common expressions, grammar, improving listening and communication skills, but will also gain a better understanding of Spanish culture, using materials from Spain, Mexico, and Central and South America.

LANG 111, 112 Conversational Arabic I, II (2,2)
This course is designed to introduce students to phonics, vocabulary, and the ability to understand, read, write and speak simple Modern Standard Arabic as well as explore the cultures of the Arabic-speaking world. With active participation in class and adequate practice outside of class, students will increase not only the knowledge of Arabic vocabulary, common expressions, grammar, improving listening and communication skills, but will gain a better understanding of the culture of the Arabic people as well.

LANG 121, 122 Conversational Chinese I, II (2,2)
This course is designed to introduce students to phonics, vocabulary, and the ability to understand, read, write and speak simple Chinese as well as explore the cultures of the Chinese speaking world. The lectures will be highly interactive with skits and pair/group situational dialogues that reflect daily activities. With active participation in class and adequate practice out of class, students will increase not only the knowledge of Chinese vocabulary, common expressions, grammar, improving listening and communication skills, but will gain a better understanding of the culture of Chinese people as well.

MANAGEMENT (MGT)

MGT 331 Organizational Behavior (3)
Basic principles of management with an emphasis on the human relations approach. Includes studies of organizational development issues, practical applications of motivational theory, and leadership approaches all relative to both profit and not-for-profit organizations. Prerequisite: junior standing

MGT 340 Managing Teams in Organizations (3)
This course uses a collaborative learning environment to study team development and characteristics while also exploring interpersonal issues and personal feelings in group involvement. The course setting becomes a laboratory for group interaction where one’s effectiveness as a team member increases. The course teaches management of conflict between and within groups and decision-making and problem-solving styles. Prerequisite: MGT 331

MGT 470 Leadership and Managing Change (3)
An analysis of various theories and approaches. The course includes skill development, experiential activities, theoretical constructs and guest speakers who are leaders in a variety of settings. Prerequisite: MGT 331

MGT 485 Small Business Management (3)
Practical problems in operations, marketing, and finance facing the small businessman or entrepreneur; readings, case studies, and consulting projects with local firms. Prerequisite: junior standing.
**MARKETING (MKT)**

**MKT 240 Principles of Marketing (3)**
An introductory survey of the marketing function: product design, distribution, pricing, and integrated marketing communication.

**MKT 341 Advertising and Promotion (3)**
Role of advertising in business and society; concepts and strategy in the administration of advertising programs; budgets and media selection; evaluation of advertising effectiveness. *Prerequisite: MKT 240*

**MKT 344 Retail Management (3)**
Principles of retailing as applied to the marketing of goods and services to ultimate consumers. Store location, consumer behavior, promotion, and personal selling skills are examined. Purchasing practices and price setting for retail managers. *Prerequisite: MKT 340*

**MKT 348 Sales Management and Professional Selling (3)**
A study of basic personal selling techniques: steps in the selling process, buyer behavior, obligations, and personality factors in the selling process and overall management of the sales function. *Prerequisite: MKT 240*

**MKT 350 Sport Marketing (3)**
This course examines the world of sport as a business and will focus on attracting the overall community to the sport event as well as marketing within the event itself. The course will discuss the management of sports at professional, collegiate and special event levels focusing on the role marketing plays in planning and decision making in attracting fans and sponsors. Other topical areas will include: sports branding, athlete management, globalization, event sponsorship and marketing, media involvement, fantasy sports, sports vendors, sports innovations and the value and ROI of investing in sports.

**MKT 442 Marketing Management (3)**
This course uses case studies to examine marketing problems faced by companies. Students will examine the marketing function in detail and how it interrelates with other functional areas of the organization. Students will also examine case studies from a strategic management view and how marketing is a key component of a company’s strategic plan. *Prerequisites: MKT 240 and junior standing.*

**MKT 450 Consumer Behavior (3)**
Study of business, consumer and non-profit organizational buying processes. Emphasis is placed upon understanding the internal and external determinants of buyer behavior, including its social, cultural, information processing and psychological aspects. *Prerequisite: MKT 240.*

**MKT 460 Special Topics in Marketing (3)**
In-depth study of selected topics and problems that confront the marketing decision-maker. Examples include problems in global marketing, social marketing, services marketing and industrial marketing. *Prerequisite: MKT 240.*

**MATHEMATICS (MATH)**

**MATH 105 Quantitative Reasoning (3)**
This course explores commonly used mathematical topics to develop reasoning skills. An interdisciplinary approach is used with examples from various academic fields. Topics include logical reasoning, introduction to statistical concepts, unit conversion, formulas and linear modeling, and probability.

**MATH 106 Precalculus Mathematics (4)**
Topics in algebra, trigonometry, and functions that are essential for success in calculus. Intended for majors in mathematics, computer science, natural science, and others who will go into the calculus sequence. Credit will apply to the mathematics major. *Prerequisite: MATH 105 with grade of “C-” or higher.*
MATH 110 College Algebra (3)
College algebra, including algebraic operations on polynomials and rational expressions, graphs and models, solutions of linear and quadratic equations, including the quadratic formula, inequalities, and systems of equations. Exponential and logarithmic functions and properties are included. Intended for students who need to improve their skills in algebra. Does not apply to the mathematics major or minor.

MATH 113 Trigonometry (2)
This is a pre-calculus course emphasizing the function concept. It includes a study of the properties and applications of trigonometric and inverse trigonometric functions. Other topics include identities, polar coordinates, and vectors. Technology will be used to make connections between concepts and demonstrate applications.

