

Course Descriptions

This section lists the descriptions for all courses offered at Athens State University.

Course descriptions are presented in alphabetical order by **discipline prefix**.

The rules, regulations, policies, fees and other charges, courses, programs of study, and academic requirements that appear in this catalog were in effect at the time of its publication and every effort has been made to ensure the accuracy of all information. The contents are published for informational purposes only, and do not constitute a contract between the University and any student, applicant for admission or other person. Statements regarding courses, programs of study, fees, and conditions are subject to change without advance notice.

Accounting (AC)

- AC 300 Fundamentals of Accounting (3 Sem. Hrs.)**
This course provides an introduction to the financial accounting concepts, procedures and reporting practices. Emphasis is placed on the elements of the accounting cycle for service and merchandising enterprises.
- AC 301 Managerial Accounting (3 Sem. Hrs.) (Formerly listed as AC 371)**
Prerequisite: AC 300 or Principles of Accounting I (BUS 241)
A continuation of AC 300. This class builds on the foundational accounting concepts and using accounting information to provide a basis for management decisions. Emphasis is placed on accounting for manufacturing enterprises, including Job order, Process and Standard Cost systems.
- AC 302 Management Information Systems (3 Sem. Hrs.) (Also listed as MG 302)**
Prerequisite: Windows applications course (CIS 146); LiveText required
An examination of the role of information systems in organizations and how they relate to the objectives and structure of an organization. Emphasis is given to providing a broad overview of the information system management function.
- AC 303 Management Decision Support Systems (3 Sem. Hrs.) (Also listed as MG 303)**
Prerequisite: Windows applications course (CIS 146)
An analysis of the nature of the decision making process and an examination of support systems. Instruction will emphasize an advanced application of spreadsheet and database management software.
- AC 312 Law for Accountants (3 Sem. Hrs.)**
Prerequisite: Legal Environment of Business (BUS 263)
A study of law subjects the accountant encounters including contracts, the UCC, business organizations, and accountant liability.
- AC 321 Intermediate Accounting I (3 Sem. Hrs.)**
Prerequisite: Principles of Accounting II
A survey of the financial reporting process, detailed study of financial statements, and an analysis of generally accepted accounting principles.
- AC 322 Intermediate Accounting II (3 Sem. Hrs.)**
Prerequisite: AC 321
An in-depth study of accounting theory applicable to the major asset categories of a business entity.
- AC 323 Intermediate Accounting III (3 Sem. Hrs.)**
Prerequisite: AC 322
A review of the application of accounting theory to liability and stockholders equity balance sheet categories, culminating with a study of special purpose financial statements.
- AC 361 Federal Tax Accounting I (3 Sem. Hrs.)**
Prerequisite: Principles of Accounting II (BUS 242)
An overview of federal tax laws and regulations applicable to individuals and sole proprietors.
- AC 362 Federal Tax Accounting II (3 Sem. Hrs.)**
Prerequisite: AC 361
The application of the federal income tax law as it applies to partnerships and corporations, with emphasis on the differences which exist between financial and tax accounting.
- AC 401 Auditing (3 Sem. Hrs.)**
Prerequisites: AC 302, AC 303, and AC 322
Auditing theory and practice, with emphasis given to the function of the audit in the certification of financial statements by an independent auditor.
- AC 431 Advanced Accounting (3 Sem. Hrs.)**
Prerequisite: AC 323
A study of advanced accounting concepts including business combinations, partnerships, foreign currency transaction, and other related topics.
- AC 435 Governmental Accounting (3 Sem. Hrs.)**
Prerequisite: AC 322
An introduction to fund and budgetary accounting for government and not-for-profit organizations in education, health care, and social welfare agencies.
- AC 441 Special Topics in Accounting (3 Sem. Hrs.)**
To be offered on occasion of student demand or need.
- AC 442 Advanced Auditing and Fraud Examination (3 Sem. Hrs.)**
Prerequisites: AC 322 and AC 401
An advanced study of auditing theory and practice.

- AC 460 Directed Study/Research in Accounting (3 Sem. Hrs.)**
A course designed to allow students an opportunity to perform research/directed studies in accounting. Offered at the discretion of the professor with approval of the College Dean.
- AC 461 Internship in Accounting (1 Sem. Hr.) (At least 50 hours of work-based experience required)**
AC 462 Internship in Accounting (2 Sem. Hrs.) (At least 100 hours of work-based experience required)
AC 463 Internship in Accounting (3 Sem. Hrs.) (At least 150 hours of work-based experience required)
Prerequisites: MG 320 or GBA 300; Senior standing, approval of academic advisor, and compliance with College of Business Internship Policies and Procedures
 Designed to provide the student with practical work experience leading to a potential career in either functional or technical areas of the field.
- AC 471 Cost Accounting (3 Sem. Hrs.)**
Prerequisites: AC 323, AC 361 and AC 401
 Cost data analysis and accounting controls in planning and controlling operations and in making special decisions.

Acquisition and Contract Management (ACM)

- ACM 353 Project Management (3 Sem. Hrs.) (Also listed as LSM 353 and MG 353)**
An examination of the use of critical path method (CPM) and Program Evaluation Review Technique (PERT) on project planning and control.
- ACM 394 Introduction to Acquisition and Contract Management (3 Sem. Hrs.)**
This course is an examination into contracting with the Federal Government. Content provides insight and understanding into how government requirements are presented and developed into a contractual instrument negotiated between the government and contractor. Topics addressed include a typical contract, elements comprising a contract, terms and conditions, special provisions, clauses and instructions. Pre-award and post-award documents will be accessed. Navigation of the Federal Acquisition Regulation (FAR) to find specific laws and regulations relative to contracting with the federal government will be explored. An understanding and knowledge of the Uniform Contract Format will be obtained along with the ethical conduct and responsibilities of major contracting participants throughout the acquisition process.
- ACM 395 Acquisition and Contract Management Pricing (3 Sem. Hrs.)**
This course covers material needed by buyers, price analysts, and contracting officers tasked with obtaining fair and reasonable prices. Students who complete this class will be able to address market forces, the market research process, commerciality issues and cost/price analysis techniques such as the analogy method, parametrics, and learning curves. Students will determine whether a cost or price analysis is appropriate and identify factors that affect price comparability. Direct labor, material and indirect costs will be analyzed and calculated to determine pre-negotiation objectives. Application of a full range of contract pricing techniques will be utilized to determine the appropriate contract adjustment and establish final price or fee adjustments.
- ACM 396 Acquisition and Contract Management Administration (3 Sem. Hrs.)**
An examination of the management of government contracts in the pre- and post-award phases. The content provides insight into the variety of administrative matters that arise during the life of a contract. Emphasis is given to a consideration of the rights and responsibilities of the government and contractor.
- ACM 397 Acquisition and Contract Management Negotiations (3 Sem. Hrs.)**
Prerequisite: ACM 394
 An examination of the concepts and techniques of negotiation. Topics covered include strategies and tactics of contract negotiation, preparation for sound negotiation, organization and operation of a procurement team, the relative positions of strength required for successful negotiation, and limitations as imposed by law. Students will participate in mock negotiations using case studies.
- ACM 398 Government Contract Law (3 Sem. Hrs.)**
Prerequisites: ACM 394, ACM 395, and ACM 396
 This course is a study of that specialized area of contract law as applied to contracts with the Federal Government. It will focus on the unique legal aspects of government contracts from the establishment of a requirement that will be fulfilled by contract, through the solicitation and award phases; it will conclude with the management/administration of the contract including a review of the administrative and judicial forums that resolve and adjudicate claims and disputes arising under the contract.
- ACM 400 Advanced Acquisition and Contract Research/Project (3 Sem. Hrs.)**
Prerequisites: ACM 394, ACM 395, ACM 396, ACM 397, and ACM 398
 This course allows students the opportunity to implement the knowledge and skills gained in prior prerequisite coursework. This class prepares the students to be able to apply the knowledge gained in real world situations in the contracting environment with the creation of contract components. The study consists of a series of individual and group research projects which build upon material presented within the ACM curriculum.
- ACM 461 Internship in Contract Management (1 Sem. Hr.) (At least 50 hours of work-based experience required)**
ACM 462 Internship in Contract Management (2 Sem. Hrs.) (At least 100 hours of work-based experience required)
ACM 463 Internship in Contract Management (3 Sem. Hrs.) (At least 150 hours of work-based experience required)
Prerequisite: MG 320 or GBA 300; compliance with College of Business Internship Policies and Procedures
 The internships in the field of Acquisition and Contract Management are designed to provide the student with practical work experience leading to a potential career-field in business.

Adult Degree Program (ADP)

ADP 301 Adult Degree Theory and Practice (3 Sem. Hrs.)

Prerequisite: *Permission of Instructor Required*

This course will focus on academic and personal issues unique to adult re-entry students, with emphasis on the university services available to nontraditional students. It will also provide students information regarding the concept of prior learning assessment and how to effectively document prior learning gained from work-place experience, training programs, military training, and certification programs.

Art (AR)

AR 300 Art Studio in Critique (3 Sem. Hrs.) (Lab fee)

Prerequisite: *Art major or minor or permission of instructor*

This course is designed to enable the student to produce works in visual art making use of personal innovations, carefully considered form, techniques, and materials. Skills in art analysis and criticism will be used regularly. This course involves a significant amount of criticism of historical and contemporary art works. Students will define their creative projects in a written statement. This statement will be discussed and possibly modified. A body of work will be created.

AR 301 Painting (3 Sem. Hrs.) (Lab fee)

This course includes oil painting theory and techniques and a study of the history of painting. Museum visits and critiques will be included.

AR 310 Fine Arts Connection (1 Sem. Hr.) (Lab fee)

(Education or Art Majors Only.) This course is an integrated fine arts course that assists students in acquiring the knowledge to use the visual arts, music, and creative movement in developmentally appropriate ways in regular classroom instruction.

AR 311 Landscape Painting and Drawing (3 Sem. Hrs.) (Lab fee)

Prerequisite: *AR 301 or equivalent*

This course looks at the environment as a subject for drawing and painting in a variety of media. It is a direct study from nature.

AR 312 Figure Drawing (3 Sem. Hrs.) (Lab fee)

This course places emphasis upon the human figure.

AR 313 Portrait Drawing and Painting (3 Sem. Hrs.) (Lab fee)

Students will use a variety of media to develop skills in portraiture.

AR 314 Topics in Watercolor (3 Sem. Hrs.) (Lab fee)

Students will use transparent and opaque water color techniques and a variety of subject matter to become more proficient as painters.

AR 315 Topics in Ceramics (3 Sem. Hrs.) (Lab fee)

This course is an introduction to basic ceramic techniques with emphasis on hand-constructed ceramics. The course will include a study of the history of ceramics from prehistory to modern times.

AR 317 Ceramic Sculpture (3 Sem. Hrs.) (Lab fee)

This course is an exploration of sculptural media, particularly clay and terra cotta.

AR 330 Topics in Photography (3 Sem. Hrs.) (Lab fee - course requires the student to purchase supplies in addition to the lab fee)

This is a course in digital photography. Students will need a DSLR 35mm camera with adjustable/stop, shutter speed and focus, and a working internal light meter. An exploration of photography with emphasis upon creativity and activities. The course will include criticism and aesthetics.

AR 331 Digital Photography (3 Sem. Hrs.) (Lab fee - course requires the student to purchase supplies in addition to the lab fee)

Prerequisite: *AR 330 or the equivalent*

Advanced theory and practice in pre- and post-production.

AR 335 Topics in Adobe Photoshop (3 Sem. Hrs.) (Lab fee)

Prerequisite: *Art major or minor or permission of instructor*

This course is designed to enable the student to produce works in graphic art making use of personal innovations, carefully considered form, techniques, and materials. Skills in art analysis and criticism will be used regularly. Students will define their final creative project in a written statement. This statement will be discussed and possibly modified. A body of work will be created.

AR 336 Advanced Microscopy and Digital Imaging (3 Sem. Hrs.) (Lab fee) (Also listed as BI 336)

Prerequisite: *8 semester hours of lab-based sciences*

This course is designed to enable the student to produce works in digital photography through the use of various photomicrographic techniques including ordinary light, phase contrast, electron microscopy, and digital image analysis. The course will include criticism, and a body of work will be required.

AR 342 Art of the Ancient Americas (3 Sem. Hrs.)

Focusing on the period before the European conquest, this course explores the art and archaeological record of the Americas' aboriginal cultures and societies in sculpture, architecture, ceramics and paintings. The goal is to understand the aesthetics,

philosophy and social historical and religious contexts of the visual arts and speak to the function of these artworks as ideological statements.

- AR 343 Renaissance Art History (3 Sem. Hrs.)**
This course covers the history of art from the Early Renaissance through the first part of the 19th century including the Renaissance, Mannerism, Baroque.
- AR 401 Advanced Figure Drawing (3 Sem. Hrs.) (Lab fee)**
Prerequisite: AR 312
This course is a continuation of Figure Drawing, building on the techniques learned in AR 312 to create a finished product.
- AR 404 Art Studio in Photography (3 Sem. Hrs.) (Lab fee)**
Prerequisite: AR 330 or AR 331 or the equivalent
This course is designed to enable the student to produce works in photography making use of personal innovations, carefully considered form, techniques, and materials. Skills in art analysis and criticism will be used regularly. Students will define their final creative projects in a written statement. This statement will be discussed and possibly modified. A body of work will be created. Both analog and digital images will be encouraged.
- AR 405 Interface Design Management (3 Sem. Hrs.) (Also listed as ISM 405) (Lab fee)**
Prerequisite: Art major or permission of instructor
This course introduces students to theories of human-computer interaction as well as the principles and practices of user interface design, evaluation, and integration. Topics covered include command, menu, and direct manipulation interfaces. Using a visual design tool such as Visual Basic, students develop an actual user interface. Emphasis is placed on management aspects of GUI design.
- AR 408 Printmaking (3 Sem. Hrs.) (Lab fee)**
This course is a development of techniques in various print media.
- AR 410 Adobe Illustrator Design (3 Sem. Hrs.) (Lab fee)**
Concepts will be covered from visualizations through finished projects. Problems in composition in commercial as well as fine arts projects will be assigned. This course is designed to produce a portfolio of finished projects.
- AR 420 Art Studio (3 Sem. Hrs.) (Lab fee)**
Prerequisite: Art major or minor or permission of instructor
This course is designed to enable the student to produce works in visual art making use of personal innovations, carefully considered form, techniques, and materials. Skills in art analysis and criticism will be used regularly. Students will define their creative projects in a written statement. This statement will be discussed and possibly modified. A body of work will be created.
- AR 421 Sacred Art in History (3 Sem. Hrs.) (Also listed as RE 421)**
This course explores the relationships between art and religion bringing theories of religious and aesthetic experience together. It gives an overview of the history of sacred art worldwide and it introduces students to religious functions of contemporary art. The course concentrates on the ways in which sacred and spiritual beliefs influence the creation of works of art using various cultures from around the world and throughout history. Students learn to understand aesthetic experiences with critical reflection and explain it to others.
- AR 423 History of Modern Art (3 Sem. Hrs.)**
This course covers the post-impressionist period through 1945.
- AR 424 Late Modern Art History (3 Sem. Hrs.)**
This course covers 1945 to present.
- AR 426 Critical Theories of Today's Art (3 Sem. Hrs.)**
Critical theory looks deeper in to the given art object. It is a way of thinking about and looking at and even making art that is not simply affirmative, but goes beyond generalities to the reception and interpretation of art with regard to context. Context is the economic, religious, institutionalized, political, educational and personal practices of any particular culture. Issues of how are the arts responding to science and technology, new trends in art and the socio-cultural issues demanding art attention today will be discussed. This course will focus on art being made today in a world-wide culture context.
- AR 430 Advanced Drawing and Design (3 Sem. Hrs.) (Lab fee)**
This course covers advanced concepts in drawing and composition.
- AR 435 Computer Graphic Design (3 Sem. Hrs.) (Lab fee)**
Graphic design is art for the purpose of communication. The student will gain the knowledge necessary to understand and augment the latest innovations in computer graphics through advanced graphic design projects using hardware and software important to the Graphic Design industry.
- AR 442 Special Topics in Art (1-3 Sem. Hrs.) (Lab fee)**
This course will be offered on occasion of student demand or need.
- AR 450 Internship in Art (3 Sem. Hrs.) (Lab fee)**
This course is an internship program in which the student will receive training with a commercial enterprise relating to his or her area of experience.

- AR 451 Internship in Art P-12 (6-12 Sem. Hrs.) (Lab fee)**
Prerequisites: Admission to the Teacher Education Program, satisfactory completion of all TEP courses, and clearance by the Internship Office
 This course is a fifteen-week internship program for art with seven weeks in an elementary school and seven weeks in a secondary school. This culminating experience of the Teacher Education Program provides practical experience in teaching classes in state-accredited schools under the guidance of a cooperating teacher and supervision by a University supervisor. Seminar attendance is required.
- AR 454 Materials and Methods of Teaching Art in P-5 (3 Sem. Hrs.) (Lab fee)**
Prerequisite: Admission to the Teacher Education Program
 Students will study the unique dynamics of teaching and assessing a comprehensive arts education to P-5th grade level children. Students will examine how to teach the young learner to create visual art using a variety of materials and methods using knowledge of childhood physical and emotional development, will be involved in extended learning discussions about how art relates to children's perception, cognition, questioning, and interpretation processes. Students will learn to mount exhibitions of student art. Students in AR454 will study multiculturalism in their approaches to learn how to use the integration of other subjects into art thinking and into the creation of art. Students will learn methods for introducing aesthetics in educational settings. Students observe primary education practices in a working art classroom. Students will learn to give instructions to help their own future students prepare art portfolio that synthesizes knowledge, and skills. Students will develop a working knowledge of a comprehensive art education curriculum. Students will implement an art lesson plan, first, in the university classroom and then in an education setting under supervision of that classroom's instructor.
- AR 455 Materials and Methods of Teaching Art in 6-12 (3 Sem. Hrs.) (Lab fee)**
Prerequisite: Admission to the Teacher Education Program
Course requirements include mandatory campus-based training. Consult the College of Education Calendar of Events Webpage for more information. Field experience is required. Students will study the unique dynamics of teaching and assessing a comprehensive arts education to 6-12 grade level children. Students will examine how learning about art relates to adolescents' perception, cognition, questioning, and interpretation processes. Students will pursue inquiry into the relationship between creating and a philosophical investigation about art. Students will study multi-cultural approaches to teaching art. Students will study contextual art criticism. Students will learn how to find and develop art resources for the classroom. Students will learn how to use the integration of other subjects into art thinking and into the creation of art. Students will learn methods for introducing aesthetics in educational settings. Students will observe 6-12 grade level practices in a working art classroom. Students will learn to give instruction to help their own students prepare an art portfolio that synthesizes knowledge, skills, and dispositions in art and pedagogy developed through a comprehensive art education curriculum. Students will create and implement an art lesson plan, first, in the university classroom and then in a secondary setting to age appropriate students.
- AR 460 Special Workshop (3 Sem. Hrs.) (Lab fee)**
 This workshop focuses on arts and crafts.
- AR 461 Special Workshop in Sculpture (3 Sem. Hrs.) (Lab fee)**
 This course is a special workshop in sculpture. It looks at advanced exploration in various 3D materials and methods with an emphasis on design and craftsmanship.
- AR 465 Portfolio, Exhibition and Art Research (3 Sem. Hrs.) (Lab fee)**
Prerequisites: AR 300 and Graduating Senior Art Major
 This capstone course will familiarize the students with the proper utilization of the art reference books, abstracts, monographs, and indices for the purpose of college writing and research in the content area of art. Students will compile a professional portfolio and hang their senior exhibition.

Biology (BI)

- BI 300 Microbes and You (3 Sem. Hrs.)**
Corequisite: BI 300L **Prerequisites:** Principles of Biology I and II, or consent of instructor
 This is an introductory microbiology course which examines the major groups of bacteria and instills awareness of the importance of microbes to the Earth's ecology.
- BI 300L Microbes and You Lab (1 Sem. Hr.)** **Corequisite:** BI 300
- BI 301 Cell Structure and Function (3 Sem. Hrs.)**
Corequisite: BI 301L **Prerequisites:** Principles of Biology I and II, Introductory Chemistry with lab or equivalent, or consent of instructor
 This course considers molecular organization of basic cellular components, including membranes, nucleic acids, and proteins, and how these are assembled into organelles and other cellular structures. It also explores mechanisms of enzyme and organelle function and coordination.
- BI 301L Cell Structure and Function Lab (1 Sem. Hr.)** **Corequisite:** BI 301
- BI 302 Genetics (3 Sem. Hrs.)**
Corequisite: BI 302L **Prerequisites:** Principles of Biology I and II, Introductory Chemistry with lab or equivalent, or consent of instructor
 This course is an up-to-date treatment emphasizing structure, function, and regulation of genes, recombinant DNA techniques and applications, principles and patterns of Mendelian inheritance, and population genetics.
- BI 302L Genetics Lab (1 Sem. Hr.)** **Corequisite:** BI 302

- BI 303 General Ecology (3 Sem. Hrs.)**
Corequisite: BI 303L **Prerequisites:** Principles of Biology I and II, or Plant Biology and Animal Biology, or consent of instructor
 This course includes the study of extant organisms and how they interact with one another and with their nonliving environments. Interactions are investigated at individual, population, community, and ecosystem levels. Qualitative, quantitative, and theoretical aspects of ecology are also discussed.
- BI 303L General Ecology Lab (1 Sem. Hr.)** **Corequisite:** BI 303
- BI 311 Biodiversity of North Alabama (3 Sem. Hrs.)**
Corequisite: BI 311L
 This course is designed as an introduction to the diversity of habitats and organisms found in northern Alabama. A broad variety of topics relating to the natural history and adaptations of the various organisms inhabiting this region will be discussed. Field trips are required.
- BI 311L Biodiversity of North Alabama Lab (1 Sem. Hr.)** **Corequisite:** BI 311 (Lab runs concurrently with lecture)
- BI 313 Bioinformatics (3 Sem. Hrs.)**
Corequisite: BI 313L
 This is a survey course intended to introduce the student to the field of Bioinformatics. It discusses the use of, and concepts behind, current bioinformatics tools in fields such as molecular biology, biochemistry, and phylogenetics.
- BI 313L Bioinformatics Lab (1 Sem. Hr.)** **Corequisite:** BI 313
- BI 314 Entomology (3 Sem. Hrs.)**
Corequisite: BI 314L **Prerequisites:** Principles of Biology I and II
 This course is an exploration of insects with respect to physiology, behavior, evolution, systematics and diversity, ecology, and economic importance.
- BI 314L Entomology Lab (1 Sem. Hr.)** **Corequisite:** BI 314
- BI 315 Fermentation and Microbial Technology (3 Sem. Hrs.)**
Corequisite: BI 315L
 This course will cover the basics of food fermentations and their applications in small scale industry with a focus on the products produced by local companies. The co-requisite lab will emphasize microbial techniques used by food fermenters.
- BI 315L Fermentation and Microbial Technology Lab (1 Sem. Hr.)** **Corequisite:** BI 315
- BI 336 Advanced Microscopy and Digital Imaging (3 Sem. Hrs.) (Lab fee) (Also listed as AR 336)**
Prerequisite: 8 semester hours of lab-based sciences
 This course is designed to enable the student to produce works in digital photography through the use of various photomicrographic techniques including ordinary light, phase contrast, electron microscopy, and digital image analysis. The course will include criticism. A body of work will be required.
- BI 342 Economic Botany (3 Sem. Hrs.)**
 This course presents important roles that plants have played in the development of civilizations and cultures, past and present. Emphasis is placed on origins of agriculture and domestication of plants, on development of early irrigation and rainfall agriculture civilizations, on importance of plants in religion, medicine, commerce, politics, and war, and on future of plants in relation to man.
- BI 342L Economic Botany Lab (1 Sem. Hr.)** **Corequisite:** BI 342
- BI 361 Human Structure and Function (3 Sem. Hrs.)**
 This course is designed to be a one-semester study of human anatomy and physiology. Lecture and laboratory topics include human cells, tissues, skin and integument, skeletal, nervous, muscular, cardiovascular, respiratory, digestive, endocrine and reproductive systems, and fluid and electrolyte balance.
- BI 361L Human Structure and Function Lab (1 Sem. Hr.)** **Corequisite:** BI 361
- BI 409 Biochemistry (3 Sem. Hrs.) (Also listed as CH 409)**
Prerequisite: CH 311
 This course is a study of proteins, carbohydrates, lipids, and other important biochemical compounds and their metabolic functions. Enzyme reaction mechanisms and biological oxidations may also be included.
- BI 411 Invertebrate Systematics and Morphology (3 Sem. Hrs.)**
Corequisite: BI 411L **Prerequisite:** Principles of Biology I and II, or Animal Biology, or consent of instructor
 This is an inclusive and in-depth survey of invertebrate animals covering all phyla from protozoa through echinoderms. Emphasis is placed on morphological structures characterizing each phylum, on a systematic approach taken in each phylum, and on phylogenetic relationships among the various phyla.
- BI 411L Invertebrate Systematics and Morphology Lab (1 Sem. Hr.)** **Corequisite:** BI 411
- BI 415 Microbial Toxins and Human Health (3 Sem. Hrs.)**
Prerequisites: Principles of Biology I and II and an introductory course in microbiology or consent of instructor
 This advanced course examines the roles of microbes as human pathogens and as a source of contamination in the food industry.
- BI 420 Field Vertebrate Zoology I: Ichthyology and Herpetology (4 Sem. Hrs.)**
Prerequisites: Principles of Biology II and BI 303, or consent of instructor
 This is a course in systematic and ecological ichthyology and herpetology. It introduces the diversity of fishes, amphibians, and reptiles, position and content of major groups, their classification, relationships, and basic structure, with emphasis on living representatives, particularly those of the Tennessee Valley region of North Alabama.

- BI 422 Field Vertebrate Zoology II: Ornithology and Mammalogy (4 Sem. Hrs.)**
Prerequisites: *Principles of Biology II and BI 303, or consent of instructor*
 This is a course in systematic and ecological ornithology and mammalogy. It introduces the diversity of birds and mammals, position and content of major groups, their classification, relationships, and basic structure, with emphasis on living representatives, particularly those of the Tennessee Valley region in North Alabama.
- BI 423 Histology (3 Sem. Hrs.)**
Corequisite: *BI 423L* **Prerequisites:** *Principles of Biology I and II*
 This course studies the groups of specialized cells called tissues. Tissue organization is examined at all levels, from the whole organ to the molecular components of cells. Histological techniques include tissue culture, fixing and staining, microscopy, and biochemistry.
- BI 423L Histology Lab (1 Sem. Hr.)** **Corequisite:** *BI 423*
- BI 424 Animal Physiology (3 Sem. Hrs.)**
Corequisite: *BI 424L* **Prerequisites:** *Principles of Biology I and II, or Animal Biology, and Introductory Chemistry with lab, or equivalent, or consent of instructor*
 This course explores the functions of living animals and discusses temporary, long-term and developmental changes in an organism's responses to the environment. Topics will include sensory, motor, nervous and endocrine systems; circulation and respiration; the use and acquisition of energy; and the maintenance of fluid, electrolyte and temperature homeostasis. Lab will focus on the human model system.
- BI 424L Animal Physiology Lab (1 Sem. Hr.)** **Corequisite:** *BI 424*
- BI 425 Developmental Biology (3 Sem. Hrs.)**
Corequisite: *BI 425L* **Prerequisites:** *Principles of Biology I and II*
 This course considers the period of growth and differentiation from fertilization until hatching or birth of an animal or, in plants, germination. Vertebrate and human models will be emphasized. Concepts are explored in terms of cell biology, genetics, and comparative vertebrate anatomy.
- BI 425L Developmental Biology Lab (1 Sem. Hr.)** **Corequisite:** *BI 425*
- BI 427 Parasitology (3 Sem. Hrs.)**
Corequisite: *BI 427L* **Prerequisites:** *Principles of Biology I and II*
 This is a study of the relationships between parasites and their hosts, with emphasis on vertebrate and human models. Concepts are discussed in terms of systematics, molecular biology, ecology, and evolutionary biology.
- BI 427L Parasitology Lab (1 Sem. Hr.)** **Corequisite:** *BI 427*
- BI 429 Immunology (3 Sem. Hrs.)**
Corequisite: *BI 429L* **Prerequisites:** *Principles of Biology I and II*
 This course examines the evolution, organization, and function of immune systems, with an emphasis on vertebrate and human models. Concepts are discussed in terms of cell biology, genetics, and evolutionary biology.
- BI 429L Immunology Lab (1 Sem. Hr.)** **Corequisite:** *BI 429*
- BI 431 Plant Systematics and Morphology (3 Sem. Hrs.)**
Corequisite: *BI 431L* **Prerequisites:** *Principles of Biology I and II, or Plant Biology, or consent of instructor*
 This course includes an in-depth survey of non-vascular and vascular plants. Emphasis is placed on morphological structures characterizing each division, subdivision, class, and subclass of plants, on a systematic approach taken at each level of taxonomic hierarchy, and on phylogenetic relationships among the various groups of plants.
- BI 431L Plant Systematics and Morphology Lab (1 Sem. Hr.)** **Corequisite:** *BI 431*
- BI 434 Sample to Sequence (3 Sem. Hrs.) (Lab fee)**
Prerequisites: *Principles of Biology I and II*
 This course is designed for Athens State students who have been selected as interns for this study at The HudsonAlpha Institute for Biotechnology. This selection process is open to all biology majors and is conducted by the staff at HudsonAlpha. The Sample to Sequence program is intended to expose students to the growing field of metagenomics and the many procedures and techniques used for its study. Students will collect environmental samples, primarily soil, and extract genetic material from the microbial inhabitants within. The 16S ribosomal DNA will then be amplified from the extracted genomic DNA and cloned into a DNA library. From this library, the amplified material will then be sequenced and identified by bioinformatic techniques.
- BI 441 Special Topics in Biology (1 Sem. Hr.)**
BI 442 Special Topics in Biology (2 Sem. Hrs.)
BI 443 Special Topics in Biology (3 Sem. Hrs.)
BI 444 Special Topics in Biology (4 Sem. Hrs.)
Prerequisite: *Consent of instructor*
 These courses will be offered on occasion of student demand or need. (BI 443 may be used to award credit to SIM in-service teachers who meet the established criteria.)
- BI 450 Research Seminar (1 Sem. Hr.)**
Prerequisite: *Consent of instructor*
 This course will be offered on occasion of student demand or need. It affords the biology major the opportunity to develop and present results of laboratory and/or field research.
- BI 451 Marine Biology (3 Sem. Hrs.) (Lab/Special fees)**
Corequisite: *BI 451L* **Prerequisite:** *Principles of Biology I and II*
 This course is an introduction to salt water and salt marsh environments. This course is offered for students to obtain first hand field

experience in marine ecosystems especially on the Gulf Coast. Class lecture content includes the microbial, and planktonic life forms, marine invertebrates, and marine vertebrates around the world, and specifically on the Gulf Coast. Laboratory and field exercises will include sampling, collecting, preserving and identification techniques for specimens on the Gulf Coast using various dichotomous keys for the species observed and collected.

BI 451L Marine Biology Lab (1 Sem. Hr.) *Corequisite: BI 451*

BI 453 Plant Ecology (3 Sem. Hrs.) (Lab/Special fees)

Corequisite: BI 453L Prerequisite: Principles of Biology I and II

This course is designed to provide the student with information about types of plant communities and the various forest types in the Southeastern U.S. Lab and field exercises will include field trips to Wheeler National Wildlife Refuge and/or other suitable forest types, and to the Great Smoky Mountains National Park in East Tennessee, for forest evaluation and treatment of data.

BI 453L Plant Ecology (1 Sem. Hr.) *Corequisite: BI 453*

BI 456 Materials and Methods of Teaching Biology in the Middle School/High School (3 Sem. Hrs.) (Also listed as CH/GS 456)

Prerequisite: Admission to the Teacher Education Program

This course is intended to enhance the students' abilities to plan, implement, and evaluate instructional activities and to select and use appropriate materials and equipment in the field of secondary science (Biology, Chemistry, General Science). Students will actively participate in demonstration and modeling of strategies and techniques. Emphasis will be placed on the integration of laboratory activities into the curriculum and research-based science pedagogical methods. This will include the use of technology, laboratory management, inquiry teaching, teaching resources, science-thinking skills, and the Alabama science curricula. Does not satisfy requirements for biology/chemistry/general science major, minor, or general studies. Senior methods portfolio will be submitted in this course.

BI 457 AMSTI/Science in Motion Laboratory Technologies for Teachers (3 Sem. Hrs.) (Lab fee)

Prerequisites: Principles of Biology I and II

This course is designed as training for student teachers using the Alabama Mathematics and Science Teaching Initiative (AMSTI) /Science in Motion (SIM) biological laboratory exercises owned by and distributed to public schools in North Alabama by Athens State University. This training will enable the student to use and teach the biological principles within the selected labs in Levels 1, 2, and 3 in the Science in Motion series.

BI 461 Directed Study/Research in Biology (1 Sem. Hr.)

BI 462 Directed Study/Research in Biology (2 Sem. Hrs.)

BI 463 Directed Study/Research in Biology (3 Sem. Hrs.)

Prerequisite: Consent of instructor

These courses will be offered on occasion of student demand or need.

BI 470 Biology Capstone (1 Sem. Hr.)

This capstone course will provide students with the knowledge and skills to formulate a thesis, do research on the thesis topic, write the thesis, and orally present the findings to the class.

BI 471 Research Thesis Capstone (1 Sem. Hr.)

Prerequisites: Principles of Biology I and II, and 3 hours of Directed Study/Research in Biology

This capstone course will provide students with the knowledge and skills to formulate a thesis, do research on the thesis topic, write the thesis, and orally present the finding to the class. This thesis will be based on the student's previous and ongoing Research in Biology.

Children's Advocacy Studies Training (CAST)

CA 301 Perspectives on Child Maltreatment & Child Advocacy (3 Sem. Hrs.)

This course is the introductory course for child advocacy studies. This course covers the history, comparative perspectives, the legal framework, responses to child maltreatment, the skills necessary to do the work, other pertinent issues pertaining to child maltreatment and child advocacy, and the future. The field of child maltreatment is fraught with controversy. Much of the class focuses on these controversies. The approach of the course will be from a variety of diverse, professional perspectives including the perspectives of a prosecuting attorney versus a defense attorney. The course is designed for students majoring in criminal justice, education, social work, sociology, psychology, nursing, paralegal, or other areas where knowledge of child maltreatment and advocating for children might be necessary.

CA 302 Global Child Advocacy Issues (3 Sem. Hrs.)

This course is a core course for child advocacy studies certificate. The purpose of this course is to prepare students to recognize child advocacy issue around the world. The course is designed for students majoring in criminal justice, education, social work, sociology, psychology, nursing, paralegal, or other areas where knowledge of child maltreatment and advocating for children will be necessary. Multidisciplinary approaches to advocacy in different countries throughout the world will be presented and discussed.

CA 401 Child Advocacy II: Professional and System Responses to Child Maltreatment (4 Sem. Hrs.)

Prerequisites: CA 301 and CA 302, or consent of instructor

This course is the third course for child advocacy studies. The purpose of this course is to prepare students to recognize the effects of child maltreatment and apply interventions strategies for children and their families. Multidisciplinary approaches to prevention, advocacy and treatment of child maltreatment survivors will be presented and discussed. The course is designed for students majoring in criminal justice, education, social work, sociology, psychology, nursing, paralegal, or other areas where knowledge of child maltreatment and advocating for children will be necessary.

Career and Technical Education (CE)

- CE 300 Foundations of Technical Education I (3 Sem. Hrs.)**
A survey course on philosophies and developments in education and training; focusing on adult learning theories and principles.
- CE 302 History and Principles of Career/Technical Education (3 Sem. Hrs.)**
A historical review of the development of career and technical education including philosophies, ideologies, trends, economic, sociological, and legislative perspectives.
- CE 303 Professional Education Communication (3 Sem. Hrs.)** *(Students seeking the Technical Education: Early Instructor option will take this course)*
This beginning education course is designed to facilitate the acquisition of professional attributes, and to improve oral and written communication skills by refining study and research skills, using professional vocabulary, sharing research findings about educational trends and issues, seeking funding for educational programs, sharing information with families, and writing lesson plans. Attributes and dispositions will be articulated, defined, and modeled. These dispositions will be encouraged in oral presentations and collegial interactions. Practice in oral and written language usage will occur through writing and speaking about current educational concerns.
- CE 305 Meeting the Needs of Exceptional Career/Technical Education Students (3 Sem. Hrs.)**
An exploration of individual differences of students in career and technical education. Students with different socio-cultural backgrounds, abilities, and values; understanding diversity; legislation pertaining to diversity; categories of exceptional students; referral and placement procedures; services; curriculum, instructional, and facility modification and adaptations; and career opportunities are concepts addressed in the course.
- CE 306 Introduction to Instructional Design (3 Sem. Hrs.)**
Introduction to Instructional Design focuses on the design, development, implementation, and evaluation of learning and teaching. Students will develop the necessary pedagogical and technological skills that will facilitate the design and development of instruction using the appropriate tools.
- CE 307 IC³ Preparation (3 Sem. Hrs.)**
A course based upon The Global Standard 3 (IC³), an internationally recognized standard for digital literacy and reflects the most relevant skills needed in today's academic and business environments. Modules include computing fundamentals, key applications, and living online.
- CE 308 Information Design and Visual Literacy (3 Sem. Hrs.)**
In this course, students will explore the foundations of Cognitive Load Theory and discover various methods and techniques to help design efficient and effective teaching and training materials that will limit the amount of load placed on the learner.
- CE 310 Principles of Early Childhood Education (3 Sem. Hrs.)** *(Students seeking the Technical Education: Early Instructor option will take this course)*
This course is designed to provide prospective teachers of young children with the historical, theoretical, and practical issues of early childhood education. Emphasis is on early childhood philosophical and sociological foundations, facets of development, principles of learning, trends and issues, and program models.
- CE 319 Literacy and Literature for the Young Child (3 Sem. Hrs.)** *(Students seeking the Technical Education: Early Instructor option will take this course)*
Emphasis is given to teaching Language Arts and literature to ESL students. This course examines methods and materials for planning, implementing, and assessing developmentally and culturally appropriate language arts and literature curricula for early childhood education. Emphasis will be on developing the process skills for facilitating emergent literacy, early writing, listening, and speaking, as well as teaching language arts and literature.
- CE 322 Basic Principles of ELL Education (3 Sem. Hrs.)** *(Students seeking the Technical Education: Early Instructor option will take this course)*
A course designed to provide all educators the fundamental theories and knowledge about second language acquisition, with an emphasis on instructional methods for teaching English language learners.
- CE 326 Assessment in Early Childhood Classrooms (3 Sem. Hrs.)** *(Students seeking the Technical Education: Early Instructor option will take this course)*
This course examines the goals, benefits, and uses of developmentally and culturally appropriate assessment processes that positively influence children's development and learning. It focuses on the family's significant role in the assessment process. It includes developmental and health screenings, systematic observations, play-based assessments, diagnostic evaluations, documentation of learning, and curriculum and criterion referenced assessments. Strengths, limitations, problems, and the developmental and cultural appropriateness of the selected practices and strategies will be addressed.
- CE 327 Classroom Management in Early Childhood Education (3 Sem. Hrs.)** *(Students seeking the Technical Education: Early Instructor option will take this course)*
This course is designed to provide prospective teachers of young children with a rationale for thoughtful provision of an appropriate environment for effective learning and development in early childhood programs. This course will provide early childhood educators with the factors that influence quality programs in the area of management.

- CE 330 Children's Constructions of Relationships through Arithmetic and Mathematical Reasoning (3 Sem. Hrs.)** *(Students seeking the Technical Education: Early Instructor option will take this course)*
Prerequisites: ED 301, ED 302, and ER 323
 Students will examine how young children construct number and mathematical concepts. They will identify and examine developmentally and culturally appropriate techniques, strategies, and materials for teaching young children arithmetic and mathematical concepts. **Five days of Field Experiences are required.**
- CE 400 Children's Play as Symbolic Behavior (3 Sem. Hrs.)** *(Students seeking the Technical Education: Early Instructor option will take this course)*
 This course will examine the role of representation in young children's learning, study the child's developing ability to represent what they know about their worlds through play, understand the impact of experience, culture, and social interaction on the ability to represent, as well as allow students the opportunity to explore a range of forms of symbolic representations and develop ideas and strategies to stimulate children's development.
- CE 402 Preschool Curriculum (3 Sem. Hrs.)** *(Students seeking the Technical Education: Early Instructor option will take this course)*
 This course provides a curricula framework of goals and outcomes for young children attending Head Start, preschool, Pre-K and Kindergarten programs that support their growth and development and help teachers and administrators meet state and national standards of high quality in their programming for children. The course builds knowledge about outcomes in nine areas considered essential in preparing children for school success; language development, literacy, mathematics, science, creative arts, social and emotional development, approaches to learning and physical health and development. Students will develop the knowledge and skills to plan for children, implement plans, and assess the progress of children in meeting local, state and national standards. Emphasis is on planning and implementing plans in all domains of learning for all children, including English language learners and those with special needs.
- CE 420 Parenting and Community Relations (3 Sem. Hrs.)** *(Students seeking the Technical Education: Early Instructor option will take this course)*
 This course will examine various ways of enhancing the young child's development through promoting positive interrelationships among early childhood educators, parents and others in the community. Using an ecological systems framework, the course builds knowledge of the roles of diverse family structures, cultural identities, stressors and supports, economic circumstances, and community characteristics and resources in facilitating child development. Learners develop skills needed for communicating effectively with families, facilitating parent education, and promoting family involvement with child care setting as well as utilization of community resources. Special emphasis is given to the importance of the role of the educational leader in school-community relations.
- CE 430 Instructional Strategies for Adult Learners (3 Sem. Hrs.)**
 A course focused on the development and implementation of instructional strategies and techniques to facilitate adult learning in various settings. Participants will examine and apply models, strategies, and methods for planning and implementing instruction. Instructional approaches, engagement strategies, and management of the instructional environment are explored.
- CE 432 Teaching Career/Technical Education (3 Sem. Hrs.)**
 A course on methods, strategies, and techniques for teaching and training in career and technical education.
- CE 433 Learning Resources and Technology in Career/Technical Education (3 Sem. Hrs.)**
 A course on selecting, developing, utilizing, and evaluating a variety of appropriate instructional resources, media, and technology for instruction and facilitating online learning.
- CE 434 Course Development and Evaluation in Career/Technical Education (3 Sem. Hrs.)**
 A course designed to provide knowledge of the process of developing and evaluating instructional curriculum. Concepts addressed are techniques, procedures, and potential problems in the selection and organization of subject matter and the implementation, facilitation, and evaluation of instruction.
- CE 435 Industrial Health and Shop Safety (3 Sem. Hrs.)**
 A survey course on accident prevention and identification of potential safety hazards as they pertain to technical education classes, labs, and business industry settings. The Occupational Safety and Health Administration (OSHA) basic practices of identifying, reducing, eliminating and reporting hazards are introduced and discussed as applicable in educational and business/industry settings.
- CE 436 Career/Technical Information Guidance (3 Sem. Hrs.)**
 An introductory course on career/technical guidance. Topics include trends and issues in workforce development, educational and training options, job qualifications and requirements, and sources for continued education and training and occupational information.
- CE 438 Classroom/Laboratory Management & Student Leadership Development (3 Sem. Hrs.)**
 A course designed to provide knowledge and application of techniques and procedures used to maintain and manage technical education learning environments, including inventories, and organizational processes. Leadership development through the management and care of various laboratories and equipment is addressed.
- CE 439 Career/Technical Student Youth Organizations (3 Sem. Hrs.)**
 A survey course of procedures for establishing, implementing, and operating informal, formal, and/or co-curricular career/technical student organizations.
- CE 440 Testing and Evaluation in Career/Technical Education (3 Sem. Hrs.)**
 A course designed to review traditional methods used to measure and interpret student achievement and to introduce knowledge and skills necessary to select/construct and implement appropriate assessment strategies for career/technical instruction and settings.

- CE 441 Special Topics in Career/Technical Education (1 Sem. Hr.)**
CE 442 Special Topics in Career/Technical Education (2 Sem. Hrs.)
 Courses designed to allow students majoring in Technical Education to pursue special projects of interest. Projects undertaken for these courses may be continuations of projects begun in other courses.
- CE 444 Design and Instruction of Online Training (3 Sem. Hrs.) (Cross-listed with ED 308)**
 Design and Instruction of Online Training prepares students with knowledge and skills in methods of designing different types of tutorials (print-based, video, multimedia) for online training and learning. Study includes identifying media elements, understanding the media selection process, and media design principles. Students will also explore, design, and create online training materials in accordance with best practices and media design principles.
- CE 445 Functions of the Coordinator (3 Sem. Hrs.)**
 A course designed to prepare individuals for organizing, establishing, and administering various programs in career/technical education that are of a cooperative nature.
- CE 448 Assessment in Instructional Design (3 Sem. Hrs.)**
 Assessment of Instructional Design focuses on the application and interpretation of theory, research and standards-based effective practices used to design, develop and evaluate distance and blended education experiences. Students will examine different aspects of online teaching (e.g. asynchronous communication, facilitation and feedback) based on research, and apply their learning to online content design. Students will leave the course with a completed online course module that includes content specific activities and an understanding of how to create lessons and assessments that support student exploration of their individual curiosities, educational goal setting, management of learning and assessment of progress.
- CE 450 Practicum in Advanced Technical Studies (3 Sem. Hrs.)**
CE 451 Practicum in Advanced Technical Studies (3 Sem. Hrs.)
CE 452 Practicum in Advanced Technical Studies (3 Sem. Hrs.)
 Courses designed to allow students majoring in Technical Education to pursue special projects of interest. Projects undertaken for these courses may be continuations of projects begun in other courses.
- CE 460 Directed Study/Research Career/Technical Education (1-9 Sem. Hrs.)**
Prerequisite: Permission of academic advisor required
 In-service technical education instructors may earn up to 9 semester hours of credit for directed study/research in Career/Technical Education.
- CE 465 Instructional Design Capstone (3 Sem. Hrs.)**
Prerequisite: Permission of academic advisor required
 Instructional Design Capstone is the culminating capstone course of the CE instructional design instructor course sequence. In this course, students will apply theory, research, principles, skills and knowledge learned in all previous CE instructional design instructor courses to design and build an entire course inside a learning management system. Students must obtain permission from their academic advisor before enrolling in the course.
- CE 470 Practicum-Supervised Work Experience (3 Sem. Hrs.)**
CE 471 Practicum-Supervised Work Experience (3 Sem. Hrs.)
CE 472 Practicum-Supervised Work Experience (3 Sem. Hrs.)
 Courses designed to allow students majoring in Technical Education to pursue special projects of interest in a program area work setting. Projects undertaken for these courses may be continuation of projects begun in other courses.
- CE 483 Practicum in Teaching Technical Education (3 Sem. Hrs.)**
 Studies designed to expand the current teaching/training skills of participants. Projects undertaken for these courses may be continuation of projects begun in other courses.
- CE 484 Practicum in Teaching Technical Education (3 Sem. Hrs.)**
 Studies designed to expand the current teaching/training skills of participants. Projects undertaken for these courses may be continuation of projects begun in other courses.
- CE 485 Practicum in Teaching Technical Education (3 Sem. Hrs.)**
 Studies designed to expand the current teaching/training skills of participants. Projects undertaken for these courses may be continuation of projects begun in other courses.
- CE 487 Internship in Technical Education (6-12 Sem. Hrs.) (Teaching Internship fee)**
Prerequisites: Admission to the Teacher Education Program and clearance by the Internship Office
 The culminating experience for pre-service candidates in the Technical Education Teacher Education Program. The internship program provides practical experience in teaching classes in state-accredited schools under the guidance of a cooperating teacher and a University supervisor.

Chemistry (CH)

- CH 302 Introduction to Forensic Science (3 Sem. Hrs.) (Lab fee)**
Prerequisite: General Education Science requirements
 This course is a basic study of investigation methodology, forensic science techniques and procedures, evidence collection and development, and laboratory techniques. CH 302 may not be used as credit toward a chemistry major or minor.