MATH 115 Principles of Geometry (3)
This course is designed to provide an in-depth understanding of the concepts of Euclidean geometry. The content topics include measurement in U.S. and metric units, conversion of units, formulas for perimeter, area, volume and surface area, similar triangles and proportions, transformations of area and volume, classification of geometric objects and shapes, properties of angles, lines and geometric objects, coordinate geometry, congruence, symmetry and constructions. Process skills will include problem solving, conjecturing, reasoning, finding counterexamples, communications, connections and representation. Topics will include but not be restricted to those aligned with the Ohio Academic Content Standards for grades 4 – 9. Offered in alternate years. Prerequisite: MATH 106.

MATH 201, 202, 203 Analytical Geometry and Calculus I, II, III (4,4,4)
A three-course sequence covering limits, derivatives, anti-derivatives and the definite integral, elementary vector analysis, infinite series, related topics in analytic geometry, and selected relationships within mathematics and connect mathematics to scientific applications and to other disciplines in real world situations. Prerequisite: MATH 106.

MATH 300 The History of Mathematics (3)
Mathematics as it existed at various stages of history—Babylonian and Egyptian, Greek, Chinese, Hindu, Arabian, and Modern. Significant stages in the development of different branches of mathematics, such as geometry, algebra, and calculus. Ancient problem-solving techniques, as well as contributions from underrepresented groups and from diverse cultures will be explored. Offered in alternate years. Prerequisite: MATH 201

MATH 301 Linear Algebra (4)
Vectors and vector spaces, linear transformations, isomorphism, matrix algebra, matrix eigenvectors, and determinants. Offered alternate years. Prerequisite: one semester of calculus.

MATH 302 Modern Abstract Algebra (4)
A study of algebraic structures, this course includes and introduction to groups, rings, integral domains and fields, examining both concrete examples, and axiomatic structure. Offered alternate years. Prerequisite: two semesters of calculus

MATH 304 Modern Geometry (4)
A re-examination of Euclidean geometry and an introduction to new geometries including classical non-Euclidean. Geometry is examined both as an axiomatic system and as a group of transformations. The understanding and application of the process of measurement is included. Offered in alternate years. Prerequisite: one semester of calculus

MATH 305 Discrete Mathematical Structures (3)
Topics from graph theory, combinatorics, logic and set theory. Includes making conjectures and an examination of the structure of proofs. Offered in alternate years. Prerequisite: MA106
MATH 306 Probability and Statistics (4)
An examination of probability both in theory and application, graphical and numerical analysis of data, random variables, probability distributions, estimation, hypothesis testing and linear regression. Emphasis on computer and handheld technology. Offered in alternate years. **Prerequisite: one semester of calculus**

MATH 401 Differential Equations (4)
Methods of solution of ordinary differential equations, numerical computation and estimation techniques extended to algebraic expressions, selected applications, Laplace transforms and power series solutions to equations, fundamental matrix solutions, and series solutions. **Prerequisite: MATH 203**

MATH 405 Operations Research (3)
Mathematical programming and models. Topics will include linear programming, integer programming, network models, game theory, and Markov chains. The main emphasis of the course will be to introduce students to the concepts of building models and applying these to a variety of situations. Students will be expected to build and implement models of their own using computer simulation for solutions. Offered in alternate years. **Prerequisite: MATH 301.**

MATH 410 Topics in Applied Mathematics (3)
Applications of advanced mathematics to include Fourier series and Boundary-value problems, Green’s functions, calculus of variations, Sturm-Liouville eigenvalue problems, and tensor analysis. **Prerequisite: MATH 203 (and MATH 401 is recommended)**

MATH 420 Real Analysis (4)
This course is designed as a theoretical sequel to the calculus series. The study of sets, sequences and functions becomes a foundation for advanced study. Topics included are convergence of sequences, continuity and uniform continuity, derivative and integral, and some introductory topology. Offered fall of odd alternate years. **Prerequisite: MATH 203**

MATH 490 Senior Capstone Project (3-4)
A senior project is required of all mathematics majors. Each student will complete an independent project under the supervision of a mathematics faculty member and present the results to the mathematics faculty and students. Seniors engaged in senior projects are expected to attend all presentations. Students investigate using a problem-solving approach to the investigation and demonstrate and understanding of mathematical content using every day mathematical language. They must be able to make and evaluate mathematical conjecture and arguments and validate their own mathematical thinking.

**McMASTER SCHOOL FOR ADVANCING HUMANITY (MCC)**

**MCC 371, 372, 373, 374, 375 McMaster Learning Communities (1-3)**
MC courses integrate community-based research conducted with international or national partners and an off-campus field experience. McMaster student Scholars will participate in a learning community to develop an in-depth understanding of the issues surrounding the location of study and investigate community-defined needs within a multidisciplinary framework that includes but is not limited to study of the culture, history, arts, economics, and politics relative to the geographic and social environments. Each Scholar will participate in a series of ‘constitutional conversations’ to develop a macro perspective of issues that impact the human condition, both in their research location and globally. In addition each Scholar will complete a research project and produce a scholarly summary/product at the end of the academic term. Enrollment in this course is required by and is restricted to approved McMaster Scholars. **Course section MC 371 is the course number for the Belize learning community, MC372 is Cambodia, MC373 is Tanzania, in the 2014-15 academic year.** (Graded Pass/Fail).

**MCC 299 Honors Study (2)**
This class is intended to prepare students to travel abroad and to give them an interdisciplinary insight into the countries they will be exploring. Through this course and travel students will engage in the study of a region's culture, history, economics, geography, and societal and political systems. It is the goal of the class to prepare students to be conscious observers within the areas explored while on the ground. The course, implemented through a learning community, works to prepare students to learn effectively and safely engage in a cross-cultural experience.
MUSIC (MUS)

MUS 110 Introduction to Music (3)
An introduction to the nature of musical sound and the rich heritage of Western and World music. Designed to create an informed listener, the course is a survey of the historic eras and musical personalities that have shaped our music.