- CH 311 Organic Chemistry I (4 Sem. Hrs.)**
Corequisite: CH 311L **Prerequisite:** General Chemistry I, II
 This course is a basic study of aliphatic and aromatic compounds, their properties, preparation, and reactions, with an emphasis on theory and mechanisms of reaction.
- CH 311L Organic Chemistry I Lab (1 Sem. Hr.)** **Corequisite:** CH 311
- CH 312 Organic Chemistry II (4 Sem. Hrs.)**
Corequisite: CH 312L **Prerequisite:** CH 311
 This course is a basic study of aliphatic and aromatic compounds, their properties, preparation, and reactions, with an emphasis on theory and mechanisms of reaction. Laboratory includes organic qualitative analysis.
- CH 312L Organic Chemistry II Lab (1 Sem. Hr.)** **Corequisite:** CH 312
- CH 314 Polymer Science (3 Sem. Hrs.)**
Corequisite: CH 314L **Prerequisite:** CH 311
 This course is a study of synthesis, characterization, testing, and reactions of polymers. It includes step-reaction polymerization, ionic chain reactions, free radical chain polymerization, copolymerization, and inorganic polymers, in addition to the effects of additives and fillers.
- CH 314L Polymer Science Lab (1 Sem. Hr.)** **Corequisite:** CH 314
- CH 324 Analytical Chemistry (3 Sem. Hrs.)**
Corequisite: CH 324L **Prerequisites:** General Chemistry I, II
 Topics covered in this course may include: classical volumetric techniques in chemical analysis, modern methods of chemical separation, and basic instrumentation techniques.
- CH 324L Analytical Chemistry Lab (1 Sem. Hr.)** **Corequisite:** CH 324
- CH 330 Environmental Chemistry (3 Sem. Hrs.) (Also listed as GS 330)**
 This course is a study of natural chemical processes of Earth and actual and possible effects of humans on natural chemical systems. Environmental problems such as air and water pollution, ozone depletion, and global warming are discussed. The course may also include an introduction to some methods of environmental analysis and pertinent environmental regulations.
- CH 409 Biochemistry (3 Sem. Hrs.) (Also listed as BI 409)**
Prerequisite: CH 311
 This course is a study of proteins, carbohydrates, lipids, and other important biochemical compounds and their metabolic functions. Enzyme reaction mechanisms and biological oxidations may also be included.
- CH 410 Instrumental Analysis (3 Sem. Hrs.)**
Corequisite: CH 410L **Prerequisite:** CH 324 or consent of instructor
 The theoretical application of modern instrumentation to problems in analytical chemistry is covered in this course. Optical, electrochemical, and other instrumentation techniques are also covered.
- CH 410L Instrumental Analysis Lab (1 Sem. Hr.)** **Corequisite:** CH 410
 The practical application of modern instrumentation to problems in analytical and environmental chemistry is covered in this laboratory course.
- CH 420 Intermediate Inorganic Chemistry (3 Sem. Hrs.)**
Prerequisite: General Chemistry I, II
 This course covers atomic structure, bonding, trends in the periodic table, and coordination chemistry. Topics also may include catalysis, group theory, structure and properties of solids or bio-inorganic chemistry.
- CH 430 Physical Chemistry I (4 Sem. Hrs.)**
Corequisite: CH 430L **Prerequisite:** General Chemistry I, II, MA 304, and calculus-based Physics II
 This course covers the application of laws of physics and mathematics to study of thermodynamics, equilibria, and kinetics.
- CH 430L Physical Chemistry I Lab (1 Sem. Hr.)** **Corequisite:** CH 430
 This laboratory course includes introduction to working with personal computers and spreadsheet programs.
- CH 431 Physical Chemistry II (3 Sem. Hrs.)**
Corequisite: CH 431L **Prerequisite:** CH 430, 420, or consent of instructor
 This course covers the application of the laws of physics and mathematics to the study of quantum chemistry, molecular structure, and spectroscopy. The laboratory includes experience with computer programs pertinent to chemistry.
- CH 431L Physical Chemistry II Lab (1 Sem. Hr.)** **Corequisite:** CH 431
 This lab course serves as the capstone course for the chemistry major. To fulfill requirements for this course, students are required to submit a written project report and make an oral presentation of the report findings.
- CH 441 Special Topic in Chemistry (1 Sem. Hr.)**
CH 442 Special Topic in Chemistry (2 Sem. Hrs.)
CH 443 Special Topic in Chemistry (3 Sem. Hrs.)
Prerequisite: Consent of instructor
 These courses will be offered on occasion of student demand or need. (CH 443 course may be used to award credit to SIM in-service teachers who meet the established criteria.)
- CH 456 Materials and Methods of Teaching Chemistry in the Middle School/High School (3 Sem. Hrs.) (Also listed as BI/GS 456)**
Prerequisite: Admission to the Teacher Education Program
 This course is intended to enhance the students' abilities to plan, implement, and evaluate instructional activities and to select and use appropriate materials and equipment in the field of secondary science (Biology, Chemistry, General Science). Students will

actively participate in demonstration and modeling of strategies and techniques. Emphasis will be placed on the integration of laboratory activities into the curriculum and research-based science pedagogical methods. This will include the use of technology, laboratory management, inquiry teaching, teaching resources, science-thinking skills, and the Alabama science curricula. Does not satisfy requirements for biology/chemistry/general science major, minor, or general studies. Senior methods portfolio will be submitted in this course.

- CH 461 **Directed Study/Research in Chemistry (1 Sem. Hr.)**
 CH 462 **Directed Study/Research in Chemistry (2 Sem. Hrs.)**
 CH 463 **Directed Study/Research in Chemistry (3 Sem. Hrs.)**

Prerequisite: *Consent of instructor*

These courses will be offered on occasion of student demand or need.

Computer Information Systems (CIS)

- CIS 301 **Problem Solving With Computers (3 Sem. Hrs.)**

CIS 301 may only be taken by Computer Science majors (CS, CIS, CN or IS option) as a substitution for the required Microcomputer Applications course. *Designed for non-computer science, non-CIS majors.* This course is designed to strengthen student's grounding in common computer terminology and applications. Students with minimal skills will learn to enhance their personal productivity and problem solving skills by applying information technologies to problem situations and by designing and using small information systems for individuals and groups. The course will be conducted through lecture, in-class computing laboratories, and out-of-class assigned problems and projects.

- CIS 315 **Scripting Languages and System Administration (3 Sem. Hrs.)**

This course is an in-depth study of the design of scripting languages and their applications. Scripting languages can be used to manipulate text and data using subtle and complex coding to automate many tasks. Students will learn to write simple scripts to automate system administration tasks using appropriate languages. This course explores the nature of scripting, the role of scripting languages, explores some of the popular scripting languages and their applications, and provides skills in scripting language design.

- CIS 321 **Systems Analysis and Design (3 Sem. Hrs.)**

This course will provide an in-depth study of the Systems Development Life Cycle (SDLC) to include study system analysis fundamentals, information requirements analysis, the analysis process, the essentials of design, software engineering and implementation. A total quality management emphasis is stressed and computer-assisted systems engineering (CASE) tools are introduced. A project is required to show understanding of topics presented.

- CIS 325 **The Digital Enterprise (3 Sem. Hrs.)**

Prerequisites: *CIS 146, CIS 301 or equivalent Microsoft Windows applications course*

This course examines e-business strategy, solution architecture, and their components. These components create the link between organizational strategy and networked information systems, and support the implementation of a rich variety of business models in both national and global contexts. Technology applications that support organizational, managerial and decision support, as well as those that support business changes necessitated by evolution in the digital economy are covered. Other topics include: legal and ethical issues, information privacy, and supply chain management.

- CIS 365 **Visual Application Development (3 Sem. Hrs.) (Lab fee)**

Prerequisite: *CS 318*

This course introduces students to programming in visual, event-driven environments. Students learn concepts of visual programming and underlying design principals used in developing applications in visual programming environments. An emphasis will be placed on design of user interfaces, on-line documentation, input, and output components including menus, forms, queries, and reports.

- CIS 382 **Mobile Device Software Development (3 Sem. Hrs.)**

Prerequisite: *CS 372*

This course is an introduction to mobile device programming for the iOS and Android mobile device platforms. Students will learn Swift, Objective-C, and Java programming languages for development on the two platforms, and the design patterns used to develop applications for the iPhone, iPad and Android device. We will discuss the core objects that make up iOS and Android Software Development Kits (SDKs) and consider the commonly used programming interfaces for building applications for mobile devices.

- CIS 420 **Fundamentals of Information Security (3 Sem. Hrs.)**

Prerequisite: *CIS 321 or CIS 325 or ISM 400, or consent of instructor*

The focus of this course is managing security and building systems to remain dependable in the face of malice, error, or mischance. This course will focus on the tools, processes, and methods needed to design, implement, and test complete systems, and to adapt existing systems as their environment evolves. Students will use real-world case studies to gain practical experience in solving complex problems, like the ones encountered in industry. The course will focus on applying the methodology of security engineering to develop reliable, cost-effective, and easily maintainable systems. Students will also develop an understanding of how the business of security engineering can best be managed.

- CIS 421 **Digital Forensics (3 Sem. Hrs.) (Lab fee)**

Prerequisite: *CIS 321 or CIS 325, or consent of instructor*

This course covers the fundamentals of digital forensics, that is, the recovery and investigation of material found in digital devices, often in relation to computer crime. The focus of the course is on the technical aspects of a forensics investigation with an emphasis on: (1) legal considerations of the digital domain, (2) technical implications of the rules of evidence, (3) tools and techniques for computer and network forensics, (4) forensic data analysis, and (4) mobile device forensics. Students will gain hands-on lab experience in each of these areas of emphasis.

- CIS 440 Database Systems (3 Sem. Hrs.) (Lab fee)**
Prerequisite: *CS 317*
 In this course, students are introduced to the design, implementation, and management of systems in a database environment. Emphasis will be placed on data models, normalization, and a relational query language. Other topics include: comparison of relational and object oriented models, data warehousing, and data mining.
- CIS 441 Systems Integration and Architecture (3 Sem. Hrs.)**
Prerequisite: *CIS 321*
 This course exposes students to the Information Technology (IT) hardware and systems software concepts. Topics include: computer hardware, operating systems, system software, hardware and software integration, operating procedures, system performance, security/safety, and compatibility. Student labs and hands-on activities will include: Windows, Unix, and Linux systems, system utilities and software tools.
- CIS 450 Human-Computer Interaction (3 Sem. Hrs.)**
 This course covers interaction between modern computer interfaces and system users. Students examine user diversity and its impact on design of user interfaces. Techniques for task analysis, interface prototyping, and methods for using usability tests to evaluate effectiveness of human-computer dialogs are also covered. Emphasis is placed on the integration of human-computer interaction principles into software engineering life cycle. Theories, principles, and guidelines for interface development and testing are learned through design and development of prototypes for various types of user interfaces.

Criminal Justice (CJ)

- CJ 301 Criminal Justice Process (3 Sem. Hrs.)**
 This course presents an overview of the major steps in the processing of a criminal case in the United States, including pretrial, trial, and post-conviction phases.
- CJ 302 Criminal Law (3 Sem. Hrs.) (Also listed as PO 302)**
 This course focuses on definitions of crimes to include the specific elements of various criminal offenses. Defenses to criminal conduct also are discussed.
- CJ 307 American Constitutional Law (3 Sem. Hrs.) (Also listed as HY 307 and PO 307)**
 This course examines the text of the nation's primary law and key decisions of the U.S. Supreme Court interpreting certain phrases. Organization and operation of the Court are also covered. This course focuses on separation of powers, federalism, interstate commerce, taxation, the contract clause and the takings clause. This course provides a foundation in American constitutionalism for students who plan to attend law school or teach social studies in the secondary schools.
- CJ 326 International and Domestic Terrorism (3 Sem. Hrs.) (Also listed as PO 326)**
 This course examines the threat of international and domestic terrorism. There is an emphasis on the people and groups involved in international terrorism, the goals and ideology of the terrorists, major terrorist events, the global war on terrorism, homeland security, and strategies for containing and defeating the terrorist threat.
- CJ 336 A History of Criminal Justice (3 Sem. Hrs.) (Also listed as HY 336)**
 The subject of this course is the historical development of American criminal justice philosophy, institutions, and practices in the political, cultural, and social context of the Western world and the United States from ancient Hebraic law to the present. Emphasis is on the contribution and effect of the Enlightenment, Puritanism, American Revolution and Constitution, and frontier experience on the origins and evolution of the American administration of justice.
- CJ 350 Introduction to the American Legal System (3 Sem. Hrs.) (Also listed as PSHA 350 and PO 350)**
 This course is a review of basic legal doctrines and processes in the U.S. system of jurisprudence. Students are introduced to a wide variety of topics in civil and criminal justice. Topics include the theory and nature of law as a device for social control, torts, contracts, and ownership of property. The course is structured to provide prelaw majors with limited exposure to the many social conflicts managed by law and courts, and to provide education majors with an overview of law-related topics necessary for civics instruction.
- CJ 364 Civil Liberties (3 Sem. Hrs.) (Also listed as PO 364)**
 This course focuses on the leading cases and doctrines which balance governmental/societal interests with individual rights across a broad spectrum of social relationships. It explores the constitutional foundations for freedom of expression, due process, and equal protection under the law.
- CJ 400 Law Enforcement In America (3 Sem. Hrs.)**
 This course presents an in-depth examination of American policing. It includes history, structure, functions, processes, and administrative issues of contemporary law enforcement agencies/systems.
- CJ 401 Adult Corrections (3 Sem. Hrs.)**
 This course examines socioeconomic facets of crime and principles and practices of delinquency, probation, and parole. Interaction (environmental and attitudinal) of persons from sentencing to return to society will be stressed.
- CJ 446 Public Sector Organizational Theory and Management (3 Sem. Hrs.) (Also listed as PSHA 446)**
 This course examines the structure and functioning of public sector organizations focusing on agencies involved in the areas of public safety and health administration. Major theories and concepts relating to structure, behavior, and management practices of public organizations are examined.

- CJ 452 Advanced Criminology (3 Sem. Hrs.)**
This course provides an analysis of social causal process and theories by which individuals become criminals and evaluation of the effectiveness of the criminal justice system in returning helpful, contributing citizens back to society. Historical and contemporary orientation.
- CJ 453 Juvenile Delinquency (3 Sem. Hrs.)**
The course applies a sociological approach to analyzing juvenile delinquency. While recognizing a variety of the causes (physiological, psychological, and social) of juvenile delinquency, this approach focuses on the impact of societal conditions on juvenile delinquency. The course combines a theoretical and an empirical emphasis.
- CJ 455 Ethics in the Public Sector (3 Sem. Hrs.) (Also listed as PO 455 and PSHA 455)**
This course examines ethical issues encountered by employees of governmental agencies, both in terms of management practices and interactions with the public. The course explores application of codes of ethics, theories of ethical decision making, and ethical principles impacting various aspects of the public sector.
- CJ 460 Directed Studies in Criminal Justice (1 Sem. Hr.)**
CJ 462 Directed Studies in Criminal Justice (2 Sem. Hrs.)
CJ 463 Directed Studies in Criminal Justice (3 Sem. Hrs.)
Prerequisite: Consent of instructor (Offered by request)
- CJ 464 Internship in Criminal Justice (3 Sem. Hrs.)**
Prerequisite: Consent of instructor
This course provides an opportunity for students to gain experience in a Criminal Justice career field under the guidance of a faculty and agency supervisor. All Criminal Justice students must take at least three hours of internship course work during their junior or senior academic year. The minimum clock hours for the three hours of required internship course work is 120 clock hours within the semester that the student is registered. Students must meet with the instructor at least one semester before the semester in which they will register for the internship in order to begin the internship application process and gain approval. **Students are suggested to maintain at least a 2.5 G.P.A. to apply for an internship.**
- CJ 465 Senior Research Project (4 Sem. Hrs.)**
This course provides a capstone experience for senior Criminal Justice majors. It is available only to Criminal Justice majors and must be taken during their last term in the degree program. The course consists of four elements: (1) an observation experience at an office or agency engaged in the application of theories and concepts in a subfield of Criminal Justice; (2) an issue paper on a contemporary issue facing criminal justice leaders at the national, state, or local levels and presentation of this research to selected full-time faculty at Athens State University; (3) a supervised review of selected professional literature, and (4) a sufficient score on an externally validated exit exam. Students should consult with their academic advisor **prior** to registration for this course.

Computer Networking (CN)

- CN 301 Networking Fundamentals (2 Sem. Hrs.) (Lab fee)**
This course introduces the student to underlying concepts of data communication, telecommunications, and networking. The course focuses on terminology and technologies in current networking environments. The course also provides a general overview of field of networking as basis for continued study in field.
- CN 302 Local Area Networks (2 Sem. Hrs.) (Lab fee)**
Prerequisite: CN 301 or concurrent enrollment
This course presents the latest concepts of local area network (LAN) technologies. It also provides a comprehensive introduction to the concepts, technologies, components, and acronyms inherent in today's local networking environments.
- CN 303 Wide Area Networks (2 Sem. Hrs.) (Lab fee)**
This course provides conceptual and working knowledge of how LANs communicate over wide area. The course introduces telephony and the technology of switched-voice communications. The course also provides an understanding of how communication channels of public switched-telephone networks are used for data communication and how voice data communication have become integrated.
- CN 304 Network Architectures (2 Sem. Hrs.) (Lab fee)**
Prerequisite: CN 303 or concurrent enrollment
This course outlines three important networking architectures in today's corporate environments: TCP/IP, SNA, and DNA. The major components and functions of each of these architectures are discussed, as well as methods used to connect different architectures. The course also provides concepts important to the field of Systems integration and conceptual basis for understanding network architecture.
- CN 401 Internetworking Devices (2 Sem. Hrs.) (Lab fee)**
Prerequisite: CN 302 or CN 303 or concurrent enrollment
This is an advanced course intended for networking professionals and students who already grasp the general concepts of data communications and networking but would like a more detailed understanding of internetworking. Techniques and components for managing network growth and connecting disparate network architectures will be presented and solutions to internetworking problems will be developed.
- CN 402 The Internet (2 Sem. Hrs.)**
Prerequisite: CN 401 or concurrent enrollment
This course familiarizes the student with the operation and function of the Internet. The course covers the underlying components and protocols that make up the Internet and the services provided. Internet tools will be used to illustrate concepts. The course also

provides concepts necessary to establishing and maintaining Internet connectivity. Tools used to navigate and access information on the Internet will be studied.

CN 403 Network Processes and Protocols (2 Sem. Hrs.) (Lab fee)

Prerequisite: CN 304

This is an advanced course intended for networking professional and students who grasp the basic concepts of networking but would like to understand, in more detail, some of the major protocols controlling the flow of information between data communication layers and between cooperating processes on network nodes. Trace and analysis tools will be used to analyze the frames and packets traversing a network.

CN 404 Enterprise Network Design and Management (2 Sem. Hrs.) (Lab fee)

Prerequisite: CN 304 and CN 403, or concurrent enrollment

This is an advanced course intended for networking professionals and students who grasp basic concepts of networking but would like to understand methods used to analyze, design, and manage LANs and point-to-point networks. Exercises are geared toward learning techniques used to design and analyze networks.

CN 405 Network Security (3 Sem. Hrs.)

Prerequisite: CN 304 or consent of instructor **Corequisite:** CN 405L

This course is a study of networking basics and security essentials with respect to information services provided over a computer network. The course covers the technical details of security threats, vulnerabilities, attacks, policies, and countermeasures such as firewalls, honeypots, intrusion detection systems, and cryptographic algorithms for confidentiality and authentication and the development of strategies to protect information services and resources accessible on a computer network.

CN 405L Network Security Lab (1 Sem. Hr.) Corequisite: CN 405

Cooperative Education (CP)

Note: These classes are only for students who are active working members of the Cooperative Education Program. A minimum overall grade point average of 2.5 and prior approval by the Co-op Education Office is required. Courses must be taken in sequential order.

CP 301 Parallel Co-op Practicum I (1 Sem. Hr.) Prerequisite: Prior approval of Instructor

CP 302 Parallel Co-op Practicum II (1 Sem. Hr.) Prerequisite: CP 301

CP 303 Parallel Co-op Practicum III (1 Sem. Hr.) Prerequisite: CP 302

CP 304 Parallel Co-op Practicum IV (1 Sem. Hr.) Prerequisite: CP 303

CP 305 Parallel Co-op Practicum V (1 Sem. Hr.) Prerequisite: CP 304

CP 306 Parallel Co-op Practicum VI (1 Sem. Hr.) Prerequisite: CP 305

CP 307 Parallel Co-op Practicum VII (1 Sem. Hr.) Prerequisite: CP 306

CP 308 Parallel Co-op Practicum VIII (1 Sem. Hr.) Prerequisite: CP 307

(Co-op Work Experience) A series of courses wherein the student works on a part-time basis in a job directly related to their academic major. Grades will be based on the employer's evaluation of the student's productivity and the student's completion of vocational self-assessment workbook exercises and reports, work evaluation, and a personal SWOT analysis leading to the development of a professional career portfolio and class presentation.

CP 401 Alternating Co-op Practicum I (2 Sem. Hrs.) Prerequisite: Prior approval of instructor

CP 402 Alternating Co-op Practicum II (2 Sem. Hrs.) Prerequisite: CP 401

CP 403 Alternating Co-op Practicum III (2 Sem. Hrs.) Prerequisite: CP 402

CP 404 Alternating Co-op Practicum IV (2 Sem. Hrs.) Prerequisite: CP 403

CP 405 Alternating Co-op Practicum V (2 Sem. Hrs.) Prerequisite: CP 404

(Co-op Work Experience) A series of courses wherein the student works on a part-time basis in a job directly related to their academic major. Grades will be based on the employer's evaluation of the student's productivity and the student's completion of vocational self-assessment workbook exercises and reports, work evaluation, and a personal SWOT analysis leading to the development of a professional career portfolio and class presentation.

CP 410 Co-op Practicum (2 Sem. Hrs.)

Prerequisite: Prior approval of instructor

A course wherein the student works a minimum of 20 hours in a job directly related to their academic major. Grade will be based on the employer's evaluation of the student's productivity and the student's completion of vocational self-assessment workbook exercises and reports, work evaluation, and a personal SWOT analysis leading to development of a professional career portfolio and class presentation.

Computer Science (CS)

CS 305 Concepts of Computer Programming (3 Sem. Hrs.) (Lab fee)

Prerequisite: Any Introduction to Computer course or consent of instructor

CS 305 may only be taken by Computer Science majors (CS, CIS, CN, or IS option) as a substitution for the required pre-professional programming course(s). This course is offered for those incoming students who have not taken programming courses to fulfill their pre-professional requirements and to fulfill the prerequisite for CS 317. The course will introduce the fundamental techniques of programming as a foundation for more advanced study of computer science. Considerable attention is devoted to developing effective software engineering practice, emphasizing such principles as design, decomposition, encapsulation, procedural abstraction, testing, and software reuse. Topics include standard programming constructs, problem-solving strategies, the concept of an algorithm, and fundamental data structures (strings, arrays, and records) along with an introduction to machine representation, and graphics.