MUS 123, MU 124   Musicianship I, II (4,4)
Musicianship is a two semester sequence of courses in music theory designed to help the student musician who wants to increase their understanding and enjoyment of music by developing musical skills and an understanding of how music is put together. These courses are called “theory” courses, but they deal as much with the practice of music as with its theory. Being able to sing a melody at sight and to harmonize a tune are examples of the kinds of practical skills developed in this course. Offered alternate years.

Private Applied Music (1)
Private applied music requires the approval of the instructor. Enrollment for one credit entitles the student to 12 one-half hour lessons on a weekly basis, and the student is required to practice three hours per week. This course cannot be taken as audit.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Instrument</th>
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<tbody>
<tr>
<td>MUS 150</td>
<td>Piano</td>
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<tr>
<td>MUS 151</td>
<td>Voice</td>
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<tr>
<td>MUS 152</td>
<td>Guitar</td>
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<tr>
<td>MUS 153</td>
<td>Bass Guitar</td>
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<tr>
<td>MUS 155</td>
<td>Violin</td>
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<tr>
<td>MUS 156</td>
<td>Viola</td>
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<tr>
<td>MUS 159</td>
<td>String Bass</td>
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<tr>
<td>MUS 160</td>
<td>Cello</td>
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<tr>
<td>MUS 161</td>
<td>Woodwinds</td>
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<tr>
<td>MUS 162</td>
<td>High Brass</td>
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<tr>
<td>MUS 163</td>
<td>Low Brass</td>
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<tr>
<td>MUS 164</td>
<td>Percussion</td>
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</tbody>
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Music Ensembles (1)
Music ensembles involve students in cooperative learning environments developing aural, communication, and leadership skills. Experience in music is not required in all ensembles, but some may require an audition and/or approval by the instructor. Half-credit hour ensembles typically meet once a week for a portion of the semester with required performances outside the weekly class meeting. One credit hour ensembles typically meet once or twice a week with required performances outside the weekly class meetings.

<table>
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<tr>
<th>Course Code</th>
<th>Ensemble Name</th>
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<tbody>
<tr>
<td>MUS 171</td>
<td>String Ensemble</td>
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<tr>
<td>MUS 172</td>
<td>Choral Union</td>
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<td>MUS 173</td>
<td>Chamber Singers</td>
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<tr>
<td>MUS 174</td>
<td>Concert Band</td>
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<tr>
<td>MUS 175</td>
<td>Percussion Ensemble</td>
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<tr>
<td>MUS 176</td>
<td>Marching Band</td>
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<tr>
<td>MUS 179</td>
<td>Men’s Chorus</td>
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<tr>
<td>MUS 180</td>
<td>Women’s Chorus</td>
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</tbody>
</table>

MUS 230 History of Rock and Roll (3)
The History of Rock and Roll encompasses the powerful effect that popular music has on culture. Since the advent of the 20th century, popular music has become both definitive and at the same time expressive of the social, emotional, economical, spiritual, and political climate of people worldwide. The course will trace the roots of popular music from the 1920s to present day, focusing on the changes and expressions of global societies. Though “Rock and Roll” is often seen as an American invention, this course will dig deeply into the roots of human expression through music worldwide. The course will transcend both inter-continental influences and cross generational boundaries throughout human history in the discovery of a medium that remains core to the human experience.
MUS 231 History of Sacred Music (3)
The history of music series studies the development and literature of specific genres. History of Sacred Music is a survey style course, including topics from Gregorian chant and the early mass to modern day praise music. Includes attending services or performances including sacred music.

MUS 232 History of Musical Theatre (3)
The history of music series studies the development and literature of specific genres. History of Musical Theatre is a survey style course, ranging from the ancient Greeks to modern day, studying the art of story through song. Attending live performances is included.

MUS 371 Leadership in Music (3)
Leadership in Music develops the skills required to successfully prepare and direct a musical ensemble. Course content includes basic conducting, choosing repertoire, budgeting and planning programs, and using technology in music. Students may select the type of group to operate and may also have the opportunity to work with the Defiance College ensembles. Offered in alternate years.

THEATRE (THEA)

THEA 205 Introduction to Acting (3)
An introduction to the basic concepts of acting with an emphasis on developing vocal and physical skills in acting. Topics include characterization, focus, use of space, character and text analysis, and improvisation.

THEA 405 Theatre Directing and Design (3)
A practical course which involves all aspects of play production: directing, set design and construction, lighting, sound, costumes, stage management, props, make-up, publicity, box office, and house management. Prerequisite: THEA 205 Introduction to Acting.

NATURAL SCIENCE (NSCI)

NSCI 200 Earth in the Cosmos (4)
This course is designed to meet the life science requirement for non-science majors. This class allows for the exploration of the scientific method, the development of hypotheses, and an understanding of the physical universe through observation, investigation, and inference. The students will gain an appreciation for the physical mechanisms of the universe and the synergistic links between these processes, the natural sciences, and human culture. A laboratory component is required.

NSCI 201 The Development of Life on Earth (4)
This course is designed to meet the life science requirement for non-science majors. Areas of emphasis are the cell, inheritance, evolution, animal anatomy and physiology, and ecology. Particular attention will be given to the human species and how it fits in the environment. A laboratory component is required.

NSCI 199, 299, 399 Independent Research
Independent research may be either project or research-oriented. Such topics are not a normal part of the curriculum and serve two needs: first, the student investigates an area of special interest; and second, the student works closely with a faculty member in planning, executing and evaluating the program.