- CS 309 Introduction to Digital Logic Design (3 Sem. Hrs.)**
Corequisite: CS 309L
 This course is a comprehensive introduction to Boolean Algebra and methods for designing circuits which implement Boolean expressions. Topics include binary numbers and codes, axioms and theorems of Boolean Algebra, standard algebraic forms of Boolean expressions, the use of methods such as Karnaugh Maps and the Quine-McCluskey procedures for simplification of Boolean expression, analysis and design of combinational and sequential circuits, register operations, and introduction to fault tolerance design.
- CS 309L Digital Design Lab (1 Sem. Hr.)** **Corequisite: CS 309**
- CS 310 Professional Ethics of Computing (1 Sem. Hr.)**
Prerequisites: Microcomputer Applications and Computer Programming courses
 This course is an applied introduction to the ethical problems faced by computer scientists, professional codes of ethics in computing, legal issues involved in technology, and the social implications of computing and other digital technologies.
- CS 317 Computer Science I (3 Sem. Hrs.) (Lab fee)**
Prerequisite: Precalculus Algebra and an introductory programming course
 This is the first course for any new CS or CIS student or minor at Athens State. It covers the fundamentals of programming. This course reviews introductory programming and problem-solving techniques and expands upon the following topics: Arithmetic and relational operations; I/O for elementary data types; logic-control constructs for selection and iteration; functions and parameter passing mechanisms. Students are introduced to the concepts and the rationale for object-oriented programming using classes and class functions. This course will also cover the use of arrays, including basic sorting and searching algorithms. Programming assignments will focus on the techniques of good programming style and how to design, code, debug, and document program.
- CS 318 Computer Science II (3 Sem. Hrs.) (Lab fee)**
Prerequisite: CS 317
 This is an advanced course in object-oriented computer programming using C++. The focus for this course is on the principles of object-oriented programming, abstraction, and software design. It also provides an introduction to recursion, pointers, and linked lists. Object-oriented design and programming, using classes, operator overloading, member functions and inheritance are emphasized. Students will learn the principle of encapsulation (information hiding) and code reuse. Programming assignments will focus on the techniques of design as a prerequisite of good programming.
- CS 340 Introduction to Assembly Language (3 Sem. Hrs.) (Lab fee)**
Prerequisites: CS 309 and CS 318
 This course is an introduction to computer architecture at the assembly language level. Methods for representing data in computers, the study of the assembly language of a specific computer will be covered. The course covers addressing modes, instruction formats, and control structures of a typical assembly language. A number of programming assignments are given to support assembly programming concepts.
- CS 372 Data Structures (3 Sem. Hrs.) (Lab fee)**
Prerequisite: CS 318 with a grade of C or better
 This course is a continuation of CS 318 stressing concepts of abstraction, software engineering, analysis of algorithms, and problem solving skills. The course introduces lists, linked lists, stacks, queues, and trees, and presents problems and algorithms using these advanced data structures. The course covers searching and sorting algorithms. Students are required to understand of each concept through programming assignments.
- CS 380 Programming for the Web (3 Sem. Hrs.) (Lab fee)**
Prerequisite: CS 318
 This course introduces students to developing interactive web pages and client-server computing. Course topics include XHTML, cascading style-sheets, HTML Forms processing, dynamic and interactive content, scripting languages, and internet servers. These languages allow the programmer to add interactive content to their web pages. Principles of event-driven, user-oriented websites are covered. Emphasis is placed on hands-on design of working web pages and software using a variety of web programming technologies.
- CS 409 Computer Organization and Architecture (3 Sem. Hrs.) (Lab fee)**
Prerequisites: CS 309, CS 340, and MA 308
 This course is a comprehensive study of the architecture of a hypothetical digital computer. The course will present an overview of computer architecture and then a detailed design of each major functional subsystem, including: memory, central processing unit (control unit and arithmetic-logic unit), Input/Output devices, and hardware for the support of the Operating System. The study of the implications of computer architecture for systems programming and Operating System design will also be covered.
- CS 414 Programming Language (3 Sem. Hrs.) (Lab fee)**
Prerequisite: CS 372
 This course is an in-depth study of similarities and differences of modern programming language paradigms. Emphasis is on the implementation of basic language features and in the choice of a language most appropriate for a given problem. Programming assignments will require the use of the unique features of various languages.
- CS 415 Operating Systems (3 Sem. Hrs.) (Lab fee)**
Prerequisites: CS 372 and any computer networking course
 This course is an applied introduction to Operating Systems, appropriate for students who are interested in using and understanding computer operating systems and networks. The goal is to learn why operating systems are needed and what, at a functional level, they do. The course approaches these materials from a perspective to include experienced users who may or may not know how to program. Concepts covered include: Operating System Fundamentals, User Interfaces, File Systems, Resource Management (memory, multiprocessing, peripherals), Client/Server Information Systems. Modern commercial and open source operating systems, as well

as supporting components, are also studied.

- CS 417 Topics in Object Oriented Programming (3 Sem. Hrs.) (Lab fee)**
Prerequisite: CS 372
Topics in this course include the principles of object-oriented programming and design, visual application frameworks, and event-driven programming. A formal modeling language will be used for design. Students will be required to design, develop and implement working applications.
- CS 423 Computer Graphics (3 Sem. Hrs.) (Lab fee)**
Prerequisites: CS 318 and MA 308
This course is an introduction to the basic concepts and tools of computer graphics in both two and three dimensional space. The course covers graphical devices, graphical software, coordinate systems, vectors and matrix algebra, and transformation algorithms. Also covered are algorithms in line drawing, drawing curves, geometric figures, and Windowing and clipping concepts. Students are required to understand each concept through programming assignments.
- CS 430 Software Ethics and Professionalism (3 Sem. Hrs.)**
Prerequisites: Successful completion of 12 sem. hrs. of 300-400 level Computer Science courses at Athens State
The ethics and professionalism course addresses ethical, professional, social and team issues inherent in software development. Interaction with software development team members, clients, system users, and others is covered. Written and oral communications documents, standards and sensitivity issues are discussed. Confidentiality, privacy, copyrights, and harassment are just a few of the topics explored.
- CS 441 Special Topic in Computer Science (1 Sem. Hr.)**
CS 442 Special Topic in Computer Science (2 Sem. Hrs.)
CS 443 Special Topic in Computer Science (3 Sem. Hrs.)
Prerequisite: Consent of instructor
These courses are to be offered on occasion of student demand or need. Topics which may be covered include special programming languages, compilers, system design, graphics, and special applications.
- CS 451 Software Engineering (3 Sem. Hrs.) (Lab fee)**
Prerequisites: CS 372 with grade of C or better, senior standing and consent of instructor
The course will familiarize the student with the entire software life cycle, spanning from the time of conception of the actual requirements, through the analysis, design, and development of the software. The course will study various methodologies of software engineering; i.e., the analysis and comparison of methods which use sound engineering principles to develop software that is reliable, cost-effective, and easily maintainable. The course will emphasize the concept of a software development team where students work on real-world software development projects to solve software problems for users.
- CS 452 Senior Software Engineering Project (3 Sem. Hrs.)**
Prerequisite: CS 451
This course provides students with the opportunity to apply the knowledge and skills mastered in the computer science discipline through development of complex software projects. Emphasis is placed on the concept of software development teams to create project plans, software requirements, design specifications, test plans, and other written documentation for the selected software project. Student software teams also code, test, and integrate the software according to the requirements and design specifications produced. Technical walk through and software demonstrations are required at the completion of various milestones.
- CS 452L Senior Software Engineering Project Lab (1 Sem. Hr.) Corequisite: CS 452**
- CS 454 System Security Management (3 Sem. Hrs.) (Lab fee)**
Prerequisites: CS 372 and MA 308
The focus of this course is security engineering and building systems to remain dependable in the face of malice, error, or mishaps of other sorts. This course will cover tools, processes, and methods needed to design, implement, and test complete security systems and to adapt existing systems as their environment evolves. Students will use real-world case studies to gain practical experience in solving complex problems, like the ones encountered in industry.
- CS 460 Directed Study/Special Computer Science Project (1 Sem. Hr.)**
CS 461 Directed Study/Special Computer Science Project (2 Sem. Hrs.)
CS 462 Directed Study/Special Computer Science Project (3 Sem. Hrs.)
Prerequisites: 15 sem. hrs. of upper level computer science coursework, and consent of instructor
These courses are to be offered on occasion of student demand or need. The courses are designed to allow students majoring in computer science to pursue special projects of interest to both the student and instructor. Projects undertaken for these courses might well be continuations of projects begun in other courses.
- CS 472 Algorithm Analysis (3 Sem. Hrs.) (Lab fee)**
Prerequisites: MA 308 and CS 372
This course is an introduction to the classic methods for designing algorithms. The course will study specific problems such as sorting, graph traversals, and matrix multiplication in order to illustrate these methods. The methods studied will include: Divide and Conquer, Back-Tracking, Branch and Bound, and Dynamic Programming and a brief introduction to computational complexity.
- CS 474 Introduction to Formal Language Theory (3 Sem. Hrs.) (Lab fee)**
Prerequisite: CS 414
This course covers formal programming languages, formal grammars, methods for language parsing, regular and context-free languages, automata, Chomsky hierarchy, Church-Turing Thesis, and theory of computability.

- CS 475 Introduction to the Theory of Computing (3 Sem. Hrs.)**
Prerequisites: CS 372 and MA 308
 This is a first course on the theory of computing. Topics covered include finite automata, regular expressions and languages, push-down automata, pumping lemmas for regular and context-free grammars, the Chomsky hierarchy of language classes, Turing machines and computability, the decidability of the halting problem, time complexity and NP-completeness and tractability.
- CS 484 Applied Cryptography and System Security (3 Sem. Hrs.)**
Prerequisites: CS 372 and MA 308
 Cryptography is about communication in the presence of an adversary. Modern cryptography encompasses problems as diverse as encryption, authentication, and key distribution. This course provides the foundation upon which one may understand what these problems are, how to evaluate protocols and methods to solve them, and how to build secure software solutions for these problems.

Economics (EC)

- EC 310 Modern Economics (3 Sem. Hrs.)**
 A macro examination of the operation of modern economic systems including price determination, aggregate demand and supply theory, public policy options, and the philosophical foundations of free market and command systems.
- EC 320 International Economics and Trade (3 Sem. Hrs.)**
 Introduction of the economic principles underlying the international market systems and international trade. Attention given to economic benefits and consequences of free trade, the examination of the factors affecting trade and of the trade policies relating to industrialized and developing nations. Focus will also be on the application of these principles to current international and domestic developments.
- EC 321 Money and Banking (3 Sem. Hrs.)**
Prerequisite: Principles of Economics
 A study of how money, credit, and interest rates affect the level of employment, production, and prices in the economy. Topics of study will include the Federal Reserve System, the operations of commercial banks, credit controls, the theory of interest rate determination, and recent trends in banking.
- EC 348 Labor Economics (3 Sem. Hrs.)**
 Introduction to labor in the economy and the relationships among workers, management, labor organizations, and public policy.
- EC 410 International Finance and Monetary Economics (3 Sem. Hrs.)**
Prerequisites: Principles of Macro and Micro Economics (or equivalent) and EC 321 Money and Banking (or equivalent)
 This course provides students with a strong foundation in the theory and practice of international finance and macroeconomics policies, and will explore emerging topics of interest such as a single currency (Euro) in Europe and financial crises in developing countries. The course consists of four parts: foreign exchange markets, the international monetary system, open-economy macroeconomics and international financial markets.
- EC 441 Special Topics in Economics (3 Sem. Hrs.)**
 To be offered on occasion of student demand or need.
- EC 460 Directed Study/Research in Economics (3 Sem. Hrs.)**
 A course designed to allow students an opportunity to perform research/directed studies in economics. Offered at the discretion of the professor with approval of the College Dean.

Education (ED)

- ED 301 Introduction to Teaching (1 Sem. Hr.)**
Course requirements include mandatory campus-based training. Consult the College of Education Calendar of Events Webpage for more information. Introduction to Teaching introduces prospective teachers as well as other education students to the teaching profession. This course encourages students to think more deeply, more broadly, and more systematically about what teaching is, what teachers do, and whether teaching is an appropriate career choice for them. In the course students will develop research and theory-based views of teaching practices, various contexts of teaching and teachers, and contemporary issues related to teacher education.
- ED 302 Foundations of Education (3 Sem. Hrs.)**
Course requirements include mandatory campus-based training. Consult the College of Education Calendar of Events Webpage for more information. Field experience is required. A foundational approach to the study of education draws on the disciplines of history, philosophy, and sociology. This course will examine, discuss, and reflect on philosophical issues related to education in a democratic society, as well as explore interdisciplinary understandings of cultural and social realities of education in a global society. Pre-service teachers will use interpretative, normative, and critical perspectives in understanding the relationship between school and society as well as address emerging issues in education. **Five days of Field Experiences are required.**
- ED 303 Practicum in Teacher Education (1 Sem. Hr.)**
 University supervised teaching experience in a K-12 school, enrichment program or academic camp.
- ED 305 Technology and Media in Education (3 Sem. Hrs.) (Software/license fee)**
 This course will examine the transformative effect technology is having on society and schools, as well as the implications these

changes have for teaching and learning. Students will explore the use of technology in schools, including meeting students' needs and wants, educational equity and challenges for using technology creatively in public school classrooms. As pre-service teachers learn to integrate technology into teaching and to produce educationally sound, technology-based, communication and instructional materials, the ethical, legal, and pedagogical issues related to technology will be emphasized.

- ED 307 Teaching Strategies for the Digital Age (3 Sem. Hrs.)**
This course requires intermediate-level technology/computer skills (e.g., word processing, slide presentations, and basic video production). This course encourages questioning of previously conceived notions about the qualities and characteristics that make a good teachers and how to use those qualities to better and increase learner awareness regarding ever-changing student needs. Students will learn the unique characteristics of today's digital-age students and 21st century pedagogical strategies used for instructing this population. Upon completion of the course, students will have the ability to locate, use and assess a variety of tech tools that are used for student inquiry and presentation of work and create and present content-based lessons that model explored teaching strategies.
- ED 308 Curriculum Design and Assessment for the e-Classroom (3 Sem. Hrs.) (Cross-listed with CE 444)**
This course requires intermediate-level technology/computer skills (e.g., word processing, slide presentations, and basic video production). This course focuses on the application and interpretation of theory, research and standards-based effective practices used to design, develop and evaluate distance and blended education experiences. Students will examine different aspects of online teaching (e.g. asynchronous communication, facilitation and feedback) based on research, critically evaluate existing social media and online resources, and apply their learning to online content design. Students will leave the course with a completed online course module that includes content specific activities and an understanding of how to create lessons and assessments that support student exploration of their individual curiosities, educational goal setting, management of learning and assessment of progress.
- ED 312 Cultural Competence and Responsiveness (3 Sem. Hrs.)**
 This course is designed to equip students with the knowledge and skills needed to respect, appreciate, and value diverse populations. Beginning with the awareness of self, biases, and prejudices, students will engage in learning experiences to develop skills to interact respectfully, responsively, and effectively with diverse populations, understand daily living practices and challenges of those who represent diverse cultures, races, ages, and socioeconomic platforms. The ultimate goal of cultural competence is to recognize, affirm, foster, and value strengths of individuals from all walks of life and protect and preserve their worth and dignity through activism and action. Learners will use the framework "know myself and know others" to better understand their role as a change agent for liberty and justice.
- ED 322 Basic Principles of ELL Education (3 Sem. Hrs.)**
 A course designed to provide all educators the fundamental theories and knowledge about second language acquisition, with an emphasis on instructional methods for teaching English language learners.
- ED 325 Theoretical Foundations of Language Acquisitions (3 Sem. Hrs.)**
 A course designed to investigate the conceptual, linguistic, sociological, historical, political, and legal foundations of ELL education. Emphasis is placed on understanding acculturation and academic achievement of, and programmatic alternatives and pedagogy for ELLs in a pluralistic society. Multiple factors impacting the school experience of language minority students will be explored, including but not limited to: cognitive/academic (school, teacher), social/affective (personal, family, community), and linguistic development issues.
- ED 359 Assessment Strategies for the P-12 Art Classroom (3 Sem. Hrs.)**
Prerequisite: Admission to the Teacher Education Program
 A senior level course designed to provide P-12 art teachers the skills necessary to develop and implement proper assessment strategies. Special emphasis will be on types of assessment that are used in the art classroom as well as the construction of assessments that are appropriate for elementary and secondary art classrooms.
- ED 360 Classroom Management in Art Education (3 Sem. Hrs.)**
Prerequisite: Admission to the Teacher Education Program
 This course is designed to prepare the senior level art student in the techniques of classroom management; emphasizing rules, procedures and general classroom organization for the elementary through high school classroom.
- ED 404 Methods and Materials for Teaching English Language Learners (3 Sem. Hrs.)**
Prerequisite: ED 322 or ED 325
 This course focuses on curriculum development and instruction for students (K-6) in a variety of English learner programs. The course emphasizes second-language methods, approaches, and strategies to facility ELL students learning of reading, writing, speaking and listening in English and other content areas such as mathematics, science and social studies. Frameworks for evaluating curriculum materials and their instructional recommendations for ELL students are provided.
- ED 405 Assessment of English Language Learners (3 Sem. Hrs.)**
 The theoretical and practical aspects of assessing English language learners are addressed including examination of instruments used by educators to assess the language proficiency and academic achievement of linguistically diverse students. Classroom assessment practices across content areas will be developed within this course. Provisions of state and federal requirements, and the use of varied data sources to distinguish between ELLs who are developing normally and those with a disabling condition are discussed.
- ED 407 Emerging Instructional Technologies (3 Sem. Hrs.)**
Note: This course requires land-based lab activities conducted at the main Athens State campus. This course requires intermediate-level technology/computer skills (e.g., word processing, slide presentations, and basic video production). In this course, current leading-edge research about emerging instructional technologies is integrated with hands-on experiences. Through the process of compiling, evaluating, and organizing educational technology resources, K-12 teachers will obtain the skills necessary to provide similar learning experiences for their respective students. More importantly, participants will consider their own unique

educational contexts while working with course content to determine how the Internet can be used to meet teaching and learning goals.

- ED 408 Issues and Trends in Educational Technology (3 Sem. Hrs.)**
This course requires intermediate-level technology/computer skills (e.g., word processing, slide presentations, and basic video production). This course will provide a holistic overview of the issues and trends associated with using the Internet for instruction. Participants will review and discuss literature from a variety of sources, such as educational technology research journals, educational technology practitioner magazines, online articles and websites, and select books. Participants will engage in group reading discussions and projects, compose position papers, and chart the history, current state and possible future developments in educational technology.
- ED 409 Special Topics in Education Technology (3 Sem. Hrs.)**
This course requires intermediate-level technology/computer skills (e.g., word processing, slide presentations, and basic video production). In this course, students will explore relevant topics not served by established courses. With technological and pedagogical changes occurring at a rapid pace, new advances are consistently being discovered and implemented in today's classroom. These changes will be explored in this course, which includes an in depth study of special issues in educational technology. Topics in this course change based upon student need, changing trends in education and in educational technology.
- ED 410 Curriculum Integration of Technology for Elementary Learners (3 Sem. Hrs.)**
This course requires intermediate-level technology/computer skills (e.g., word processing, slide presentations, and basic video production). This course will focus on using technology tools to help facilitate learning in the elementary classroom and help pre-service teacher and students improve digital awareness. Participants will engage in learning instructional strategies and techniques unique to the elementary classroom. Participants will also review and practice strategies, regarding the proper use and implementation of technologies, into content specific teaching and learning. Students will examine how role of technology differentiating instruction. By the end of the course, participants will have designed several lesson plans and activities for the elementary classroom toolkit.
- ED 411 Curriculum Integration of Technology for Secondary and Adult Learners (3 Sem. Hrs.)**
This course requires intermediate-level technology/computer skills (e.g., word processing, slide presentations, and basic video production). This course will focus on using technology tools to help facilitate learning in secondary and adult teaching environments and help pre-service teachers and students improve digital awareness. Participants will engage in learning instructional strategies and techniques unique to secondary and adult classrooms. Participants will also review and practice strategies, regarding the proper use and implementation of technologies, into content-specific teaching and learning. Students will examine how role of technology differentiating instruction. By the end of the course, participants will have designed several lesson plans and activities for the classroom toolkit.
- ED 420 Strategies for Gifted and Talented Students (3 Sem. Hrs.)**
This course focuses on curricular and instructional models and strategies for teaching gifted and talented students. Curriculum theories, models, strategies, and concepts are addressed.

English (EH)

- EH 303 Journalism (3 Sem. Hrs.) (Lab fee)**
(This course will not satisfy literature requirements. It is designed to fulfill requirements for language arts majors.) This course is a study and practical experience with journalistic principles, processes, and practices of the news media, utilizing media outlets both in schools and in the community with special emphasis on work with school publications.
- EH 304 Southern Literature (3 Sem. Hrs.)**
This course is an appreciative and critical study of the body of fine literature written by and about residents of the American South with a concentration on literature in the 20th century. Both oral and written student response are required.
- EH 307 Major Authors I (3 Sem. Hrs.)**
This course is a survey (Ancient to Renaissance) of contributions to western civilization by the great writers of ancient and medieval times, beginning with the Old Testament and concluding with John Milton. Both oral and written student response are required.
- EH 308 Major Authors II (3 Sem. Hrs.)**
This course is a survey of contributions to western civilization made by the great writers of the 18th century through the 20th century, beginning with the Enlightenment and ending with contemporary writers. Both oral and written student response are required.
- EH 309 The Bible and Its Influence (3 Sem. Hrs.) (Also listed as RE 309)**
The Bible and Its Influence is an overview of the story of the Bible and the influence the Bible has had in shaping western culture. This course will provide a survey of the biblical story. The influence of the Bible on western culture in art, history, music and literature will be explored. The course also introduces an historical-metaphorical approach to reading the Bible.
- EH 310 Film: History, Development and Evaluation (3 Sem. Hrs.)**
This course looks at the history and development of the film as literature and drama, with student practice in critical evaluation. Films will be viewed and read about, and students will perform oral and written criticism of them. The course may include film writing and film making.
- EH 311 Drama Production (3 Sem. Hrs.) (Lab fee)**
(This course will not satisfy literature requirement. It is designed to fulfill requirements for Language Arts majors.) This course covers the study and practical experience in producing, acting, and directing, or otherwise active participation in stage craft in school or

community theatre. An opportunity exists for qualified students to study with the Alabama Shakespeare Festival Theatre.

- EH 312 Dramatic Literature (3 Sem. Hrs.)**
This course covers the selected studies in drama, from classical through contemporary, designed to provide a wide familiarity with dramatic literature. The close study of specific plays are included. Both oral and written student response are required.
- EH 313 Modern American Drama (3 Sem. Hrs.)**
Through the examination of plays, this course will explore the development of Modern American Drama. The focus will begin with the foundational drama of Eugene O'Neill in the 1920s through the contemporary drama of Susan-Lori Parks in the early 21st Century. Over the course of the semester students will read plays, discuss American playwrights, and examine the historical, social, and critical contexts of the period. Although analysis of dramatic texts will be the main focus, discussion will emphasize historical documents and artifacts, dramatic reconstructions (including taped and live performances), and major theories of early 20th Century drama.
- EH 314 19th Century British Studies (3 Sem. Hrs.)**
This course is a critical study of the major and minor works of the Romantic and Victorian periods. Both oral and written analysis are required.
- EH 316 American Masterpieces (3 Sem. Hrs.)**
This course is an in-depth study of the major works of American literature from the colonial period to the present. Both oral and written analysis are required.
- EH 319 Technical Theatre (3 Sem. Hrs.)**
This course will cover the technical aspects of play production, designed for students who intend to direct a play or teach Drama.
- EH 320 Grammar (3 Sem. Hrs.)**
Prerequisite: Two courses in freshman composition
(This course will not satisfy literature or composition requirement.) This course is a teaching-oriented course, using both traditional standard grammar and linguistics-based grammatical systems and will include some work in elements of composition.
- EH 322 Costume Design (3 Sem. Hrs.)**
In this course, students will learn to design costumes for stage productions and will work on combining visual expression with ideas about character and theme. Students will learn to analyze a script for relevant information, develop costume plots and breakdowns, do clothing and design research, create image references, and swatch them with fabric ideas.
- EH 325 Myth: Ritual and Culture (3 Sem. Hrs.)**
This course is a study of the core Greco-Roman myths of Western Civilization, their impact on art, literature, and culture, and their ongoing evolution in art, advertising, film, and in fantasy and young adult literature.
- EH 330 Literary and Critical Theory (3 Sem. Hrs.)**
This course is an introduction to the major figures and principles of literary theory from Plato to the present.
- EH 331 Dramatic Theory and Criticism (3 Sem. Hrs.)**
Dramatic Theory and Criticism surveys the range of theatre and performance theories from ancient time to the present, as well as critical methodologies to theatre, drama and performance (e.g. Feminism, Semiotics, Materialism, Post Colonialism, etc.). Considerable time will be devoted to the development of excellent writing skills, including organization and editing of material, effective argumentation, and the conventions of research and citation standard for the discipline.
- EH 332 Adaptation and the Arts (3 Sem. Hrs.)**
Many plays, musicals, and television shows are adapted from other literary, dramatic, and artistic sources. This colloquium will examine and compare source material such as novels, and short stories adapted into plays, films and other representational forms. In addition, students will focus on works whose characters are confronted with life's challenges, often requiring them to *adapt* to new circumstances. In this way students will consider not only the art and techniques of adaptation, but also adaptation as a social, interpersonal, and creative human process.
- EH 333 Acting I (3 Sem. Hrs.)**
This course is a study and practice in the art and skills of acting in live theater to include emphasis on the use of voice, gesture, and body language to convey meaning and emotion.
- EH 334 Acting II: Scene Study and Acting Shakespeare (3 Sem. Hrs.)**
Acting II: Scene Study and Acting Shakespeare is a performance class offering in-depth scene and monologue study emphasizing character development and script analysis. Various basic through advanced acting techniques will be discussed and utilized as students work with some of the most-produced playwrights in the English language. Students will have the opportunity to begin or further their work on monologues which can be used as audition pieces, and to develop in-depth scene work with partners. This course will culminate with exploring techniques for acting Shakespeare based in the 1623 First Folio.
- EH 335 Movement and Stage Combat (3 Sem. Hrs.)**
Movement Stage Combat explores creative movement for the theatre with an emphasis in stage combat. This course is designed to stimulate the actor's body to increase flexibility and the kinetic response to environmental stimuli through exercise and research into the physical process. Our main goals are to develop the ability to safely portray violence onstage within the context of a play with specificity and dramatic power, as well as to understand how stage combat fits into the practice of theater as a whole. Other aspects include the development of strength and flexibility, eye/hand coordination, understanding and applications of principles of safety in working with a partner, and learning how to advance your character journey and develop ensemble work through each individual move in a fight sequence. This course will be a hands-on approach with emphasis placed upon actor safety, dramatic requirements of

the script, and historical accuracy.

EH 400 Creative Writing (3 Sem. Hrs.)

This course is a study and practice in the art and skills of creative writing--poetry, prose, and drama.

EH 401 Speech: Conflict Management (3 Sem. Hrs.)

(This course will satisfy the general speech requirement. It will not satisfy a literature requirement.) This is a course in interpersonal communication, and group dynamics. Emphasis will be on conflict, resolution, problem solving and mediation.

EH 405 Playwriting (3 Sem. Hrs.)

This course is a study and practice in the art and skills of playwriting. The student will learn to write plays by writing plays.

EH 414 History of the English Language (3 Sem. Hrs.)

(This course will not satisfy literature or composition requirements.) This course looks at the development of American English from early and medieval British beginnings to the current linguistic standards and variations. It is designed to increase ease of use, vocabulary, and appreciation of the English language. Analytical writing is required.

EH 416 Interpreting the Text (3 Sem. Hrs.) (Also listed as RE 416)

This course is an examination of various ancient, historical, and literary methods of interpreting literature covering the range from ancient ways of reading texts to current poststructuralist approaches. Even though primary emphasis will center on religious texts, there will be considerable attention given to issues and methods that emerged from the realms of the social sciences, literature, and philosophy.

EH 425 Shakespeare (3 Sem. Hrs.)

This course is designed to provide familiarization with the range of Shakespeare's work as well as close critical appreciation of certain sonnets and plays.

EH 426 Renaissance Drama (3 Sem. Hrs.)

Through the examination of plays, students will explore the development of dramatic literature in the European Renaissance from 1589-1700. Over the course of the semester students will read plays, discuss European playwrights, and examine the historical, social, and critical contexts of the period. The focus will begin with the foundational drama of the University Wits in Elizabethan period, and continue through the commercial theatre of the Jacobean and Carolinian period. These English plays will then be contrasted with the dramatic works Lope de Vega and the playwrights of the Spanish Golden Age. Finally the course will conclude with an exploration of the French Neoclassical drama of the Seventeenth Century. Although analysis of dramatic texts will be the main focus, discussion will emphasize historical documents and artifacts, the development of Renaissance theatrical performance, dramatic reconstructions (including taped and life performances), and major theories of Early Modern European drama.

EH 431 Poetry and Poetics (3 Sem. Hrs.)

This course is a critical study of the major poems in English and American literature with an emphasis on language, forms, themes, poetic theory, analysis, interpretation, and explication. Both oral and written analysis are required.

EH 433 Fiction (3 Sem. Hrs.)

This course is a study of a wide range of fiction. Study is designed both to increase enjoyment of fiction and to develop analytical and evaluative reading skills. Both oral and written response are required.

EH 440 African-American Studies (3 Sem. Hrs.)

This course is a study of the major works of African-American writers from the 1700's to the present day. It includes the history of the African-American culture with an emphasis on literature related to the civil rights movement: 1865-1965.

EH 441 Special Topics in English (1 Sem. Hr.)

EH 442 Special Topics in English (2 Sem. Hrs.)

EH 443 Special Topics in English (3 Sem. Hrs.)

Prerequisite: Consent of instructor.

These courses will be offered on occasion of student demand or need.

EH 450 Renaissance Literature 1550-1680 (3 Sem. Hrs.)

This course is a critical study of the major works of the English Renaissance from Spenser through Milton, (1550-1680) exclusive of Shakespeare. Both oral and written analysis are required.

EH 451 The British Novel (3 Sem. Hrs.)

This course covers the development of the English novel as a genre from late seventeenth century to the present. Students will gain perspective on this literary form with emphasis on how moral, social, economic, gender, political, and philosophical problems were perceived during corresponding periods of the English novel's history.

EH 452 Chaucer and Medieval Literature (3 Sem. Hrs.)

This course is a critical study of the major literary works of the middle ages with an emphasis on Chaucer and The Canterbury Tales. Both oral and written analysis are required.

EH 454 Young Adult Literature (3 Sem. Hrs.)

This is a survey course of novels for middle and high school readers. Various themes and a diverse representation of authors will be studied.

- EH 455 Theatre for Young Audiences (3 Sem. Hrs.)**
Theatre for Young Audiences (TYA) surveys the range of theatre and performance theories and practice of all phases of play production for young audiences. In this course students will discuss the TYA movement of the later 20th Century, various theories, practices, and applications of theatre for children and adolescents. Children's plays will be analyzed and examined through reading, discussion, and scene study. Although analysis of dramatic texts will be the main focus, there will also be discussions on historical documents and artifacts, the development of TYA performance, and dramatic reconstructions (including taped and live performances).
- EH 457 Materials and Methods of Teaching English/Language Arts in the Middle School/High School (3 Sem. Hrs.)**
Prerequisite: Admission to the Teacher Education Program
A senior methods portfolio must be submitted during this class (LiveText required). This course does not satisfy requirements for any English major, minor, or general studies. This course is intended to enhance the students' abilities to plan, implement, and evaluate instructional methods, activities and equipment into instruction; to expand knowledge of curriculum in drama, journalism, literature, speech and writing; and to improve student-centered instructional techniques. Students will actively participate in demonstration and modeling of strategies and techniques. Research-based decision making will be emphasized.
- EH 460 Directed Study of English (1 Sem. Hr.)**
EH 461 Directed Study of English (2 Sem. Hrs.)
EH 462 Directed Study of English (3 Sem. Hrs.)
Prerequisite: Consent of instructor
These courses are special research or creative writing courses designed to meet specific needs and interest.
- EH 465 Internship in Applied Journalism: Student Editor of Athena's Web, A Journal of the College of Arts and Sciences (1 Sem. Hr.)**
Prerequisite: Consent of Instructor
This course is a study and practical experience with journalistic principles, processes, and practices, with a special emphasis on copy reading, headline writing, and publication layout with online student academic journal publications.
- EH 466 Practicum in Production (3 Sem. Hrs.)**
Practicum in Production is designed to provide college credit for participation in Athens State University theatre activities. This course is designed to provide students the opportunities to participate in and learn skills directly related to specific areas of theatrical production. This course allows the student to work in all areas of theatre practicum during an instructed work call. It may be in set building, painting, costumes, props, publicity and-or box office for a certain number of hours each week so that a practical knowledge of the working theatre may be obtained.
- EH 469 English Capstone Seminar (1 Sem. Hr.)**
This capstone course for English majors, which must be taken during students' final semester as seniors, will consist of three main components: a comprehensive examination based on required Professional courses in English major, a research paper/project designed around students' needs and interests, and a presentation of research. Upon successful completion of this course, students will understand how to formulate a thesis, collect, assess and integrate scholarly research into a 25-page research paper and present the findings of their research orally and before peers. Like all humanities classes at Athens State University, this one increases students' awareness of cultural heritage and helps them develop the research abilities for graduate work.

Elementary Education (EL)

- EL 315 Principles and Methods of Teaching Kindergarten (3 Sem. Hrs.)**
This is a course designed to teach Elementary Education majors (K-6) appropriate methodology specifically for kindergarten. This course includes developmental characteristics of five-year-old children with emphasis on language and intellectual development. The course will provide theoretical and philosophical bases for selecting materials and methods for a developmentally appropriate kindergarten curriculum. Implications for equipment selection, room arrangements, daily schedules, and learning experiences are discussed.
- EL 320 Children's Literature (3 Sem. Hrs.)**
This is a survey course of current and traditional prose and poetry thought to be applicable to diverse populations of children. Emphasis is placed on the integration of children's literature throughout the curriculum.
- EL 321 Curriculum and Instruction: Language Arts (3 Sem. Hrs.)**
Prerequisites: ED 301 and ED 302
A course designed to teach appropriate methodology for all areas of language arts with an emphasis on effective teaching of written composition in the elementary grades/early middle school grades. Course reflects the integrative nature of the language arts; the need for wholeness; the importance of being able to transfer skills, abilities, and attitudes learned in one context to another.
- EL 324 Curriculum and Instruction: Primary Mathematics (3 Sem. Hrs.)**
Prerequisites: ER 323
Course requirements include mandatory campus-based training. Consult the College of Education Calendar of Events Webpage for more information. A course designed to assist prospective teachers of young children in presenting early mathematical concepts and skills. Application of psychological principles to the teaching and learning of mathematics is included. **Five days of Field Experiences are required.**
- EL 351 Assessment Strategies for the Elementary Classroom (3 Sem. Hrs.)**
A junior level course designed to provide elementary and elementary/collaborative teachers the skills necessary to develop and implement proper assessment strategies. Special emphasis will be on types of assessment that are used in the classroom including state mandated assessments and interpretation of data received from standardized testing as well as the construction of assessments that are appropriate for an elementary classroom.

- EL 352 Curriculum and Instruction: Management Strategies (3 Sem. Hrs.)**
Prerequisites: ED 301 and ED 302
 A junior level course designed to prepare prospective elementary and elementary/collaborative teachers to provide an environment for effective learning. Special emphasis will be on classroom organization, discipline, and the establishment of fair rules and procedures. General methods for establishing a community of learners will be identified through the design of a classroom layout and the procedures and rules that are appropriate for an elementary classroom.
- EL 413 Curriculum and Instruction: Intermediate Reading (3 Sem. Hrs.) (Lab fee)**
Prerequisite: ER 323
 This course provides in-depth study in and application of the process of reading and reading instruction, theoretical approaches, instructional strategies, classroom organization, and the formal/ informal assessment of teaching reading in the intermediate grades. Emphases are on acquiring vocabulary, developing comprehension skills, and refining reading processes by modeling metacognitive strategies that promote reading for meaning and foster an enjoyment of reading in a balanced literacy program.
- EL 420 Curriculum and Instruction: Science (3 Sem. Hrs.) (Lab fee)**
Prerequisites: ED 301 and ED 302
Course requirements include mandatory campus-based training. Consult the College of Education Calendar of Events Webpage for more information. Field experience is required. Recommended for students beginning their third full semester of course work. This course is designed to present a comprehensive overview of the place of science in elementary education: the objectives and trends, issues in science curriculum and teaching methods, how children learn science, the relation of science to daily life, processes in science, organizing the program, and obtaining materials for instruction. Emphasis is placed on materials and methods, processes of discovery, and the role of children as investigators. Inquiry science teaching is a major course emphasis.
- EL 423 Curriculum and Instruction: Social Studies (3 Sem. Hrs.)**
Prerequisite: Admission to the Teacher Education Program
 This course is designed to provide prospective elementary and middle school teachers with materials and methods to help children develop competencies that will enable them to deal with and, to some extent, manage the physical and social forces of the world in which they live. Emphasis is placed on a balanced instructional program in the development of understandings, attitudes, and skills which are needed to meet intelligently the problems of everyday living.
- EL 424 Curriculum and Instruction: Intermediate Mathematics (3 Sem. Hrs.) (Lab fee)**
Prerequisites: EL 324 and Admission to the Teacher Education Program
 This course is based on the NCTM Standards and is designed to present a comprehensive overview of the topics presented in an elementary/middle school mathematics program. Emphasis is placed on materials and methods that assist students in learning mathematical concepts with understanding for application in everyday living.
- EL 482 Internship in Elementary Education (6-12 Sem. Hrs.) (Teaching Internship fee)**
Prerequisites: Admission to the Teacher Education Program and clearance by the Internship Office
 Fifteen-week internship program. This culminating experience of the Teacher Education Program provides practical experience in teaching classes in state-accredited schools under the guidance of a cooperating teacher and supervision by a University supervisor.
- EL 483 Internship in Elementary Education (3 Sem. Hrs.) (Teaching Internship fee)**
Prerequisites: Admission to the Teacher Education Program and clearance by the Internship Office
 Seven-week internship program for persons seeking certification through the Elementary/Collaborative K-6 degree.
- EL 484 Curriculum Seminar in Elementary Education (3 Sem. Hrs.)**
Prerequisites: ER 323 and Admission to the Teacher Education Program
 Senior methods portfolio must be submitted during this class. This is a senior level capstone course designed to prepare prospective elementary teachers through reflective practice and to provide an environment for effective learning. Special emphases will be on classroom organization, including preparing for the first day of school, establishing fair rules and procedures, and integrating the curriculum. The course will include recent trends in the selection and organization of the elementary school curriculum. General methods for integrated teaching will be identified through the planning of a series of lessons appropriate for an elementary school class. **Seven days of Field Experiences are required. Four of these days will be completed during the entire semester; three will be during Faculty-Led placements.**

Early Childhood Education (ER)

- ER 302 Language Development and Developmental Interactions (3 Sem. Hrs.)**
Prerequisites: ED 301 and ED 302
 This course emphasizes the development of language (including phonology, morphology, syntax, semantics, and pragmatics), cognitive, social development and their relationship to language development. Topics include theory and stages of language and cognitive development and strategies and materials used to meet the developmental needs of young children who are developing typically and those with developmental delay and disability.
- ER 303 Professional Education Communication (3 Sem. Hrs.) (Also listed as CE 303)**
 This beginning education course is designed to facilitate the acquisition of professional attributes, and to improve oral and written communication skills by refining study and research skills, using professional vocabulary, sharing research findings about educational trends and issues, seeking funding for educational programs, sharing information with families, and writing lesson plans. Attributes and dispositions will be articulated, defined, and modeled. These dispositions will be encouraged in oral presentations and collegial interactions. Practice in oral and written language usage will occur through writing and speaking about current educational concerns.

- ER 309 Early Brain Development (3 Sem. Hrs.) (May be used as a substitution for CHD 209)**
The purpose of this course is to help students understand how early brain development might be related to changes in cognitive and affective development in young children birth through age 8. Topics will include (1) normal development in infants and toddlers in all domains, physical, social, emotional and cognitive; (2) the history, theory and research on early brain development; (3) biological perspectives on development; (4) the processes of brain maturation; (5) the educational implications of early brain research; (6) brain plasticity; (7) the neurological basis development disorders, and; (8) the effects early experiences have on the development of the young child.
- ER 310 Principles of Early Childhood Education (3 Sem. Hrs.) (Also listed as CE 310)**
This course is designed to provide prospective teachers of young children with the historical, theoretical, and practical issues of early childhood education. Emphasis is on early childhood philosophical and sociological foundations, facets of development, principles of learning, trends and issues, and program models.
- ER 318 Literature in Early Childhood Education (3 Sem. Hrs.)**
This course has a two-fold purpose. As a survey course, it is designed to assist preservice teachers in becoming acquainted with the great wealth of trade books available for today's young children. An equally important purpose is to assist pre-service teachers so they may guide young children toward more creative, insightful utilization of literary materials in a classroom setting.
- ER 319 Literacy and Literature for the Young Child (3 Sem. Hrs.) (Also listed as CE 319)**
Prerequisite: Admission to the Teacher Education Program
Course requirements include mandatory campus-based training. Consult the College of Education Calendar of Events Webpage for more information. Field experience is required. Emphasis is given to teaching Language Arts and literature to ESL students. This course examines methods and materials for planning, implementing, and assessing developmentally and culturally appropriate language arts and literature curricula for early childhood education. Emphasis will be on developing the process skills for facilitating emergent literacy, early writing, listening, and speaking, as well as teaching language arts and literature.
- ER 323 Curriculum and Instruction: Primary Reading (3 Sem. Hrs.)**
Prerequisites: ED 301 and ED 302
Course requirements include mandatory campus-based training. Consult the College of Education Calendar of Events Webpage for more information. An in-depth study of early literacy development; word identification strategies including phonics, structural analysis, contextual analysis, and whole word methodology; various approaches to reading including the language experience and basal reader approaches and the uses of computers in the reading/writing program. **Five days of Field Experiences are required.**
- ER 326 Assessment in Early Childhood Classrooms (3 Sem. Hrs.) (Also listed as CE 326)**
This course examines the goals, benefits, and uses of developmentally and culturally appropriate assessment processes that positively influence children's development and learning. It focuses on the family's significant role in the assessment process. It includes developmental and health screenings, systematic observations, play-based assessments, diagnostic evaluations, documentation of learning, and curriculum and criterion referenced assessments. Strengths, limitations, problems, and the developmental and cultural appropriateness of the selected practices and strategies will be addressed.
- ER 327 Classroom Management in Early Childhood Education (3 Sem. Hrs.) (Also listed as CE 327)**
This course is designed to provide prospective teachers of young children with a rationale for thoughtful provision of an appropriate environment for effective learning and development in early childhood programs. This course will provide early childhood educators with the factors that influence quality programs in the area of management.
- ER 330 Children's Constructions of Relationships through Arithmetic and Mathematical Reasoning (3 Sem. Hrs.) (Also listed as CE 330)**
Prerequisites: ED 301, ED 302, and ER 323
Students will examine how young children construct number and mathematical concepts. They will identify and examine developmentally and culturally appropriate techniques, strategies, and materials for teaching young children arithmetic and mathematical concepts. **Five days of Field Experiences are required.**
- ER 400 Children's Play as Symbolic Behavior (3 Sem. Hrs.)**
This course will examine the role of representation in young children's learning, study the child's developing ability to represent what they know about their worlds through play, understand the impact of experience, culture, and social interaction on the ability to represent, as well as allow students the opportunity to explore a range of forms of symbolic representations and develop ideas and strategies to stimulate children's development.
- ER 402 Preschool Curriculum (3 Sem. Hrs.)**
This course provides a curricula framework of goals and outcomes for young children attending Head Start, preschool, Pre-K and Kindergarten programs that support their growth and development and help teachers and administrators meet state and national standards of high quality in their programming for children. The course builds knowledge about outcomes in nine areas considered essential in preparing children for school success; language development, literacy, mathematics, science, creative arts, social and emotional development, approaches to learning and physical health and development. Students will develop the knowledge and skills to plan for children, implement plans, and assess the progress of children in meeting local, state and national standards. Emphasis is on planning and implementing plans in all domains of learning for all children, including English language learners and those with special needs.
- ER 420 Parenting and Community Relations (3 Sem. Hrs.)**
This course will examine various ways of enhancing the young child's development through promoting positive interrelationships among early childhood educators, parents and others in the community. Using an ecological systems framework, the course builds knowledge of the roles of diverse family structures, cultural identities, stressors and supports, economic circumstances, and community characteristics and resources in facilitating child development. Learners develop skills needed for communicating effectively with families, facilitating parent education, and promoting family involvement with child care setting as well as utilization

of community resources. Special emphasis is given to the importance of the role of the educational leader in school-community relations.

- ER 430 Investigation, Experimentation and Inquiry (3 Sem. Hrs.)**
Prerequisite: *Admission to Teacher Education Program*
Course requirements include mandatory campus-based training. Consult the College of Education Calendar of Events Webpage for more information. Students will examine how young children use investigation, experimentation, and inquiry to build theories in science and social studies. Emphasis will be placed on developmentally and culturally appropriate approaches that integrate the content and concepts for science and social studies.
- ER 450 Administering/Managing Early Childhood Programs (3 Sem. Hrs.)**
It is designed to provide future administrators of childcare programs with a knowledge of the factors that influence quality programs which include: program philosophy; policies and evaluation; scheduling; nutrition and health services; home and school collaborations; administrative organization and regulations; managing personnel; working with families; organizing the physical environment; financing and budgets; advocacy and contributing to the profession.
- ER 460 Practicum in Early Childhood Education (3 Sem. Hrs.) (Lab fee)**
This field experience consists of tutoring kindergarten or first grade students in math and reading and select in service opportunities.
- ER 461 Practicum in Early Childhood Education (3 Sem. Hrs.) (Lab fee)**
Prerequisite: *CHD 210*
This is a field experience in an elementary school designed to increase knowledge of how to relate to special education K-3rd grade students. Assignments are intended to link theory of early childhood education to practice.
- ER 462 Practicum in Early Childhood Education (3 Sem. Hrs.) (Lab fee)**
Prerequisite: *CHD 202*
This is a field experience in an elementary school designed to increase knowledge of planning fine arts experiences for K-3rd grade students. Assignments are intended to link theory of early childhood education to practice.
- ER 470 Early Childhood Curriculum (3 Sem. Hrs.)**
Prerequisites: *ER 310 and Admission to Teacher Education Program*
This course is the capstone course for early childhood majors and should be taken the semester prior to internship. Senior methods portfolio must be submitted during this class. This course is designed to teach the basic principles and considerations underlying planning a developmentally appropriate curriculum for young children in Pre-K through 3rd grade (P-3 certification), in all areas of development. This course examines the content, methods, and materials appropriate for young children and the teacher's role in organizing and integrating the early childhood curriculum. Implications for equipment selection, room arrangements, daily schedules, and learning experiences are discussed. **Seven days of Field Experiences are required. Four of these days will be completed during the entire semester; three will be during Faculty-Led Placements.**
- ER 480 Internship in Early Childhood Education (6-12 Sem. Hrs.) (Teaching Internship fee)**
Prerequisites: *Admission to the Teacher Education Program and clearance by the Internship Office*
Seminar attendance is required. The internship is the culminating experience of the Teacher Education Program which provides practical experience in teaching classes in state-accredited schools under the guidance of a cooperating teacher and supervision by a University supervisor. For students who have not taken a preschool practicum at the community college level, the internship will also consist of time spent in a four-year-old program.

Enterprise Systems Management (ESM)

- ESM 300 Enterprise Systems & Business Processes (3 Sem. Hrs.) (Lab fee) (Also listed as LSM 300)**
Prerequisite: *AC/MG 302*
Students will learn how enterprise software is used to manage the integration of business operations. Through a process-oriented view of the organization and its relationships with suppliers, customers, and employees, students study software that automates business processes and workflow. Procurement, production and sales logistics processes and their integration with Accounting and Human Resources are investigated. Students will experience ERP through hands-on lab exercises, and improve soft skills such as writing, presenting, and team building through ERP project documentation and presentations.
- ESM 320 Human Capital Management Systems (3 Sem. Hrs.) (Lab fee)**
Prerequisite: *ESM 300; Prerequisite or Corequisite: MG 349*
Students will learn how human capital management systems provide the tools and technologies needed to enhance all facets of HR administration and employee relationship management. Key business processes such as attracting and retaining human resources, motivating human resources, payroll processes, benefits administration, and evaluating performance will be studied. Students will experience ERP and other related software through hands-on lab exercises, and improve soft skills such as writing, presenting, and team building through ERP project documentation and presentations.
- ESM 330 Accounting Information Systems (3 Sem. Hrs.) (Lab fee)**
Prerequisite: *ESM 300, 6 hours of Accounting; Prerequisite or Corequisite: MG 350*
This course will introduce students to the enterprise systems that produce financial information for organizations. Key business processes for acquiring financial and capital resources will be studied. Examples include: accounting for financial capital and assets, accounting for sales and receivables, creating income statements and balance sheets, and other reports reflecting financial performance of an organization. Students will experience ERP and other related software through hands-on lab exercises, and improve soft skills such as writing, presenting, and team building through ERP project documentation and presentations.