NSCI 310 Geographic Information Systems (4)
This course serves as an introduction to Geographic Information Systems (GIS) focusing on both the theory behind and application of GIS to a variety of fields. Applications in education, business, social sciences, and natural sciences will be covered through training using ESRI’s ArcGIS software. Two 50 minute lectures; One 3 hour and 50 minute laboratory per week. Offered spring of alternate years.
NSCI 392 Global Sustainability (3)
This interdisciplinary course explores those factors that are key indicators of global environmental conditions including food/agriculture development, energy consumption/production, atmospheric conditions and issues of hydrology, trends in biodiversity, and health, social and population concerns. Each of these concepts is observed not only from the perspective of current conditions but looking at the evolution of conditions from past to future. The course uses this knowledge base to support study of the shift from current condition to global sustainability and the roles of society, business and government in that cultural evolution.
Prerequisite: CORE 220.

NSCI 394 Cooperative Education or NS 391 Internship
Natural Science faculty realize the value of a field-type experience in today’s educational curriculum. Faculty also realize that enabling a student to have a valuable educational experience at the on-site location, the basic courses which will allow the work experience to be an enlightening and expandable part of education must have been taken. The following criteria have been established by the Natural Science faculty for students desiring science credit while enrolled in cooperative education or an internship; (1) Students must achieve junior standing. (2) Students must not be on academic probation. (3) Students will meet with appropriate staff members of the Division and present a rationale indicating how the work experience will enhance their science education. If the rationale for cooperative education or an internship is acceptable and meets the criteria above, the staff will approve the proposal. Upon completion of the educational experience, the student will present a seminar for the faculty and students as a part of a regularly scheduled Natural Science seminar. Following the completion of the seminar presentation, the student will be graded.

NSCI 496 Readings
Through a reading program, a student may explore the literature of a specific field in preparation for a later independent research project or can fill a void in his/her background. In all cases, the program is directed toward some specific goal or purpose. The student must apply through a faculty supervisor.

NSCI 499 Senior Capstone Project (2-4)
A senior capstone project is required of all Natural Science majors and can be completed by either completing an independent research project under the supervision of a Natural Science faculty member or by presenting the research during a Natural Science seminar during the senior year. If circumstances preclude a student from completing an independent research project, the following method can be used to fulfill the requirement. During the junior year a student prepares a literature analysis and review of a specific topic approved by two Natural Science faculty members. During the senior year the student will present a Natural Science seminar covering the topic.

NURSING (NRS)

NRS 101 Nurse Aide Certification (2)
An introductory course in which students learn the basics of health care delivery and are able to work in a variety of health care settings. Upon completion students will be eligible to sit for the state certification exam. Lecture + Clinical: taken off-site. (Graded Pass / Fail).

NRS 365 Nursing in a Globalized World (3)
This course will focus on the global aspects of health care delivery. Country comparisons will be completed and students will provide an analysis of a selected country’s health care system. The U.S. health care delivery system will be studied in relation to its increasing diverse population groups. Administrative, workforce, client, and funding issues will be addressed. Prerequisite: NRS 400 may be taken concurrently depending on nursing experience and with permission by the Director of Nursing.

NRS 380 Nursing Informatics (3)
This course will review the evolution of nursing informatics and beginning concepts used in the management and processing of data, including the information and knowledge to support nursing practice. Students will be introduced to the hardware, software, databases and communication systems. Concepts related to information literacy, computerized information systems, evaluation of online health resources, issues and trends in informatics and emerging technologies will be explored. Prerequisite: NRS 400 may be taken concurrently depending on nursing experience and with permission by the Director of Nursing.
NRS 400 Nursing Transitions (3)
This course is designed for the RN who is making the transition to baccalaureate nursing. The course focuses on gathering, analyzing and synthesizing information obtained in the delivery of health care and on looking beyond the medical field into other areas that may impact the health and well-being of clients.

NRS 415 Nursing Research (3)
This course focuses on nursing research in the context of evidence-based practice. Nursing theories and nursing literature will be examined in the relationship to nursing practice. Students will be expected to critically evaluate articles in the nursing literature. Ethical considerations will also be discussed. Prerequisite: NRS 400 may be taken concurrently depending on nursing experience and with permission by the Director of Nursing.

NRS 475 Community Health Nursing (6)
This course focuses on maintaining the health and well-being of individuals and groups of individuals. Topics for discussion include a collaborative approach to health care, transcultural nursing, health promotion activities, quality assurance and the evolution of community nursing. 3 hours lecture and 2 hours clinical (90 clock hours). Prerequisite: NRS 400 may be taken concurrently depending on nursing experience and with permission by the Director of Nursing.

NRS 480 Nursing Leadership and Management (6)
This course focuses on managerial and leadership principles in the health care setting. Topics for discussion include strategic planning, organizational structure and culture, communication, conflict resolution, budget planning and evaluation, human resource issues, power and politics and teambuilding. 4 hours lecture and 2 hours clinical (90 clock hours). Prerequisite: This is meant to be the final capstone for the course and should be scheduled in a student’s final term in the RN to BSN program.

PHYSICAL SCIENCE (PHYS)

PHYS 100 Physical Science (4)
An exploration of the physical universe (physics, chemistry and astronomy) with the purpose of helping the student develop an understanding and appreciation of physical phenomena. Mathematics used includes arithmetic and elementary algebra. Three class periods and one laboratory period per week. Offered in alternate years.

PHYS 195 Physical Science Concepts (4)
This class allows for the exploration of the development of modern scientific thought, specifically the development of physical science concepts. This students will gain an appreciation of how the scientific method facilitates an understanding of the physical universe through observation, investigation, and inference. The students will explore the physical mechanisms of the universe and the synergistic links between these processes, the human culture.

PHYS 202 Introduction to Geology (4)
This course explores the relationships between human beings and their geological environment. The earth is viewed as a dynamic planet affected by sudden, violent events such as volcanic eruptions, earthquakes, and floods, as well as by slower processes operating over long time spans that create, move, and destroy continents and oceans. Topics will include (1) geological hazards such as earthquakes, volcanoes, and flooding, (2) soil, water, and air pollution, and (3) the formation of minerals, rocks, soil fossil fuels, and other natural resources. Offered in alternate years.

PHYS 210 General Physics I (4)
Introductory course in physics covering the topics of mechanics, sound and heat. Three class periods and one laboratory period per week. Offered in alternate years. Prerequisite: MATH 106

PHYS 220 General Physics II (4)
Introductory course in physics covering the topics of electricity, magnetism, optics, atomic and nuclear physics. Three class periods and one laboratory period per week. Offered in alternate years. Prerequisite: PHYS 210.
POLITICAL SCIENCE (POL)

POL 237 American Government and Politics (3)
This course will provide students with a basic understanding of the political institutions of the American Government as well as its strengths and weaknesses. Students will study the structure and purpose of the U.S. Constitution; the various levels and branches of government; the rights and responsibilities of citizens; the processes of government action; the social, economic, and geographic influences of government action; the roles of interest groups, elections, and the concepts of civil rights, liberty, freedom and equality. Offered fall of odd years.

POL 325 Public Opinion and Propaganda (3)
Formation of public opinion in a democracy and its role. Analysis of mass communication and the uses of propaganda in democratic and non-democratic states. Focus will be on intention, message and effects of uses of propaganda. Offered in alternate years.

POL 336 History of the Constitution (3)
This course focuses on the historical ideas, events, and perceptions that led to the creation of the U.S. Constitution. Special emphasis will be placed on the motivations of the framers, the rationale of the Federalists and anti-Federalists, the Bill of Rights, the evolution of the government including the key concepts of liberty and freedom. Moreover, the course incorporates a degree of flexibility, which will allow for the accommodation of themes or issues in constitutional history that are of particular interest to the class participants. Offered in spring of even alternate years.

POL 337 Comparative Social and Political Systems (1)
Serving as an overview of selected social and political systems worldwide, this course provides students with the opportunity to reflect upon macro-level policy issues that affect US and global populations. The students will use the experiences that they have had through the course pre-requisites to compare world and U.S. social and political systems. Insight and experiences from Defiance College faculty, community members, and students will be shared and discussed in order to relate “on-the-ground” learning experiences to current theories and models related to global political and social systems. Offered in spring semesters. Prerequisites MCC 371, 372, 373, 374 or 375 and either HIST 336 or POL 237.

POL 371 Constitutional Law (3)
A study of the U.S. constitution through analysis of major Supreme Court decisions and the impact of those decisions upon the American political process. Offered in alternate years.

POL 495 Special Topics: These courses may be taken in political science. See descriptions of these courses under the Criminal Justice section.

PSYCHOLOGY (PSY)

PSY 110 Introduction to Psychology (3)
The application of psychological principles to the understanding of human behavior (not open to conditionally accepted first semester freshmen).

PSY 225 Infancy and Childhood (3)
An introduction to normative physiological, social, cognitive, and emotional development as a continuous process from conception through late childhood. Prerequisite: PSY 110
PSY 227 Adolescence and Adulthood (3)
The course covers bio-psycho-social issues of development of the human being from puberty through advanced age. Key transitions in the family, interpersonal, educational and occupational realms of life are highlighted. Prerequisite: PSY 110

PSY 230 Behavioral Statistics (3)
Quantitative analysis of behavioral measures including descriptive, correlational, and inferential methods. Report writing in the behavioral sciences is also emphasized. Knowledge of basic algebra is recommended. Prerequisite: PSY 110

PSY 260 Social Psychology (3)
Social psychology explores the impact of social variables on human behavior, attitudes, perceptions, and motives. Topics include attitude formation, persuasion, conformity, prejudice, and cultural variations in psychological functioning. Prerequisite: PSY 110

PSY 270 Human Sexuality (3)
This course is intended to provide a comprehensive overview of human sexuality, to include information about anatomy, the sexual response cycle, STIs, healthy reproductive decisions, sexual orientation, sexual problems, sexual variants, victimization, and social/legal issues regarding the sale of sex. Prerequisite: PSY 110, not open to freshmen

PSY 290 Abnormal Psychology (3)
An examination of the signs and symptoms of behavioral pathology and the interplay of social, learning, and physiological factors in the etiology of mental disorders. Prerequisite: PSY 110

PSY 302 Psychology Research Methods (3)
The primary goals of this course are to teach students to design and conduct research projects, to use statistical software to analyze data, and to interpret statistical results. Students will learn to write a research report that conforms to the publication specifications of the American Psychological Association and will become familiar with the ethical issues related to the use of human subjects. Prerequisites: SWK / PSY 230 Behavioral Statistics and junior class standing.

PSY 305 History and Systems of Psychology (3)
A review of major historical and theoretical perspectives in psychology. Important figures in the history of psychology as a science and as a profession will be considered. Prerequisite: PSY 110

PSY 315 Theories of Personality (3)
A comparative study of classical and recent theories of normal personality structures and development with an examination of the supporting research. Prerequisite: PSY 290 (not open to freshmen).

PSY 420 Industrial / Organizational Psychology (3)
This course is designed to examine the practices of industrial / organizational psychology. These include but are not limited to personal practices, performance assessment, job and workplace design, job satisfaction, behavior within organizations, systems of management, and safety in the workplace. Prerequisites: PSY 110 or BUS 140 and class standing of sophomore or higher.