- ESM 410 Business Intelligence Systems (3 Sem. Hrs.) (Lab fee)**
Prerequisite: ESM 300
 This course is a study of data, information, and data warehouses as business intelligence solutions. Students will learn to design and develop an enterprise data warehouse as a central repository of integrated data for comprehensive analysis, presentation, and business intelligence. Special emphasis will be placed on data mining, cleansing of legacy data and elimination of data redundancy to ensure consistency and protect data integrity. Students will experience business intelligence and data warehousing through hands-on lab exercises, and improve soft skills such as writing, presenting, and team building through ERP project documentation and presentations.
- ESM 420 Enterprise Systems Development (3 Sem. Hrs.) (Lab fee)**
Prerequisites: ESM 300 and ISM 400
 Students will be introduced to basic programming skills needed to customize and maintain ERP software systems. Practical programming assignments using a corporate database and several languages will be used to learn syntax, table processing, and report generation for real-world implementation and use within an ERP system. Students will experience ERP and other related software through hands-on lab exercises, and improve soft skills such as writing, presenting, and team building through ERP project documentation and presentations.
- ESM 425 Enterprise Systems Configuration (3 Sem. Hrs.) (Lab fee)**
Prerequisite: ESM 300
 In this course, students will learn to implement an ERP from initial installation through configuration and testing with business transactions. They will customize an ERP system learning to setup financials, human resources, logistics, sales and distribution modules to accommodate the specific needs of an organization. Students will experience ERP and other related software through hands-on lab exercises, and improve soft skills such as writing, presenting, and team building through ERP project documentation and presentations.
- ESM 460 Enterprise Systems Senior Project (3 Sem. Hrs.)**
Prerequisite: ESM 320 or ESM 330
 This capstone course for Enterprise Systems Management majors will consist of three main components: a comprehensive examination based on required courses in Enterprise (ESM) and Information Systems (ISM) management, a software project, and a paper with presentation of the results of the project. Upon successful completion of this course, students will understand how to use software in a business context to manage materials, production, and procurement processes while controlling and reporting corporate finances. This course must be taken during the student's senior year at Athens State.
- ESM 461 Internship in Enterprise Systems Management (1 Sem. Hr.) (At least 50 hours of work-based experience is required)**
ESM 462 Internship in Enterprise Systems Management (2 Sem. Hrs.) (At least 100 hours of work-based experience is required)
ESM 463 Internship in Enterprise Systems Management (3 Sem. Hrs.) (At least 150 hours of work-based experience is required)
Prerequisites: MG 320 or GBA 300; Senior standing, approval of academic advisor, and compliance with College of Business Internship Policies and Procedures.
 These internships in the field of Enterprise Systems Management are designed to provide the student with practical work experience leading to a potential career in either functional or technical areas of the field.

Finance (FIN)

- FIN 301 Financial Institutions and Markets (3 Sem. Hrs.)**
Prerequisites: Principles of Accounting, Principles of Economics, and Algebra
 Overview of the financial systems in which business operates, with emphasis on financial institutions, instruments, and markets.
- FIN 355 General Insurance (3 Sem. Hrs.)**
 A study of fundamental principles and uses of various types of insurance: life, fire, automobile, homeowners, and other casualty and business forms.
- FIN 356 Real Estate (3 Sem. Hrs.) (Approved by the Alabama Real Estate Commission as a pre-license course)**
 A course designed to give students a broad understanding of the principles of real estate. Instruction includes historical background, freehold estates, leasehold estates, deeds, transferring of interests, financing, appraising, and the Alabama Real Estate License Law.
- FIN 412 Money and Capital Markets (3 Sem. Hrs.)**
Prerequisites: Principles of Accounting, Principles of Economics, Algebra, MG 350, and FIN 301
 This course will offer an overview of the financing process and the role of financial markets. Areas covered are characteristics of instruments traded in money and capital markets; determinants of and the relationships between different asset prices; and international aspects of financial markets.
- FIN 414 Investments (3 Sem. Hrs.)**
Prerequisites: Principles of Accounting, Principles of Economics, Algebra, MG 350, and FIN 301
 A study of the various investment media together with analysis models of investment management. Emphasis is on investment decision making and portfolio analysis.

General Business (GBA)

- GBA 300 Business Research Skills (1 Sem. Hr.)**
(LiveText required.) This course is designed to familiarize students with business information sources and library research skills in business fields, including information about corporations, industries, economics and career resources. It will include periodical literature, books, electronic resources, reference materials, government resources, and finding relevant tools.
- GBA 301 Windows Applications for Business (3 Sem. Hrs.)**
An examination of the many uses for windows applications in the modern business setting. Emphasis given to a “hands on approach” of assessing the usage of personal computers for preparing spreadsheets, managing files, word processing, and graphics.
- GBA 305 Statistical Methods of Business I (3 Sem. Hrs.)**
Prerequisite: College algebra or equivalent
Introduction to descriptive and inductive methods to evaluate data. Coverage will include the calculation of central tendency, tests of hypothesis, probability theory, and sampling.
- GBA 306 Statistical Methods of Business II (3 Sem. Hrs.)**
Prerequisite: GBA 305
An advanced course covering topics such as analysis of variance, time series analysis, simple and multiple regression, and index numbers.
- GBA 307 Quantitative Business Analysis and HR Analytics (3 Sem. Hrs.)**
Prerequisites: GBA 305 and GBA 306
Focuses on the concepts, processes and problem solving tools related to the quantitative aspects associated with management and operation of a business. Topics include applied linear programming, decision theory, waiting line analysis, regression analysis, forecasting techniques, inventory management and similar topics. In addition to an in-depth study of these subjects, the course will include case studies, optimization techniques, and multi-criteria decision-making applications.
- GBA 311 The Legal Environment of Business (3 Sem. Hrs.)**
An analysis of the legal, social, and ethical environment of business.
- GBA 314 Business Ethics (3 Sem. Hrs.)**
An examination of moral philosophy and its relevance to business operation and managerial decision making. Ethical choices and their impact will be considered. Extensive use of the case study approach will be utilized.
- GBA 350 International Business Law (3 Sem. Hrs.)**
Prerequisite: None; recommended that the student complete GBA 311 or PO 350, and MG 352 before taking GBA 350
This course focuses on the legal framework within which international trade takes place. Within this large framework public and private international law are important as a sub-focus. Areas to be studied include international organizations, environmental law, human rights, economic/commercial law, public and private international law, tax law, comparative law and ethics.
- GBA 357 Personal Finance (3 Sem. Hrs.)**
A study and review of consumer money management problems, choices, and decision-making. Topics such as investing in stocks, bonds, mutual funds, commodities, and options will be covered.
- GBA 460 Directed Study/Research in Business (3 Sem. Hrs.)**
A course designed to allow students an opportunity to perform research or directed studies. This course is offered at the discretion of the professor with the approval by the College Dean.

Geography (GO)

- GO 300 World Regional Geography (3 Sem. Hrs.)**
This course examines recent trends and research concerning the physical, historical, cultural, economic, and political developments in North America, Europe, South America, Africa, and Asia. The five basic themes of geography--location, place, relationships within places, movement, and regions--are stressed. There is also emphasis on patterns of social and political development, cultural diffusion, conflict, and cooperation in each region.
- GO 340 South America, Africa, and Asia (3 Sem. Hrs.) (Also listed as HY 340)**
This course stresses the major events in the historical development of South America, Africa, and Asia. In addition to ancient empires and culture, considerable attention is given to colonization, independence, historical figures, and current events in each region.

General Science (GS)

- GS 301 Atmospheric Science (3 Sem. Hrs.)**
Corequisite: GS 301L
This is a survey course in meteorology at the introductory level. This course provides the student with physical explanations for those phenomena collectively called weather.
- GS 301L Atmospheric Science Lab (1 Sem. Hr.)** **Corequisite: GS 301**

- GS 320 Nutrition (3 Sem. Hrs.)**
Prerequisite: *Basic computer skills in Microsoft Word and Excel; Corequisite: GS 320L*
 This course considers contemporary nutrition from the viewpoint of practical application. Emphasis is on the relationship of nutrition to health, growth, development, and disease prevention.
- GS 320L Nutrition Lab (1 Sem. Hr.)** **Corequisite:** *GS 320*
- GS 330 Environmental Chemistry (3 Sem. Hrs.) (Also listed as CH 330)**
 This laboratory course is a study of natural chemical processes of Earth and actual and possible effects of humans on natural chemical systems. Environmental problems such as air and water pollution, ozone depletion, and global warming are discussed. Topics may also include the introduction to some methods of environmental analysis and pertinent environmental regulations.
- GS 441 Special Topics in General Science (1 Sem. Hr.)**
GS 442 Special Topics in General Science (2 Sem. Hrs.)
GS 443 Special Topics in General Science (3 Sem. Hrs.)
GS 444 Special Topics in General Science (4 Sem. Hrs.)
Prerequisite: *Consent of instructor*
 These courses will be offered on occasion of student demand or need.
- GS 456 Materials and Methods of Teaching General Science in Middle School/High School (3 Sem. Hrs.) (Also listed as BI/CH 456)**
Prerequisite: *Admission to the Teacher Education Program*
 This course is intended to enhance the students' abilities to plan, implement, and evaluate instructional activities and to select and use appropriate materials and equipment in the field of secondary science (Biology, Chemistry, General Science). Students will actively participate in demonstration and modeling of strategies and techniques. Emphasis will be placed on the integration of laboratory activities into the curriculum and research-based science pedagogical methods. This will include the use of technology, laboratory management, inquiry teaching, teaching resources, science-thinking skills, and the Alabama science curricula. Does not satisfy requirements for biology/chemistry/general science major, minor, or general studies. Senior methods portfolio will be submitted in this course.
- GS 461 Directed Study/Research in General Science (1 Sem. Hr.)**
GS 462 Directed Study/Research in General Science (2 Sem. Hrs.)
GS 463 Directed Study/Research in General Science (3 Sem. Hrs.)
Prerequisite: *Consent of instructor*
 These courses will be offered on occasion of student demand or need.

Health Care Management (HCM)

- HCM 340 Introduction to Health Care Systems (3 Sem. Hrs.)**
Prerequisite: *MG 346, HU 321, or the equivalent*
 This course provides an overview of the organization and administration of health care delivery systems in the United States. It examines the history, roles, and interactions of the various providers, consumers and governments.
- HCM 345 Management of Health Care Organizations (3 Sem. Hrs.)**
Prerequisite: *MG 346, HU 321, or the equivalent*
 This course is designed to prepare students for managing health care organizations, and the development of strategies for addressing the increasing pressure to contain costs and at the same time maintain quality health care. Topics covered will include an understanding of the daily tasks managers face and the knowledge and skills required; the management of health care teams; and the concepts of total quality management to continuously evaluate and improve health care delivery.
- HCM 355 Survey of Issues in Health Care Management (3 Sem. Hrs.)**
Prerequisite: *MG 346, HU 321, or the equivalent*
 Health Care organizations are under continual pressure to contain costs while maintaining high quality health care. This course is designed to help students learn about the many controversial issues facing the health care industry and to develop skills for analysis of issues facing health care organizations, including ambulatory, acute care, and long-term care facilities. Attention will be given to the often conflicting demands health care organizations face from the various stakeholders including state and federal agencies, managed care organizations, employers, health care professionals, and patients.
- HCM 356 Legal and Ethical Issues in Health Care Management (3 Sem. Hrs.)**
Prerequisite: *HCM 340*
 This course examines the basic concepts of legal aspects and philosophical approaches to ethical dilemmas in the health care setting. Topics to be discussed include health care laws and ethical choices and their impact to patients and health care professionals.
- HCM 440 Ambulatory Care Management (3 Sem. Hrs.)**
Prerequisite: *MG 346, HU 321, or the equivalent*
 This course will examine issues related to management of ambulatory care organizations. Topics included will be organizational and financial management issues, patient care systems, managed care, human resource management principles, planning and marketing.
- HCM 460 Health Care Management Senior Seminar (3 Sem. Hrs.)**
Prerequisites: *Senior standing plus completion of all 300-level required HCM minor courses*
 This course is designed to develop management skills using practical applications of leadership and behavioral theories in a variety of health care settings. In addition, upon completion of the course, students will have gained effective tools to pursue employment in the health care management field.

Health and Physical Education (HPE)

- HPE 301 Theory of Coaching and Officiating (3 Sem. Hrs.) (Recommended for Physical Education majors only)**
This course is designed to develop the knowledge of candidates regarding: Familiarity with basic philosophies, fundamentals, and rules that will cultivate keen observation and discussion of the sport. Emphases will be placed on effective methodology, strategic and theoretical elements, and motor skills leading to the development of championship teams. Additional content will include training and practice methodology, nutrition, and the psychology of motivating and uniting players as a team. A major purpose of this course is to prepare students with the basic competencies needed for interscholastic coaching and to provide an understanding of officiating mechanics. Developmentally appropriate variations can be applied for effectively coaching youth league, or collegiate teams. Opportunities will be provided to utilize technology to complete course assignments.
- HPE 321 Analysis and Teaching of Rhythms and Dance (3 Sem. Hrs.) (Recommended for Physical Education majors only)**
This course is designed for the purpose of providing Physical Education majors with an opportunity to increase their knowledge and understanding of basic rhythmic and dance skills and dance-related terminology. Specifically, the course is designed to prepare students to systematically analyze basic rhythms and dance skills. In addition, students will be provided with opportunities to teach a variety of rhythms and dances to students of varied backgrounds, ability levels and experiences. The course will also provide the students with an opportunity to participate and administer specific conditioning exercises, an opportunity to participate and administer specific cultural dances and integrative rhythms and dances, to construct developmentally appropriate rhythmic activities and dances, and an opportunity to analyze and implement specific competition strategies.
- HPE 322 Analysis and Teaching of Individual Sports (3 Sem. Hrs.) (Recommended for Physical Education majors only)**
Prerequisite: ED 302
This course is designed for the purpose of providing Physical Education majors with an opportunity to increase their knowledge and understanding of basic sport skills. Specifically, the course is designed to prepare candidates to systematically analyze badminton, tennis, and golf sport skills, and other outdoor leisure pursuits. In addition, candidates will be provided with opportunities to teach badminton, tennis, and golf sport skills. The course will also provide the candidates with opportunities to participate and administer specific conditioning exercises, opportunities to participate and administer specific sport skill drills, opportunities to analyze and implement specific game strategies or culminating activities to other candidates. Opportunities will be provided to utilize technology to complete course assignments.
- HPE 323 Aquatics and First Aid/CPR/AED (3 Sem. Hrs.) (Lab fee)**
(Recommended for Physical Education majors, wellness majors, or students seeking an additional health endorsement)
A course dealing with the analysis of movement involved in the performance of a variety of aquatics and lifesaving techniques. This course provides training in the procedures of administering first aid and CPR. American Red Cross Certification is awarded for the successful completion of this course.
- HPE 324 Analysis and Teaching of Team Sports (3 Sem. Hrs.) (Recommended for Physical Education majors only)**
Prerequisite: HPE 322
This course is designed for the purpose of providing Physical Education majors with an opportunity to increase their knowledge and understanding of basic sport skills and enhance their ability to teach specific sport skills. Specifically, the course is designed to prepare students to systematically analyze basketball, volleyball, and soccer sport skills. Students will be provided with opportunities to teach basketball, volleyball, and soccer sport skills. Students will perform and administer conditioning exercises, perform and administer sport skill drills, and analyze and implement game strategies and culminating activities.
- HPE 325 Kinesiology (3 Sem. Hrs.) (Recommended for Physical Education majors only or approval of instructor)**
Prerequisite: Anatomy and Physiology
This course is designed for the purpose of providing Physical Education majors with an opportunity to increase their knowledge and understanding of basic biomechanical concepts related to human performance. The course will provide the student with background, meaning, and significance associated with the various scientific principles impacting the body's ability to adjust to the demands of physical activity. A number of biomechanical topics will be considered, including the anatomical planes and axes of the human body, the laws of motion, the muscles that produce motion, and the forces that impact movement. It is designed to allow for the utilization of technology in the preparation of daily assignments, lab assignments, data analyses, and class presentations.
- HPE 326 History and Principles of Physical Education (3 Sem. Hrs.) (Recommended for Physical Education majors only)**
This course is designed for the purpose of providing Physical Education majors with an opportunity to increase their knowledge and understanding of basic historical aspects of physical education and sport. The course is designed to provide the student with an overview of the body of knowledge encompassing the discipline of physical education. The candidate will be exposed to the philosophical, the historical, the psychological, the biological, the sociological, and the physiological perspectives of physical education, exercise science and sport. Careers and professional considerations in physical education, exercise science and sport and the issues, challenges and the future of physical education, exercise science and sport will be studied. Candidates are provided the opportunity to observe, analyze, and reflect on the differences in policies and procedures related to a variety of public school physical education programs and activities directed at the improvement of teaching and learning to meet the needs of all students.
- HPE 327 Physiology of Exercise (3 Sem. Hrs.) (Recommended for Physical Education majors only or approval of instructor)**
This course is designed for the purpose of providing Physical Education majors with an opportunity to increase their knowledge and understanding of physiological concepts associated with human performance. The course will provide the candidate with background, meaning, and significance associated with the body's ability to adjust to the demands of physical activity. A number of human performance topics will be considered, including the impact of physical activity on the cardiovascular system, the muscular system, the respiratory system, the digestive system, and the endocrine system. It is designed to allow for the utilization of technology in the preparation of daily assignments, lab assignments, data analyses, and class presentations.

- HPE 333 Care and Prevention of Athletic Injuries (3 Sem. Hrs.) (Lab fee)**
(Recommended for Physical Education majors only or approval of instructor)
 This course is designed for the purpose of providing Physical Education majors with an opportunity to increase their knowledge and understanding of basic methods utilized to prevent, care, and rehabilitate athletic injuries. In addition, the course will provide the candidate with background, meaning, and significance associated with the most common athletic injuries, their anatomical and physiological associations, and their method of treatment. A number of topics will be considered, including basic anatomical structures, common injuries, basic preventative measures, basic treatment techniques, and basic information related to the role and responsibility of an athletic trainer. Opportunities will be provided to better understand the different needs of athletes and/or students.
- HPE 350 Adapted Physical Education and Sports (3 Sem. Hrs.) (Recommended for Physical Education majors only or approval of instructor)**
 A course designed to provide students with the information necessary to understand, evaluate, and develop programs of physical activities to meet the special needs, interests, and abilities of exceptional children and youth. Class will interact with exceptional students at field sites.
- HPE 354 Contemporary Health (3 Sem. Hrs.)**
 This course emphasizes concepts associated with healthy lifestyle practices. Specifically, nutrition topics and basic physical fitness concepts will be discussed and students will engage in a variety of physical activities. The course is designed around a variety of concepts including: physiological and psychological health, stress factors, physical fitness, nutrition, weight control, products of dependence, infectious diseases, accident prevention, stress management, and lifestyle choices.
- HPE 355 Health-Related Fitness and Nutrition (3 Sem. Hrs.) (Lab fee)**
(Meets Major prerequisite Health and Physical Education requirement for education majors with approval of instructor)
 This course deals with the development of cardiovascular endurance, muscle strength, flexibility, nutrition, and appropriate body composition as these elements contribute to health-related fitness. The course also provides the student with the opportunity to participate in an exercise program which emphasizes cardiovascular endurance, muscular strength, and flexibility.
- HPE 356 Health Promotions (3 Sem. Hrs.)**
 This course aims to provide students with competencies to assess individual and community needs, plan and implement health education programs, and evaluate effectiveness of health education programs. This seminar concentrates on the most fundamental of all health education skills -the ability to develop, plan, fund/budget, implement, and evaluate programs. Skills most emphasized in this class are needs assessment and program evaluation. To facilitate progress toward the different professional objectives of students, students are encouraged to discuss throughout the semester their own program development projects.
- HPE 400 Organization and Administration of Physical Education (3 Sem. Hrs.) (Recommended for Physical Education majors only)**
 This course is designed for the purpose of providing Physical Education majors with an opportunity to increase their knowledge and understanding of basic theoretical and practical information about specific aspects of the process of organizing and administering both physical education and athletic programs. The course will emphasize a number of management topics, including: role of management, patterns of management structure, components of sound programs, budget design, and program evaluation.
- HPE 401 Measurement and Evaluation (3 Sem. Hrs.)**
 This course is designed for the purpose of providing Health Science, Physical Education, Health and Wellness Management, and Public Safety and Health Administration majors with opportunities to increase their knowledge and understanding of techniques utilized to administer, score, and analyze the results of health science, health and safety administration, human performance, and physical education tests. A number of topics will be considered, including basic statistical concepts, techniques utilized in test administration, techniques utilized in data collection, and techniques utilized in data analysis.
- HPE 428 Early Childhood and Elementary Physical Education Curriculum (1 Sem. Hr.)**
 This course is designed to provide early childhood, elementary and elementary/collaborative education majors with an understanding of how movement education relates to an individual child's personal development - intellectually, emotionally, socially, and physically. This course will prepare teacher candidates to plan age-appropriate physical activities and design developmentally appropriate motor skill experiences for young children. Pedagogical principles and instructional techniques in physical education will be incorporated with emphasis on fundamental movement and movement concepts taught through the contexts of rhythms and dance, games, and gymnastics.
- HPE 429 Early Childhood and Elementary Physical Education Curriculum (3 Sem. Hrs.)**
 This course is designed to provide early childhood, elementary, elementary/collaborative, and physical education majors with an understanding of how movement education relates to an individual child's personal development—intellectually, emotionally, socially, and physically. This course will prepare teacher candidates to plan age-appropriate physical activities and design developmentally appropriate motor skill experiences for young children. Pedagogical principles and instructional techniques in physical education will be incorporated with emphasis on fundamental movement and movement concepts taught through the contexts of rhythms and dance, games, and gymnastics.
- HPE 430 Teaching, Assessment & Management of PE in Elementary (3 Sem. Hrs.) (Lab fee)**
(Recommended for Physical Education majors only, and that students take three of the following analysis courses prior to registering for this course: HPE 321, HPE 322, HPE 323, or HPE 324)
Prerequisite: Admission to the Teacher Education Program
 Course requirements include mandatory campus-based training. Consult the College of Education Calendar of Events Webpage for more information. Field experience is required. This course is designed for the purpose of providing Physical Education majors with an opportunity to increase their knowledge and understanding of source materials, plan and organize instruction, select suitable activities, and prepare teaching units and lesson plans for physical education in the elementary school. The course will provide the candidates with an opportunity to select, construct, and administer student assessment instruments, observe and analyze movement, and recognize and evaluate teacher effectiveness. In addition, the course will also provide the student with an opportunity to design

and implement a sequential physical education program based on the *Alabama Course of Study* and implement lessons in a variety of school settings.

- HPE 431 Motor Development and Physical Activities (3 Sem. Hrs.)**
The influence of various tissues (i.e., muscle, bone, adipose), and coordinated neural function are central concerns of this course. Physical activities intended to enhance the physical and motor growth and development of young children are examined. The relationship of physical and motor growth and development to all other aspects of human development is studied.
- HPE 440 Teaching, Assessment & Management of PE in High School (3 Sem. Hrs.) (Lab fee)**
(Recommended that students take three of the following analysis courses prior to registering for this course: HPE 321, HPE 322, HPE 323, or HPE 324)
Prerequisite: Admission to the Teacher Education Program
This course is designed for the purpose of providing Physical Education majors with an opportunity to increase their knowledge and understanding of source materials, plan and organize instruction, select suitable activities, and prepare teaching units and lesson plans for physical education in the high school. The course will cover the following topics: role of physical education in the high school, characteristics of high school students, planning for instruction, instructional management, and selection of learning activities. Candidates will be provided with opportunities to teach physical education lessons to public school students.
- HPE 450 Introduction to Epidemiology (3 Sem. Hrs.)**
Epidemiology is the study of the distribution of disease and other health events in a population. This course will discuss the general field of epidemiology, but will focus on behavioral epidemiology, specifically the field of physical activity epidemiology. Students in this course will learn how the methods of epidemiology are being used to scientifically confirm that physical inactivity is a burden on public health and what can be done about it.
- HPE 460 Directed Study/Research in Physical Education (1-3 Sem. Hrs.)**
To be offered on occasion of student need and may be taken one to three times.
- HPE 488 Internship in Physical Education, P-12 (6-12 Sem. Hrs.) (Teaching Internship fee)**
Prerequisites: Admission to the Teacher Education Program and clearance by the Internship Office
Seminar attendance is required. Fifteen-week internship program for physical education with seven weeks in an elementary school and seven weeks in a secondary school. This culminating experience of the Teacher Education Program provides practical experience in teaching classes in state-accredited schools under the guidance of a cooperating teacher and supervision by a University supervisor.