PSY 430 Memory and Cognition (3)
The course explores the information processing approach to memory and thinking. Topics include memory processes, concept formation, and reasoning. Prerequisites: PSY 110 and junior/senior standing.

PSY 450 Neuroscience (3)
An examination of the biological and physiological basis of behavior and development with special emphasis on the neural substrates. Offered in alternate years. Prerequisites: PSY 110, 4 hours of Natural Science and junior/senior standing.

PSY 195, 395 Special Topics (3)
Advanced topics of a specific and narrow, but timely, nature and involving a faculty member’s area of expertise selected for examination and discussion. Offered on demand. May be repeated. Prerequisite: PSY 110
PSY 497 Field Experience (1-6)
Students will apply the skills and knowledge they have learned as a psychology major in a company or agency in the community. This opportunity is typically available to students who are interested in mental health, but other work settings will be considered. Students may be required to investigate possible field experience locations. Eligibility for the field experience will be based on the student’s completion of relevant coursework, GPA, and a recommendation from a faculty member. Final eligibility will be determined by the participating agency. Field placements are not always available: Students who are interested in a field experience should speak with a psychology professor 3 months prior to the semester in which they wish to enroll. Offered by request. (Graded Pass/Fail)
Prerequisites: 15 hours of psychology (or related) classes and junior or senior standing at time of enrollment.

PSY 498 Senior Seminar (3)
The primary component of this class is the completion of a research project designed by the student. Students are expected to have a proposal for their research project before the first day of class. Students who did not complete a research design in a previous course must contact the professor before enrolling in the course. Students will collect and analyze their data and then write a report that meets the publication specifications of the American Psychological Association. The second significant component of the course is the completion of psychology-related service learning project chosen by the student. In preparation for graduation from Defiance College, students will research career options and graduate school programs. Prerequisites: PSY230, PSY302 and junior/senior standing

PSY 499 Advanced Independent Research (1-4)
The student will design and conduct an independent research project. This will include a literature review, the development of a research design, data collection and analysis, and the preparation of a report that meets the publication specifications of the American Psychological Association. Prior to enrolling in the course, the student must obtain a faculty advisor for the research project. Prerequisites: PSY 230 and 302

RELIGION (REL)

REL 122 Foundations of Christian Religious Education (3)
A foundational survey of biblical, theological, psychological, sociological, legal and historical elements of Christian religious education. Students will learn to inter-relate and apply these foundational elements in practical settings, and develop a statement setting forth their philosophy of Christian religious education. Offered in alternate years.

REL 150 Worship, Liturgy and Prayer (3)
The course is an introductory exploration of (1) the meaning, role and practices of worship, sacrament, liturgy and prayer in religion with particular attention to Christianity, (2) changes in practice in response to changes in culture and society, and (3) creating fresh or refreshed worship and rituals for specific settings and populations.

REL 370 Issues in 21st Century Religion (3)
A study of key issues challenging religions from a variety of directions and forces, e.g. internal critique, global economics, dominant or minority position within societies, militant-ism and nationalism, making peace more than war, gender, entitlement and power. Topics will change with instructor.

REL 201 Approaches to Religion (3)
A study of the nature of religious ideas, values, and experiences focusing on Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity, and Islam. Insights about religion gained from psychology, anthropology, and philosophy will also be examined. Prerequisites: CORE125 and CORE225.

REL 210 Spirituality and Wholeness (3)
In a 21st Century world that seems to demand that everyone do more and more at a faster and faster pace, this course explores approaches to spiritual wholeness for lives that often feel fragmented and overloaded. Students explore topics such as: spiritual and physical disciplines of meditation and prayer; holistic moral decision making; natural and religious dimensions of healing; community integrity through service to others; and an evaluation of religious beliefs about diet and exercise. Prerequisites: CORE125 and CORE225.
REL 211 Introducing the Old Testament: Chaos, Calamity and Covenant (3)
Through the rich literature of the Hebrew Bible and the history of ancient Israel, students will be introduced to some of the foundational beliefs, values, and practices of Western cultural heritage. The course acquaints students with critical literary and historical methods of understanding the Bible in its context as well as its meaning for people of faith today. Prerequisites: CORE125 and CORE225.

REL 212 Introducing the New Testament: Teachings of Jesus and the Early Church (3)
Through the Gospels, the letters of Paul, and other New Testament writings students will explore the world of Jesus and his compelling message. The course introduces critical methods for understanding the distinctive themes of the Gospels and invites possible ways for people of faith today to grasp the meaning of Jesus’ message and ministry. Prerequisites: CORE125 and CORE225.

REL 250 Program Development and Resource Theory (3)
This course examines curriculum theory and practice from philosophical, theological, historical, and methodological perspectives. The course equips students with tools and techniques to observe and evaluate curricula, and to assess learning environments (including the reality of implicit and null curricula), and how those learning environments interact with written curricula. Students are required to apply concepts from this course in constructing programs for use within local church or church-related settings that include appropriate evaluation tools. Offered in alternate years.

REL 267 Islam (3)
A survey of Islam including its early religious history, and beliefs and practices; contemporary socio-cultural issues in the Islamic world; and major schools of thought and Islamic art, literature, and spirituality. Offered in alternate years. Prerequisites: CORE125 and CORE225.

REL 310 Mediation and Conciliation (3)
Mediation and Conciliation focuses on the third party role of the mediator. The class explores the theories and practices of mediation and conciliation in the North American context. The class will develop the skills needed for mediation in formal and informal settings. Students will spend the first part of the semester learning theory and the development of basic skills. The second part of the class will be spent in mediation role plays.

REL 321 Ethics and Morals (3)
A survey of philosophical and theological resources available for the consideration of ethical questions, combined with case studies drawn from current moral issues and dilemmas. Students can focus on ethical issues in their major fields in the context of a research assignment. Prerequisites: CORE125 and CORE225.

REL 353 Leadership and Group Work Theory (3)
Through a balance of research techniques and experiential approaches, students gain social-psychological and theological understanding of leadership styles and their effects as well as group processes. Skills are developed in identifying, diagnosing, and acting upon group and individual needs in varied situations including intra- and inter-group conflict. Students are introduced to the Meyers-Briggs Type Indicator as a tool for their leadership development. Project may include exercises with groups, including the use of videotaped recordings and receiving and giving feedback, and creation of professional and personal leadership development plans. Excellent elective for students already in campus or community leadership roles as well as those in majors that lead toward work environments requiring participation and coordination of teams or working groups such as health and wellness. Offered in alternate years. Prerequisites: CORE125, CORE225, CORE310, REL211 and REL212 or REL360.

REL 356 Readings in Theology (3)
A study of the nature of religious faith from a Christian perspective. Components of the course include: readings in Christian theology; study of great religious leaders; and an investigation of specific religious issues chosen by the student. Designed for junior and senior students with a major or minor in religion. Offered in alternate years. Prerequisites: CORE125, CORE225, CORE310, REL211 and REL212 or REL360.

REL 360 Church History (3)
Important themes in the history of Christian faith and practice are traced from Jesus and the early church to the 21st century. Students will explore lives of outstanding women and men who have made significant contributions to Christian life. Particular attention will be given to the shifting leadership roles of women and men in church history. Offered in alternate years. **Prerequisites:** CORE125, CORE225, CORE310.

**REL 395 Special Topics (3)**
At least one course will be offered in alternate years in order to meet the interests of students on timely issues about religious studies. Course titles may include:
- American Religious Experience
- Christian Ethics
- Death and Dying
- Homiletics
- Issues of Justice and Peace
- Principles of Biblical Interpretation
- Women and Religion

**REL 397 Field Experience (3+3)**
A junior-level field placement for students majoring in Christian education. (Graded Pass/Fail)

**REL 475 Administrative Policies and Practices (3)**
Thoughtful leadership, teaching skills, printed resources, adequate finances and institutional relationships are critical to the success of any educational program. In this course students will be introduced to issues in leadership theory, motivation, human resources, planning and budgeting, institutional structures, and institutional relationships. Students will develop their own theoretical approach to each of these issues through reading, class discussion, written reflection, and field-based practical application. Open to junior and senior level students. Recommended that Ministry Studies majors take the course with junior or senior level field work. Offered in alternate years.

**REL 497 Field Experience (3+3)**
A senior-level field placement for students majoring in Ministry Studies or Religious Studies and will complete their capstone as part of this sequence. (Graded Pass/Fail)

**REL 499 Senior Capstone (3)**
Religious Studies majors choose an independent project related to their coursework in the major. The capstone integrates the students’ learning in religious studies and/or related disciplines with practical experience or with specialized research. A presentation of the results of student work is required and a component of community service is strongly encouraged.

**SOCIOLOGY (SOC)**

**SOC 120 Life in Society (3)**
Designed as an introductory course in the social sciences for the general student, as well as, preparing social science majors for advanced work in their respective majors, this course content will examine the diversity of human societies by understanding the nature of culture and its impact on social life. Variation in the structure and dynamics of organizations, communities, and societies will also be addressed in the course. Additionally, major theoretical perspectives from the social science disciplines will be introduced, as well as, substantial attention given to issues of globalization and cross-cultural comparisons.
SOC 496 Readings
Through a readings program, students may explore the literature of a specific field in preparation for a later independent research project, can fill a void in their background, or can read the literature of a subject for its own value. In all cases, the program is directed toward some specific goal or purpose. The student is expected to submit application through a faculty supervisor.

SOCIAL WORK (SWK)

SWK 121 Introduction to Social Work (3)
An introduction to the understanding of the concept of the social work profession, its significance in society, its history, and its place among the helping professions. The study of the goals, values, knowledge base, methods, and settings of social work. The beginning of the professionalization process.

SWK 230 Behavioral Statistics (3)
Quantitative analysis of behavioral measures including descriptive, correlational, and inferential methods. Report writing in the behavioral sciences is additionally emphasized. Knowledge of basic algebra is recommended.

SWK 235 Social Problems (3)
The purpose of this course is to facilitate increased awareness and understanding of social problems in the United States and throughout the world. Sociological theories, research and movements will be addressed in recognizing social problems and generating possible strategies for action. Problems of well-being, human diversity, inequality and modernization will be examined. The course will encourage value clarification and critical thinking in resolving current social problems. Prerequisites: SOC 120 and PSY 110

SWK 239 Marriage and Family Life (3)
An exploration of American family life from its historical structure and functions to variations in contemporary society. Issues of gender rules, parenting, communication, sexuality and economics as impacting family functioning are discussed along with the effects of domestic violence, divorce and separation, remarriage and blended families.

SWK 265 Cultural Diversity (3)
The goal of the course is to expand one's knowledge and understanding of living, working and relating in a culturally diverse society. Diversity will be examined on local, national and global fronts including the forms and mechanisms of oppression and discrimination as well as strategies for change that advance social and economic justice. Issues such as ethnicity, race, religion, gender, sexual orientation, age, mental/physical ability, and social class will be explored.

SWK 278 Interviewing and Interpersonal Communication (3)
This course examines the basic principles of oral communication and their application to social work practice. The principal techniques of interviewing individuals, couples, and families are explored. This is a laboratory based course with many opportunities for skill development. Prerequisites: SWK 121, SOC 120, SWK 239, and PSY 110

SWK 301 Research Methods (3)
An introduction to the principles and methods of organizing, conducting and interpreting behavioral, and social research. Examination of survey, experimental, single case design, evaluation, and observational techniques as well as issues of measurement are addressed. Recommendation: PSY 230 / SWK 230.