Health Science (HS)

- HS 320 Biomedical Ethics (3 Sem. Hrs.) (Also listed as PH 320)**
The course is designed to create a greater understanding of modern ethical issues in the biomedical field. Key topics will include: research on human and animal subjects, stem-cell research, genetic engineering, abortion, euthanasia, issues of justice, healthcare access, and confidentiality. The course begins with an overview of ethical theory and principle, and then explores the practical issues relating to biomedical ethics.
- HS 400 Public Safety and Health Education (3 Sem. Hrs.) (Also listed as PSHA 400)**
This course surveys the development and current state of training and education for selected safety and health related professions and "paraprofessional" fields. The focus of the course will be on the development of professional education in allied health and safety fields, and students will be able to pursue research regarding education and training programs from particular safety and health disciplines and paraprofessional fields.
- HS 447 Public Health Concepts and Systems (3 Sem. Hrs.)**
This course is designed for the purpose of providing students with opportunities to increase their knowledge and understanding of the public health system and the critical issues facing today's public health agencies.
- HS 451 Environmental Health and Regulation (3 Sem. Hrs.) (Also listed as PSHA 451)**
This course provides an in-depth examination of the creation, development, and operations of governmental processes and agencies at all levels relating to environmental awareness and protection activities in the public sector. The interactions among the historical development of environmental awareness in America, the emergence of the Environmental Movement and advocacy groups, and various governmental actors are examined. The course examines governmental responses in terms of the creation of environmentally-focused agencies, passage of legislation, and administrative rule-making and regulation.
- HS 465 Senior Research Project (4 Sem. Hrs.)**
Prerequisite: Consent of instructor
This capstone course should be taken during or near the time of the student's final semester. This course consists of the following three important academic activities: (1) a comprehensive exit exam that addresses discipline specific topics, (2) a major research paper, developed in consultation with the professor, that addresses discipline specific research questions/research problems, and (3) an oral presentation that addresses the major findings associated with the senior research paper to other students in the class and faculty members.

Humanities (HU)

- HU 313 Beginning Spanish Conversation and Culture I (3 Sem. Hrs.)**
This course is designed for students with no previous expertise in Spanish and is intended to enable the student to recognize and speak Spanish in a practical manner. Emphasis is given to language skills necessary for conducting business and successful mobility in

Spanish-speaking countries or communities.

HU 314 Beginning Spanish Conversation and Culture II (3 Sem. Hrs.)

Prerequisite: HU 313 or equivalent

This course is a continuation of Beginning Spanish Conversation I, and is intended to enhance the student's ability to recognize and speak Spanish in a practical manner. Emphasis is given to language skills necessary for conducting business and successful mobility in Spanish-speaking countries or communities.

HU 321 Research Sources and Skills (1 Sem. Hr.)

This course familiarizes the student with the online catalog, periodical databases, and basic reference sources in a variety of formats. The course focuses on efficient research strategies, evaluation of source material, and appropriate techniques for documenting sources. It is applicable to all subject areas and lifelong learning.

HU 330 Landmarks of Civilization (3 Sem. Hrs.) (Also listed as HY 330)

(Occasional lab time is required.) This course covers the classical world to present. It is a review of selected examples of human kind's creative achievements in drama, literature, philosophy, art, and music. This course is designed to demonstrate the integration of human knowledge. It stresses expository writing and critical thinking.

HU 450 Liberal Studies Capstone Seminar (1 Sem. Hr.)

This capstone seminar for Liberal Studies, which must be taken during a student's final semester as a senior, will consist of writing and information literacy assignments that will serve to bring a focus to each individual student's experience as a Liberal Studies major.

History (HY)

HY 302 Alabama History (3 Sem. Hrs.)

This course looks at the history of Alabama and its southern heritage from early times to the present. It is a study of present day problems and an examination of the space age as it has effected Alabama's development are included.

HY 303 The South In United States History (3 Sem. Hrs.)

(Satisfies the American requirement for a B.A. or minor in history as well as elective requirement for the minor and American History for a B.S. in Social Science.) This course is a study of the post-Reconstruction South. It is a survey of its historical, economic, and social development as a distinct region of the United States.

HY 304 Revolutionary America (3 Sem. Hrs.)

(Satisfies the American requirement for a B.A. or minor in history as well as elective requirement for the minor and American History for a B.S. in Social Science.) This course is a survey of Anglo-American colonial history, revolutionary developments, and the writing and ratification of the Constitution of the United States.

HY 305 American Expansion in the 19th Century (3 Sem. Hrs.)

(Satisfies the American requirement for a B.A. or minor in history as well as elective requirement for the minor and American History for a B.S. in Social Science.) This course covers the early years of the republic rise of sectionalism, and the forces of industrialization, urbanization, and immigration in United States history. Also explored is westward migration, the quest for social justice including the major reform movements of the century and the interdependence of the people of the United States.

HY 306 20th Century America (3 Sem. Hrs.)

(Satisfies the American requirement for a B.A. or minor in history as well as elective requirement for the minor and American History for a B.S. in Social Science.) This course is an examination of the political, social, cultural, and economic developments in 20th-century America. Emphasis is placed on the Progressive Movement, role of the United States in world affairs, the Interwar period, and developments after World War II, particularly the Vietnam Era and its aftermath.

HY 307 American Constitutional Law (3 Sem. Hrs.) (Also listed as PO 307 and CJ 307)

This course examines the text of the nation's primary law and key decisions of the U.S. Court interpreting certain phrases. Organization and operation of the Court are also covered. This course focuses on separation of powers, federalism, interstate commerce, taxation, the contract clause and the takings clause. This course provides a foundation in American constitutionalism for students who plan to attend law school or teach social studies in the secondary schools.

HY 309 American Civil War and Reconstruction (3 Sem. Hrs.)

(Satisfies the American requirement for a B.A. or minor in history as well as elective requirement for the minor and American History for a B.S. in Social Science.) This course covers the causes, events, and results of the Civil War. Also political, economic, and social aspects of Reconstruction are discussed.

HY 310 A History of American Religion (3 Sem. Hrs.)

(Satisfies the American requirement for a B.A. or minor in history as well as elective requirement for the minor and American History for a B.S. in Social Science.) The role of religion in America's development is the focus of this course. Each period from European settlement to the triumph of the people over their land at the end of the 19th century and through the tribulations of the two World Wars is examined. Theology is explored only when it directly explains particular historical events.

HY 313 Revolutionary Europe (3 Sem. Hrs.)

(Satisfies the European requirement for a B.A. or minor in history as well as elective requirement for the minor and Non-American History for a B.S. in Social Science.) This course is a study of the background and the events of the French Revolution and the Napoleonic Period (1789-1815). Emphasis is placed on the revolutionary wellsprings of the contemporary Western world.

- HY 314 19th Century Europe (3 Sem. Hrs.)**
(Satisfies the European requirement for a B.A. or minor in history as well as elective requirement for the minor and Non-American History for a B.S. in Social Science.) This course is a study of the social, political, and industrial forces which shaped modern Europe between 1815 and 1914. Particular attention is given to the development of large state and business bureaucracies, the spread of industry and steam transportation, European imperialism, the rise of totalitarian ideologies, and the increase in popular participation in political and social events.
- HY 315 20th Century Europe (3 Sem. Hrs.)**
(Satisfies the European requirement for a B.A. or minor in history as well as elective requirement for the minor and Non-American History for a B.S. in Social Science.) The major themes of the course are the rise and demise of totalitarian dictatorships, the continued spread of democracy, the appearance of the welfare state, and the general improvement of the European standard of living since 1918.
- HY 322 England and Britain Since 1688 (3 Sem. Hrs.)**
(Satisfies the European requirement for a B.A. or minor in history as well as elective requirement for the minor and Non-American History for a B.S. in Social Science.) This course is a survey of English and British history from 1688 to the present. The course encompasses political, constitutional, socioeconomic, cultural, intellectual, and imperial movements.
- HY 324 Nazi Germany (3 Sem. Hrs.)**
(Satisfies the European requirement for a B.A. or minor in history as well as elective requirement for the minor and Non-American History for a B.S. in Social Science.) The course is designed to provide students with a comprehensive, sophisticated account and analysis of the Nazi period in German history. It will explore issues related to the content and implications of Nazi ideology, the role of Hitler, the complicity of elites such as the Junkers, the military the churches and big business. The course will examine the origins both of the Nazi movement and of the conditions in Germany that led to the movement's rise to power. It will provide a detailed analysis of the consequences of the implementation of Hitler's policies in the forms of genocide, military conquest, and defeat.
- HY 325 America's Vietnam War (3 Sem. Hrs.)**
(Satisfies the American or Non-Western requirement for a B.A. or minor in history as well as elective requirement for the minor and American or Non-American History for a B.S. in Social Science.) This course explores America's experience in Vietnam from the 1940s to the 1970s in depth. This course grapples with this strange and terrible war as it attempts to answer questions such as, why did the United States make such a vast commitment to a part of the world with such little importance to its own national interests, what was the United States trying to accomplish in Vietnam, and why did the United States fail to fulfill its intentions in Vietnam.
- HY 330 Landmarks of Civilization (3 Sem. Hrs.)**
(Does not satisfy the requirements for a B.A. or minor in history.) **(Occasional lab time is required.)** This course covers the classical world to present. It is a review of selected examples of human kind's creative achievements in drama, literature, philosophy, art, and music. This course is designed to demonstrate the integration of human knowledge. It stresses expository writing and critical thinking.
- HY 334 Middle East (3 Sem. Hrs.)**
(Satisfies the Non-Western requirement for a B.A. or minor in history as well as elective requirement for the minor and Non-American History for a B.S. in Social Science.) This course is a survey of the historical and cultural characteristics of those countries from Mauritania and Morocco to Afghanistan. Emphasis is placed on the historical development and Arabization of the region, current socio-economic problems, the strategic significance of the area, and its relations to the rest of the world.
- HY 335 Past Imperfect: A Study of World War II Film and History (3 Sem. Hrs.)**
(Satisfies the European requirement for a B.A. or minor in history as well as elective requirement for the minor and Non-American History for a B.S. in Social Science.) This course is designed to introduce the student to the topic of film and history. Attention will focus on World War II with a selection of representative prewar, wartime, and postwar films.
- HY 336 A History of Criminal Justice (3 Sem. Hrs.) (Also listed as CJ 336)**
(Does not satisfy the requirements for a B.A. or minor in history.) The subject of this course is the historical development of American criminal justice philosophy, institutions, and practices in the political, cultural, and social context of the Western world and the United States from ancient Hebraic Law to the present. Emphasis is on the contribution and effect of the Enlightenment, Puritanism, American Revolution and Constitution, and frontier experience on the origins and evolution of the American administration of justice.
- HY 340 South America, Africa, and Asia (3 Sem. Hrs.) (Also listed as GO 340)**
(Can be used to satisfy the Non-Western requirement for a B.A. or minor in history.) This course stresses the major events in the historical development of South America, Africa, and Asia. In addition to ancient empires and culture, considerable attention is given to colonization, independence, historical figures, and current events in each region.
- HY 342 Modern Russia (3 Sem. Hrs.)**
(Satisfies the European or Non-Western requirement for a B.A. or minor in history as well as elective requirement for the minor and Non-American History for a B.S. in Social Science.) This course examines the history, geography, and current political system in Russia.
- HY 350 Warfare in the Western World (3 Sem. Hrs.)**
(Satisfies the European requirement for a B.A. or minor in history as well as elective requirement for the minor and Non-American History for a B.S. in Social Science.) This course covers the history of military operations in the West from the 17th century to the present with concentration on selected campaigns in major wars, political and military leadership and the waging of war, and the formulation of war aims and strategy.
- HY 351 Columbus and the Age of Discovery, 1400-1600 (3 Sem. Hrs.)**
(Satisfies the American, European or Non-Western requirement based on a topic for a B.A. or minor in history as well as elective requirement for the minor and American or Non-American History for a B.S. in Social Science.) This course is a survey of European

contacts with and explorations of Africa, the Americas, and Asia during the fifteenth and sixteenth centuries.

- HY 415 Ancient Greece (3 Sem. Hrs.)**
(Satisfies the European requirement for a B.A. or minor in history as well as elective requirement for the minor and Non-American History for a B.S. in Social Sciences.) This course is a detailed study of the history of ancient Greece from the Bronze Age to the end of the Hellenistic period. The emphasis in the course is on the cultural, political, and social history of the Greeks. Special attention is given to the rise of the city-state, warfare in the Greek world, the development of democracy, the Greek intellectual achievement, and the reading of primary sources.
- HY 430 Globalization: Concepts and History (3 Sem. Hrs.) (Also listed as SS 430)**
Globalization is a phenomenon that in the last fifty years has come to be explicitly recognized in the worlds of politics, economics, and culture. It also has ancient roots. This course will investigate the history, historiography, themes, and concepts associated with globalization.
- HY 431 Human Expansion: History of Trade, Travel, Tourism, and Empire (3 Sem. Hrs.)**
Humans have moved around the earth since prehistoric times. Today they are moving and communicating more than ever before. This course will look at how and why people have moved around the world as individuals and as groups. It will specifically focus on the roles of trade, travel, tourism, and empire in human expansion throughout the earth. The history, historiography, themes, and concepts associated with human expansion will be examined in detail.
- HY 441 Special Topics in History (1 Sem. Hr.)**
HY 442 Special Topics in History (2 Sem. Hrs.)
HY 443 Special Topics in History (3 Sem. Hrs.)
Prerequisite: Consent of the instructor
These courses will be offered in accordance with student demand or need. (HY 443 satisfies the American, European or Non-Western requirement based on topic for a B.A. or minor in history as well as elective requirement for the minor and American or Non-American History for a B.S. in Social Science.)
- HY 450 Materials and Methods of Teaching History and Social Sciences in Middle School/High School (3 Sem. Hrs.) (Also listed as SS 450)**
Prerequisite: Admission to the Teacher Education Program
Senior methods portfolio must be submitted during this class. (LiveText required.) This course is intended to enhance the students' abilities to plan, implement, and evaluate instructional activities in teaching history and social sciences and to select and use appropriate materials and equipment. Knowledge of the history and social sciences curriculum and middle and high school student characteristics will be increased. Students will actively participate in demonstrating and modeling strategies and techniques. The role of research will be emphasized. This course does not satisfy requirements for any history major, minor, or general studies.
- HY 451 Senior History Seminar (3 Sem. Hrs.)**
This capstone course, which must be taken during students' senior year, will provide students with an introduction to the main currents of historical scholarship in the modern era. We will examine various approaches to the past, the ways historical interpretations have changed, and how those changes are related to contemporary concerns. Upon successful completion of this course, students will understand how to formulate a thesis, gather and assess historical evidence, structure a research paper, and orally present the findings of their research. Like all history classes at Athens State University, this one increases students' awareness of our cultural heritage and helps them develop the research abilities for graduate work.
- HY 463 Fundamentals of Public History (3 Sem. Hrs.)**
This course will focus on the professional nature of public history, the interpretation of history for diverse audiences, and the application of historical methods in the wider world. Combines reading and discussion, interaction with practicing professionals, and a possible experiential learning component.
- HY 464 Internship in Public History (3 Sem. Hrs.)**
HY 465 Internship in Public History (3 Sem. Hrs.)
Prerequisites: All students taking this course must be a History or Social Science major, classified as a senior with an institutional GPA of at least 2.5 and must have permission from the instructor
These internships will provide an opportunity for students to conduct career exploration and build a record of experience in the field of public history, archives, or museology. History or Social Science majors are required to complete **at least** three hours of internship credit toward hours required for graduation. The registration deadline for these internships is at least a month prior to the first week of classes in the Fall and Spring semesters, and two weeks prior to the first week of classes in the Summer.

Information Assurance Management (IAM)

- IAM 409 Management of Information Assurance (3 Sem. Hrs.)**
Prerequisite: AC/MG 302, CIS 321, or the equivalent
This course focuses on the managerial aspects of information security and assurance. Topics covered include access control models, information security governance, and information security program assessment and metrics. Coverage on the foundational and technical components of information security is included to reinforce key concepts. The course includes up-to-date information on changes in the field, such as national and international laws and international standards like the ISO 27000 series.
- IAM 410 Information Assurance Administration and Operations Management (3 Sem. Hrs.)**
Prerequisite: AC/MG 302 or equivalent
This course presents a focus on a managerial view of data and system security. Topics include security policy development, risk management, threat assessment, and business continuity planning. The aim is to examine the implications and challenges of operational security in global organizations. This course provides students with an understanding of the legal, social, and ethical

issues related to security management from the management perspective. The course also covers the importance that management and administrators place on information security, as it pertains to overall business risk, social issues such as individual privacy, and the role of public policy.

IAM 411 Information Assurance Strategic Management (3 Sem. Hrs.)

Prerequisite: AC/MG 302 or equivalent

A survey of various means of establishing and maintaining a practical cyber and information security program to protect key organizational assets. The aim is to develop an information security program that is aligned with organizational strategy and to evaluate and recommend information and security technologies to support the information security program. Discussion covers the integration of confidentiality, integrity, and availability into an organization's security program through the use of physical and logical security controls. Topics include data protection, telecommunications systems, applications, and emerging technologies. Threats and vulnerabilities are assessed to determine the level of risk.

IAM 412 Management of Business Contingency and Resilience Planning (3 Sem. Hrs.)

This course prepares students to plan and execute industry best practices related to managing organization-wide business contingency and resilience programs and to prepare an organization for implementing comprehensive business continuity, incident handling, and disaster recovery plans.

IAM 413 Information Assurance Systems and Product Acquisition (3 Sem. Hrs.)

Acquisition strategy can be seen as a high level framework that guides program execution across the entire program life cycle. Acquisition strategies typically look for innovative ways to reduce costs. One such way is to consider the security implications of a particular process or automated resource prior to introducing it into the organization. This course explores the security controls established by the National Institute of Standards and Technology (NIST) and evaluates methods for integrating the controls into the acquisition process.

IAM 414 Information Assurance Governance (CAPSTONE) (3 Sem. Hrs.)

This course gives students a detailed understanding of the broad requirements for effective information security governance, the elements and actions required to develop an information security strategy and a plan of action to implement it.

Information Systems Management (ISM)

ISM 400 Information Management (3 Sem. Hrs.)

Prerequisite: AC/MG 302 or equivalent

This course provides an introduction to the language, concepts, structures and processes involved in the management of information systems including fundamentals of computer-based technology and the use of business-based software for support of managerial decisions. Emphasis is placed on managing information using databases.

ISM 401 Systems Design Management (3 Sem. Hrs.)

Prerequisite: AC/MG 302 or equivalent

An introduction to the development of computer-based information systems in organizations. The knowledge gained through this course includes: the management of systems development projects; the organizational, political, social, and technical issues in systems development; the methods of development commonly used in organizations; and MIS careers in systems development. Students will learn the value of working in teams on systems analysis and design tasks, to use common modeling methods and technology, and to prepare system requirements and design documents. Emphasis is on management issues of systems analysis and design.

ISM 402 Information Systems and Analytics (3 Sem. Hrs.)

Prerequisite: AC/MG 302 or equivalent

This course covers the programming and design skills needed to build database and spreadsheet-based decision support systems (DSS). Students will create databases to store data and provide an interface for human-computer interaction. Spreadsheet models will be developed to solve a number of common management science problems.

ISM 403 Data Communications Management (3 Sem. Hrs.)

Prerequisite: AC/MG 302 or equivalent

This course provides the student with an understanding of the concepts and methods associated with telecommunications and distributed information systems. Students learn the fundamentals of data communications, including network architectures, communication protocols, transmission standards and media access control methods.

ISM 404 Managing Information Resources (3 Sem. Hrs.)

Prerequisite: AC/MG 302 or equivalent

This course offers a survey of managerial and technical issues facing IS professionals. Class discussions focus on understanding how different organizations respond to the challenges of distributed processing, business process reengineering, managing the data utility, maintaining legacy systems, and other current trends. Analytical and communication skills are emphasized along with management issues.

ISM 405 Interface Design Management (3 Sem. Hrs.) (Also listed as AR 405) (Lab fee)

Prerequisite: AC/MG 302 or equivalent

This course introduces students to theories of human-computer interaction as well as the principles and practices of user interface design, evaluation, and integration. Topics covered include command, menu, and web-based interfaces. Using a visual design tool, students develop an actual user interface. Emphasis placed on management aspects of GUI and website design.

- ISM 408 E-Commerce Systems Management (3 Sem. Hrs.)**
Prerequisite: AC/MG 302 or equivalent
 This course examines electronic methods of delivering products, services, and exchanges in inter-organizational, national, and global environments. Information technology strategy and technological solutions for enabling effective business processes are considered.
- ISM 441 Special Topics in Information Systems Management (3 Sem. Hrs.)**
Prerequisite: AC/MG 302 or equivalent
 This course explores current, advanced topics in Information Systems that are not covered in other courses. To be offered on occasion of student demand or need.

Logistics and Supply Chain Management (LSM)

- LSM 300 Enterprise Systems and Business Processes (3 Sem. Hrs.) (Lab fee) (Also listed as ESM 300)**
Prerequisite: AC/MG 302
 Students will learn how enterprise software is used to manage the integration of business operations. Through a process-oriented view of the organization and its relationships with suppliers, customers, and employees, students study software that automates business processes and workflow. Procurement, production and sales logistics processes and their integration with Accounting and Human Resources are investigated. Students will experience ERP through hands-on lab exercises, and improve soft skills such as writing, presenting, and team building through ERP project documentation and presentations.
- LSM 301 Introduction to Logistics and Supply Chain Management (3 Sem. Hrs.)**
Knowledge of Excel and Access is required. This course provides the student with an overview of logistics and supply chain management concepts from the acquisition process to provision of the end product or service to the consumer. These concepts include forecasting and integrating models of procurement, transportation, warehousing, materials handling and storage, global logistics, and information systems and strategy throughout the supply chain.
- LSM 320 Logistics and Distribution (3 Sem. Hrs.)**
Prerequisite: LSM 301
 This course provides an introduction to concepts and technology that is associated with the planning and management of logistics activities. Areas that will be discussed will include inventory management, warehousing, transportation, customer service, and the technology and information systems that are necessary for appropriate decision-making.
- LSM 330 Logistics and Supply Chain Management in the Global Environment (3 Sem. Hrs.)**
Prerequisite: LSM 301
 This course examines issues in managing supply chains in both the current economy and the global environment by analyzing the logistics strategies and processes necessary to ensure students understand the design and operation of global supply chain networks. In addition, the course analyzes the principles of logistics activities in the global environment with special emphasis on transportation, global sourcing, customs issues, import-export opportunities, customs documentation, the role of government in international transactions, and similar issues.
- LSM 353 Project Management (3 Sem. Hrs.) (Also listed as ACM 353 and MG 353)**
 An examination of the use of critical path method (CPM) and Program Evaluation Review Technique (PERT) on project planning and control.
- LSM 401 Logistics and Supply Chain Integration Techniques (3 Sem. Hrs.)**
Prerequisite: LSM 301
 This course investigates the role of information management and decision support methods in the planning and management of supply chains and related processes. Specific areas include techniques and methods used in operations management; process analysis, network analysis, and the application of simulation and other technology systems.
- LSM 410 Logistics and Supply Chain Strategy (3 Sem. Hrs.)**
Prerequisites: LSM 301, 320, 330, and 401 or concurrent enrollment
 This course requires students to integrate concepts learned in an analysis of a logistical problem or issue and present a recommendation to solve the issue. This course is considered the capstone experience. Students will demonstrate proficient oral and written communication skills, decision-making abilities, problem solving skill, leadership and team skills, and a knowledge of current logistics and supply chain management issues.
- LSM 461 Internship in Logistics (1 Sem. Hr.) (At least 50 hours of work-based experience is required)**
LSM 462 Internship in Logistics (2 Sem. Hrs.) (At least 100 hours of work-based experience is required)
LSM 463 Internship in Logistics (3 Sem. Hrs.) (At least 150 hours of work-based experience is required)
Prerequisites: MG 320 or GBA 300; compliance with College of Business Internship Policies and Procedures.
 This internship in the field of Logistics and Supply Chain Management is designed to provide the student with practical work experience leading to a potential career-field in business.

Mathematics (MA)

- MA 301 Precalculus Algebra (3 Sem. Hrs.) (Lab fee)**
Prerequisite: Intermediate College Algebra or College Algebra or equivalent with a grade of C or higher
 This course is designed for students preparing to take the calculus sequence. Topics covered include a review of the real number system and operations with algebraic expressions, solving equations and inequalities, functions and graphs, rational and polynomial functions, and applications to a wide variety of fields such as biology and business.