SWK 355 Practice I: Generalist Practice (3)
An introduction to the generalist model of social work and its application. The course presents the generalist Intervention Model and the planned change process as a framework for addressing client issues and problems. Emphasis will be on micro skills as a foundation for mezzo and macro skill development. Prerequisites: Social Work Major, SWK 121, 278, and the professional sequence courses.
SWK 356 Practice II: Groups and Family Generalist Practice (3)
An introduction to the understanding of group and family dynamics, group process and group treatment, and their relationship to the planned change process. Emphasis will be the development, management and utilization of groups by generalist social workers. 
Prerequisites: Social Work Major and SWK 355

SWK 379 Applied Behavioral Science (3)
The purpose of this course is to integrate the required courses in the human behavior and social environment sequence. The emphasis will be on enabling the student to see the impact of the client’s growth, development, and present environment on social functioning. This course will add understanding of life cycles, social systems, what constitutes healthy functioning, planned change, and theories of treatment. Prerequisite: professional sequence courses.

SWK 457 Social Work Practice III – Macro Systems Generalist Practice (3)
The course is to provide a generalist perspective to working within the macro context of Social Work. Frameworks for planning and implementing change in organizations and communities will be discussed. Coursework will offer an emphasis on macro-level skills, with integration of micro and mezzo practice. Prerequisites: SWK 355, 356, and admission to Social Work Major.

SWK 476 Social Welfare and Policy Development (3)
An examination of the programs and policies of the social welfare system in the United States. It will explore the historical roots and developments of present-day programs and policy, as well as methods and models of policy formation and analysis. Prerequisites: SWK 121, 235 and 301.

SWK 488 Senior Seminar (3)
Senior Capstone Experience. Emphasis is given to integration of all previous course content in social work with concurrent field instruction. Requires regular reporting of field activities and assists students in achieving learning objectives of the field practicum. Consideration is given to the application of social work theory, policy, research and values to the field. To be taken concurrently with SW486. Prerequisites: SWK 355, 356, 379 and 397.

SWK 199, 299, 399, 499
Independent Research may be taken in social work. See descriptions of these courses under the Criminal Justice section.

SWK 397 Junior Field Experience (3)
The course serves as the first required level of field placement. The student is placed for 10 hours per week, or a total of 140 hours within a social work setting. The student begins to utilize social work knowledge, values, and skills through observation and participation in supervised activities of the assigned agency. To be taken concurrently with SW355. (Graded Pass/Fail) Prerequisite: admission to Social Work Major

SWK 486 Senior Field Instruction (9)
Senior Capstone Experience. An experiential learning opportunity geared toward integration of academic content with practice skills. The student is placed for 30 hours per week or a total of 450 hours. The student begins to work independently as a generalist social worker under supervision within an agency setting. This is a graded course. To be taken concurrently with SWK 488. Prerequisites: SWK 397 and Senior Social Work Major status

SPORT MANAGEMENT (SPMT)

SPMT 130 Introduction to Sport Management (3)
The course is designed for the individual interested in pursuing a career in the sport management field and introduces the theoretical foundations and applied areas of sports management. Offered each fall.
SPMT 220 Economics of Sport (3)
This course will provide students with an opportunity to apply principles of economic theory to various aspects of the sport and leisure fields. Additionally, students will analyze the relationship between supply and demand for services related to sport and leisure. Finally, students will examine the evolution of economic factors in sport to include: professional specialization in sport, gender issues in sport, and the evaluation of individual and team performance in sport settings. **Prerequisite:** ACCT 221 (can be taken concurrently).

SPMT 230 Event and Facility Management (3)
This course will focus on providing an understanding of the steps and guidelines that are necessary to successfully manage various sporting events. In addition to gaining a basic understanding of necessary sporting event management skills, fundamental promotional principles used in marketing sport and event services and products will be taught as well as designing, planning, managing public and private sport and other public assembly facilities.

SPMT 270 History of Sports in the United States (3)
This course will examine the development and modernization of sports in the United States from colonial times to the present and the socio-cultural factors which have affected their growth. Offered in alternate years.

SPMT 320 Sociology of Sport (3)
This course serves as an overview of contemporary sport from a sociological perspective. Topics will include the discussion of the relationship of sport to social institutions, the individual’s socialization into sport, and stratification factors within sports. Offered in alternate years.

SPMT 340 Sport Law (3)
The purpose of this course is to provide the student with an understanding of the legal issues involved in the supervision, management, and business operations of sport. Such as contracts, negligence liability, product liability, and risk management. **Prerequisites:** SPMT 130 and SPMT 230

SPMT 491 Internship (6)
This Senior Capstone is an on-the-job learning experience related to the field of sport management which provides an experiential learning opportunity geared toward fully integrating academic content with practical skills. It is cooperatively supervised by a college faculty member and a qualified person in the field where the student is working. This internship will culminate with a successful oral presentation to the faculty and students of the Exercise Science Department. Students must make arrangements with a faculty supervisor prior to enrolling. (Graded Pass/Fail) **Prerequisite:** SPMT 397 and Senior Standing with a 2.5 GPA.

SPMT 397 Field Experience
Field experience affords students an opportunity to engage in non-classroom learning under the supervision of a qualified person. The program is designed to introduce students to a professional area before enrolling in professional courses and to enable the student who has completed some professional courses to apply the principles and techniques acquired to a practical situation. Students are expected to analyze critically the situation and to evaluate the experience in light of their course work and career plans. Students must make arrangements with a faculty supervisor prior to enrolling. (Graded Pass/Fail).