- MA 302 Precalculus Trigonometry (3 Sem. Hrs.) (Lab fee)**
Prerequisite: MA 301 or equivalent with a grade of C or higher
 This course is designed for students preparing to take the calculus sequence. Topics covered include trigonometric and inverse trigonometric functions, exponential and logarithmic functions, transcendental equations, complex numbers, DeMoivre's Theorem, polar coordinates, and applications to a wide variety of fields.
- MA 303 Calculus I (4 Sem. Hrs.) (Lab fee)**
Prerequisites: MA 301 and MA 302 or equivalents with a grade of C or higher
 Topics include a review of functions, limits, differentiation, applications of differentiation, and an introduction to integration.
- MA 304 Calculus II (4 Sem. Hrs.) (Lab fee)**
Prerequisite: MA 303 or equivalent with a grade of C or higher
 This course is the second course of the three-semester sequence. Topics include applications of integration, techniques of integration, sequences, series, polar coordinates and parametric equations.
- MA 305 Calculus III (4 Sem. Hrs.) (Lab fee)**
Prerequisite: MA 304 or equivalent with a grade of C or higher
 This course is the final course of the three-semester sequence. Topics include vectors, vector calculus, partial derivatives, gradients, multiple integrals and line integrals.
- MA 308 Discrete Mathematics (3 Sem. Hrs.) (Lab fee)**
Prerequisites: MA 301 or MA 302 or equivalents with a grade of C or higher
 Topics include elementary propositional logic, sets, relations, functions, number systems and elementary number theory concepts, counting methods, mathematical induction, graphs and trees, and proof techniques applied to these mathematical content areas.
- MA 309 Business Calculus (3 Sem. Hrs.)**
Prerequisite: MA 301 or equivalent with a grade of C or higher
 (Cannot be used to satisfy requirement for upper-level mathematics elective for mathematics majors or for anyone having completed the Calculus sequence.) This course begins with a review of algebraic, exponential and logarithmic functions. Major topics include limits, derivatives and applications of differential calculus to business and industry from an algebraic perspective.
- MA 310 Matrices and Linear Algebra (3 Sem. Hrs.)**
Prerequisite: MA 301 or equivalent with a grade of C or higher
 Topics include elementary theoretical, mechanical and applied approaches to linear systems of equations, matrices, determinants, eigenvalues and eigenvectors, vector spaces, bases and linear transformations.
- MA 311 Advanced Mathematics for Teachers (3 Sem. Hrs.) (Lab fee)**
Prerequisite: At least one college-level mathematics course
 (Cannot be used to satisfy requirement for upper-level mathematics elective for mathematics majors or other scientific majors.) This course helps students to develop greater mathematical skills and insight. It also introduces students to topics in numeration systems, elementary number theory, problem solving, introduction to probability theory, statistics, and geometry.
- MA 314 College Geometry (3 Sem. Hrs.)**
Prerequisite: MA 308 or equivalent with a grade of C or higher
 Topics include axiomatic development of plane and solid Euclidean geometry including functions, distance and measure, congruence, plane separation, parallelism, proportionality and similarity, polygons, circles, area, volume and constructions. Also included is a brief introduction to non-Euclidean geometries.
- MA 316 Vector Analysis (3 Sem. Hrs.)**
Prerequisite: MA 305
 Topics include vector algebra, vector operations, vector functions, scalar and vector fields, divergence, curl, Laplacian, line and surface integrals, orthogonal curvilinear coordinates, divergence theorem, Stoke's and Green's theorems.
- MA 320 Introduction to Abstract Algebra (3 Sem. Hrs.)**
Prerequisite: MA 308 or equivalent with a grade of C or higher
 This course begins with a review of sets, relations and functions. An axiomatic approach is applied to topics of elementary number theory, groups, subgroups and cosets, homomorphisms and their properties, and an introduction to rings.
- MA 321 Differential Equations (3 Sem. Hrs.) (Lab fee)**
Prerequisite: MA 305 or equivalent
 Topics include theory and techniques of solution for ordinary differential equations with applied examples from different scientific disciplines. Also included is an introduction to Laplace transforms.
- MA 330 Advanced Mathematical Software (3 Sem. Hrs.)**
Prerequisite: Concurrent enrollment or satisfactory completion of MA 304
 (Cannot be used to satisfy requirement for upper-level mathematics elective.) This class teaches the use of mathematical software used in industry and in secondary mathematics education. Emphasis is placed both on solving problems from the calculus and appropriately presenting the results. Techniques will be taught which will ultimately increase productivity in the workplace and provide insight for research.
- MA 331 Applied Probability and Statistics (3 Sem. Hrs.)**
Prerequisite: MA 301 or MA 308 or equivalents with a grade of C or higher
 This is a non-calculus based introduction to basic probability used for statistical inference, including discrete and continuous

distributions; proper simple data collection methods; calculating and the use of descriptive statistics; basic statistical inference including confidence intervals, hypothesis testing, one-way ANOVA (analysis of variance), and Pearson's Chi-Squared tests for contingency tables and categorical data.

- MA 401 Complex Variables (3 Sem. Hrs.)**
Prerequisite: *MA 305 or its equivalent with a grade of C or higher; MA 308 preferred with a grade C or higher*
 Topics include the algebra of complex numbers, analytic functions and integrals, Liouville's Theorem, Cauchy-Riemann equations, sequences and series, and integration by methods of residues.
- MA 423 Numerical Analysis (3 Sem. Hrs.) (Lab fee)**
Prerequisites: *MA 305 and MA 310 or their equivalents (Technology or programming required.)* Topics include an introduction to numerical methods for interpolation, evaluating roots of polynomials, systems of equations, integration, differentiation, differential equations, and approximation and error analyses.
- MA 431 Introduction to Mathematical Statistics (3 Sem. Hrs.)**
Prerequisite: *MA 304 or equivalent with a grade of C or higher*
 This course is a calculus based introduction to probability and statistics. Topics include discrete and continuous probability distributions, expected values of random variables, moment generating functions, and other advanced statistical and probability concepts including the Central Limit Theorem, ANOVA, Chi-Squared tests, bivariate analysis, regression, other theories of testing and inference, and appropriate applications.
- MA 445 Mathematical Modeling and Simulation (3 Sem. Hrs.)**
Prerequisite: *MA 305 or equivalent*
 This course covers techniques in vector rotation of three-space coordinates, Perron's eigenvalue theorem, data fitting by the normalization processes for multivariable function approximation, Bezier representation of polynomials for "real-time", computer graphic application, and other topics.
- MA 452 Introductory Real Analysis (3 Sem. Hrs.)**
Prerequisite: *MA 320 or equivalent with a grade of C or higher OR MA 308 and MA 305 with a grade of C or higher*
 This course begins with a review of logic, sets and basic proof structures. Major topics include functions, countability, the topology of the real number system, theoretical treatment of sequences, series, limits, continuity and single variable differentiation. Additional theoretical treatment of single variable integration may also be included.
- MA 454 Materials and Methods of Teaching Mathematics in Middle School/High School (3 Sem. Hrs.)**
Prerequisites: *MA 314 College Geometry with a grade of C or higher and Admission to the Teacher Education Program* (LiveText required.) This course does not satisfy requirements for mathematics major, minor, or general studies. Senior methods portfolio must be submitted during this class. This course presents fundamental principles and techniques for the teaching and learning of secondary mathematics and is designed to prepare prospective secondary mathematics teachers to identify, cultivate, and display essential knowledge, skills, and attitudes necessary for the successful planning, teaching, and evaluating of middle and high school mathematics. The course also includes a study of selected topics in mathematics. Opportunities will be provided for the student to demonstrate techniques and methods of teaching various components of the secondary mathematics curriculum.
- MA 461 Directed Study/Research in Mathematics (1 Sem. Hr.)**
MA 462 Directed Study/Research in Mathematics (2 Sem. Hrs.)
MA 463 Directed Study/Research in Mathematics (3 Sem. Hrs.)
Prerequisite: *Consent of instructor.*
 These courses are offered on occasion of student demand or need.
- MA 470 Senior Mathematics Seminar (3 Sem. Hrs.)**
Prerequisites: *MA 330 and 308 or equivalent with a grade of C or higher*
 This course considers topics in mathematics to include graph theory as well as providing a focus on mathematical research and problem solving. Students will be expected to know critical content and demonstrate their knowledge through critical thinking in their research, problem solving, assignments, writing, and oral presentation. The Mathematics Department Exit Exam is administered in this course.
- MA 480 Special Topics in Mathematics (3 Sem. Hrs.)**
Prerequisites: *MA 304 and MA 308 or equivalents with grades of C or higher*
 This course is to be offered on occasion of student demand or need.

Management (MG)

- MG 302 Management Information Systems (3 Sem. Hrs.) (Also listed as AC 302)**
Prerequisite: *Windows applications course (CIS 146)*
 (LiveText required.) An examination of the role of information systems in organizations and how they relate to the objectives and structure of an organization. Emphasis is given to providing a broad overview of the information system management function.
- MG 303 Management Decision Support Systems (3 Sem. Hrs.) (Also listed as AC 303)**
Prerequisite: *Windows applications course (CIS 146)*
 An analysis of the nature of the decision making process and an examination of support systems. Instruction will emphasize an advanced application of spreadsheet and database management software.

- MG 320 Organizational Communication (3 Sem. Hrs.)**
(LiveText required.) The purpose of this course is to enhance the student's ability to communicate effectively and efficiently in the workplace. Assignments, exercises, and projects emphasize locating and evaluating relevant information, and communicating through writing, listening, reading, and speaking. Research, group collaboration, and intercultural communication skills are stressed in assignments and demonstrated in projects.
- MG 346 Principles of Management and Leadership (3 Sem. Hrs.)**
(LiveText required.) An introductory course that explores both the underlying theory and the practical application of management practices and organizational development. In addition to the basic management functions, the course deals with ethical questions, international competition, leadership, and other issues stemming from management's relationship with its increasingly complex legal, social, and competitive environment.
- MG 349 Human Resources Management (3 Sem. Hrs.) (Also listed as PSHA 349)**
A study of the technical functions of HRM. Emphasis is on their application to programs that foster employee commitment to objectives in a competitive, global economy. Course will explore challenges facing the HRM professional, as well as specific focus on the role of managers in the administration of HR activities. The challenges include technical functions such as recruitment and selection, training and development, design, administration of compensation and benefits plans, collective bargaining, and initiatives like quality-of-work life programs. The ways in which HRM works toward organizational goals in a time of rapid change will also be examined.
- MG 350 Financial Management (3 Sem. Hrs.)**
Prerequisites: *Principles of Accounting, Principles of Economics, and Algebra*
(LiveText required.) A study of the art of money capital management on the level of the firm in an enterprise economy. Topics covered include analysis of financial statements, investment decision making, and calculation of the firm's cost of capital.
- MG 351 Labor/Management Relations (3 Sem. Hrs.)**
An examination of managerial issues affecting development of industrial and labor relations policy. Topics examined include impact of public policy, negotiation, administration of collective bargaining agreements, the NLRB, and arbitration cases.
- MG 352 International Business (3 Sem. Hrs.)**
(LiveText required.) An analysis of the cultural, economic, ethical, legal, and social environment of the global market.
- MG 353 Project Management (3 Sem. Hrs.) (Also listed as ACM 353 and LSM 353)**
An examination of the use of critical path method (CPM) and Program Evaluation Review Technique (PERT) on project planning and control.
- MG 357 Project Detailed Scheduling and Planning (3 Sem. Hrs.)**
An in-depth study of project planning and scheduling which includes the introduction and use of state-of-the-art (sota) application software such as Microsoft Project. A case study approach is employed.
- MG 358 Project Initiation and Scope Management (3 Sem. Hrs.)**
A study of techniques used in formulation of a project charter, scope, and statement of work. Explores the challenges and pitfalls of scope management, communication within the project, and project closeout procedures.
- MG 370 Performance Management in Organizations (3 Sem. Hrs.)**
Prerequisite: *MG 349 or equivalent*
This course will address the entire range of topics associated with managing the human asset to realize and sustain optimal levels of performance. Topics will include appraisal systems, change management models, adult learning theories, individual versus team performance, organizational development, and managing a diverse workforce. Various aspects of the corporate training and development function, training program design and development of various methods and media for training delivery, as well as return on investment outcomes, will be explored. In addition, this course will also examine the development of systems that will provide highest levels of both personal and professional development and growth within the organization; creation of promotional and cross-functional systems that will talent strength the organization; development of retention strategies that tie rewards to performance talent; creation of workforce planning systems that will provide succession planning of best talent within the organization; and utilization of technological systems to support these functions within human resources planning will be presented.
- MG 375 Organizational Behavior and Teambuilding (3 Sem. Hrs.)**
This course is designed to enhance class members' understanding of the causes and consequences of the behavior of people within the context of organizations, with emphasis on teamwork. To accomplish the learning goals for the course, varying instructional methodologies will be employed including lecture and assigned readings from the text, journal articles, and the web. A significant amount of class time will be spent in experiential exercises.
- MG 390 Operations Management (3 Sem. Hrs.)**
Prerequisite: *MG 346*
(LiveText required.) Operations Management examines manufacturing and services industries and the multitude of activities needed to produce or process goods and services in the private and public sectors. It also examines the problems of facilities layout, plant location, statistical quality control, process control, and various models utilized in these areas.
- MG 391 Fundamentals of Operations (3 Sem. Hrs.)**
Fundamentals of Operations establishes a solid entry-level base of industrial knowledge upon which to build towards future growth in manufacturing and industrial supervision. This course introduces students to essential vocabulary and skills identifying and applying the basic principles of inventory control, planning, manufacturing control, and operational management. Included in this course are the principles of effective planning, details of priority and capacity management through the use of material requirements planning,

and a survey of the relationship between goods and services and the operation of the system.

MG 393 Basics of Supply Chain (3 Sem. Hrs.)

Prerequisite: MG 391

The course explores the basic concepts of the industrial flow of materials in a supply chain. Included is a complete overview of material flow, from internal and external suppliers to and from the organization. Topics of discussion include elements of the supply chain, Just-in-Time (JIT), total quality management (TQM), manufacturing resources planning (MRP II), demand planning, and capacity management. Specific case studies are utilized.

MG 395 Master Planning of Resources (3 Sem. Hrs.)

Prerequisite: MG 393

Master Planning of Resources concentrates on the processes used to develop sales and operations plans and teaches the student to identify and assess internal and external demand and forecasting requirements. The course focuses on the importance of producing achievable master schedules that are consistent with organizational business policies, objectives, and resource constraints. Course topics include demand management, sales and operations planning, master scheduling and measuring the business plan.

MG 397 Program and Project Risk Management (3 Sem. Hrs.)

This course focuses on a systems approach to project risk management from initiation to project planning, implementation, control, and closeout. Topics of discussion include various techniques for qualitative and quantitative risk assessment, including Monte Carlo simulation in areas such as cost, schedule, and performance.

MG 400 Detailed Scheduling and Planning (3 Sem. Hrs.)

Prerequisite: MG 395

Detailed Scheduling and Planning focuses on the various techniques for material and capacity scheduling. The course includes detailed descriptions of material requirements planning (MRP), capacity requirements planning (CRP), inventory management practices, and procurement and supplier planning. Topics include recognizing techniques and practices of inventory control; mechanics of the detailed material planning process; planning operations to support the priority plan; and planning procurement and external sources of supply.

MG 405 Project Cost Control and Earned Value Management (3 Sem. Hrs.)

This course provides an introduction to the government's Earned Value Management (EVM) reporting techniques, as well as a review of contemporary methodology for project cost determination, estimating, and control.

MG 407 Execution and Control of Operations (3 Sem. Hrs.)

Prerequisite: MG 395

Execution and Control of Operations focuses on the areas of prioritizing and sequencing work, executing work plans and implementing controls, reporting activity results, and providing feedback on performance. The course explains techniques for scheduling and controlling production processes, the execution of quality initiatives and continuous improvement plans, and the control and handling of inventories. Course topics include prioritizing and sequencing work, executing plans and implementing controls, authorizing and reporting activities for push and pull systems, and evaluating performance and providing feedback.

MG 409 Strategic Resource Planning (3 Sem. Hrs.)

Prerequisite: MG 395

This course explores the relationship of existing and emerging processes and technologies to manufacturing strategy and supply chain-related functions. The course addresses aligning resources with the strategic plan; configuring and integrating operating processes to support the strategic plan, and implementing change; competitive market issues; choices affecting facilities, supply chain, information technology, and organizational design; configuring and integrating internal processes; and evaluating and managing projects.

MG 410 Employment Law for Business (3 Sem. Hrs.)

Prerequisite: Legal Environment (BUS 263)

This course provides an applied study of significant legal issues in labor and employment law including labor-management relations, wage and hour laws, safety and health laws, retirement, welfare and privacy laws that prepare future managers, supervisors, and business owners for responsibilities in management-employee relations.

MG 411 Compensation and Benefits (3 Sem. Hrs.)

This course focuses on a study of the technical functions of compensation and benefits within Human Resource Management. Emphasis is on their application to programs that foster employee commitment to objectives in a competitive, global economy. Therefore, this course will explore the challenges facing the human resource management professional. These challenges will include technical functions such as pay models, internal alignment, external competitiveness, employee contributions, and employee benefits.

MG 412 Cultural Diversity and Communication Issues in International Business (3 Sem. Hrs.)

Prerequisite: None; recommended that MG 352 and EC 320 be completed before taking MG 412

This is the capstone course for the international business minor. It focuses on two broad areas: case studies in political, legal, economic, and cultural areas and the in-depth study of multicultural diversity. Areas to be covered include religion, family, time, gender, race, ethnicity, aesthetics, power distance, individual vs. collective, masculine vs. feminine and uncertainty avoidance.

MG 413 Project Communication, Management and Leadership (3 Sem. Hrs.)

Addresses the communication planning necessary for success within the project environment. Includes virtual, informal, and formal communication systems review. Discusses establishment of critical communications within and external to the project team.

MG 415 Technical Risk Management (3 Sem. Hrs.)

Prerequisite: Statistics (BUS 271)

This course examines the use of the scientific method and statistical analysis to minimize the risk exposure in management decision

making, particularly when bringing high-technology products to the market place within allotted time and financial specifications.

- MG 416 Entrepreneurship (3 Sem. Hrs.)**
Prerequisites: *Accounting I, CIS 146, MG 346, and MK 331*
In this course, students bring their knowledge of management, marketing, accounting, and microcomputer applications to bear on the problems of planning and operating a small business. Student teams research, prepare, and present complete business plans including *pro forma* financial statements for startup ventures. Market research, site selection, pricing, promotion, and financial analysis for the small firm are among the topics stressed.
- MG 417 Management of Change (3 Sem. Hrs.)**
This course examines the various approaches to organizational change, the resistance and driving forces for change, and the implementation and control of change in organizations.
- MG 418 Management of Technology (3 Sem. Hrs.)**
This course is a case study approach to the integration of technical knowledge with management science.
- MG 419 Technology Transfer and Commercialization (3 Sem. Hrs.)**
Technology Transfer and Commercialization offers an overview of how government-sponsored technology and expertise can be transferred into commercial and private sectors to maintain business competitiveness. Specific case studies are employed to illustrate the effectiveness and importance of technology transfer to global commerce.
- MG 420 Business Policy (3 Sem. Hrs.)**
Prerequisites: *Senior standing, MG 346, MG 350, and MK 331*
(LiveText required.) **Student should schedule this course during one of the last two semesters of their degree program. NOTE: Students must earn a minimum grade of "C" in this course in order to graduate with a major in accounting, management, human resources management, or the management of technology.** This course requires a business simulation (software purchase required). A capstone course which examines the interrelations of the various business functions from the viewpoint of middle management's decision process. There is heavy emphasis on both oral and written case study analysis.
- MG 430 Project Management Practicum (3 Sem. Hrs.)**
Applies the knowledge of project management in an integrative fashion within a project team environment. Course requires a written project plan and research paper or a challenging team project based upon liaison with business and industry.
- MG 441 Special Topics in Management (3 Sem. Hrs.)**
To be offered on occasion of student demand or need.
- MG 449 Advanced Human Resource Management (3 Sem. Hrs.)**
Prerequisite: *MG 349*
This course will examine the functions of Human Resource Management by investigating both the theoretical advance of HRM, and the practical application of these functions as they apply to the manager's responsibility in the global marketplace. Emphasis will be placed on HRM professional roles and responsibilities as a strategic business partner.
- MG 460 Directed Study/Research in Management (3 Sem. Hrs.)**
This course is designed to allow students an opportunity to perform research/directed studies in management. It is offered at the discretion of the professor with approval of the College Dean.
- MG 461 Internship in Management (1 Sem. Hr.) (At least 50 hours of work-based experience is required)**
MG 462 Internship in Management (2 Sem. Hrs.) (At least 100 hours of work-based experience is required)
MG 463 Internship in Management (3 Sem. Hrs.) (At least 150 hours of work-based experience is required)
Prerequisites: *MG 320 or GBA 300; compliance with College of Business Internship Policies and Procedures*
These internships in the field of management are designed to provide the student with practical work experience leading to a potential career-field in business.
- MG 470 Introduction to Aviation Management (3 Sem. Hrs.)**
Prerequisite: *Department approval*
This course provides an orientation to aviation management and its career opportunities. Topics include the history of significant events and accomplishments in the evolution of aviation and the related attempts to move through air and space.
- MG 471 Aviation Law (3 Sem. Hrs.)**
Prerequisites: *GBA 311 and MG 470 or equivalent*
This course covers the legal structure of aviation including federal, local, and state statutes, contracts, insurance and liability, regulatory statutes and specific case law.
- MG 472 Aviation Safety and Security Management (3 Sem. Hrs.)**
Prerequisite: *MG 470 or equivalent*
This course focuses on problems and issues of aviation safety and security including aircraft accidents, their cause, effect and the development of safety and security programs and procedures.
- MG 473 Management of Air Traffic Control Fundamentals (3 Sem. Hrs.) (Special fee)**
Prerequisite: *MG 470 or equivalent*
This course offers air traffic control procedures, facilities, center, and operations. Other topics covered are theory of radar operation and air traffic separation using computer-based ATC radar simulators.

- MG 474 General Aviation Management (3 Sem. Hrs.)**
Prerequisites: *MG 346 and MG 471*
 This course provides an overview of general aviation and its impact and interaction with the total aviation industry and includes a study of the various users, the suppliers and service organizations, the aircraft and facilities, maintenance management, and regulatory framework.
- MG 475 Aviation Weather Management (3 Sem. Hrs.)**
Prerequisite: *MG 470 or equivalent*
 This courses focuses on weather as it applies to the operation of aircraft with emphasis on observation of weather elements and interpretation of flight planning weather information; DUATS, WSI services.
- MG 476 Federal Aviation Regulations Management (3 Sem. Hrs.)**
Prerequisite: *MG 471*
 This course is a study and review of Federal Aviation Regulations CFR 14 Parts 43, 91, 121, and 135 as they pertain to management of airports, charter services, certificated air carriers, and general operating and flight rules.
- MG 479 Aviation Maintenance Management (3 Sem. Hrs.)**
Prerequisites: *MG 470 and MG 474 or equivalent*
 This course provides a study of the basic functions, operations, and importance of aviation maintenance in a comprehensive management context. Covers maintenance fundamentals, technical support, maintenance and material supports, oversight functions, human factors in maintenance, and the art of trouble shooting. Students will have a liaison with an aviation maintenance facility to observe management operations.
- MG 480 Seminar in Business (2 Sem. Hrs.)**
Prerequisite: *Senior standing (this course should be taken concurrently with MG 420 Business Policy in student's last term)* (LiveText required.) **NOTE: Students must earn a minimum grade of "C" in this course in order to graduate with a major in accounting, management, human resources management, or the management of technology.** This course is a key component in the assessment of business school programs and of student achievement in the areas of communication and professionalism. It will provide the "post" assessment writing sample for comparison with a "pre" assessment writing sample done in a course taken in the student's first term (MG 320 Organizational Communication). It will provide an opportunity for students to demonstrate proficiency in oral and written communication, to better prepare for graduate school and the job search process, and to achieve an acceptable score on the Assessment Exam.

Marketing (MK)

- MK 331 Marketing Principles (3 Sem. Hrs.)**
Prerequisite: *Principles of Economics*
 (LiveText required.) This course is a study of the forces operating, institutions employed, and methods followed in the flow of goods and services from production to consumption.
- MK 333 Advertising (3 Sem. Hrs.)**
Prerequisite: *Marketing Principles*
 This course is a study of the principles of advertising, types of advertising media, and analyzing problems of advertising encountered in business.
- MK 336 Consumer Behavior (3 Sem. Hrs.)**
Prerequisite: *Marketing Principles*
 This course is a study of the buying habits and motives involved in the purchase of economic goods and services. Emphasis is on the decision processes that precede and determine consumer behavior.
- MK 431 Marketing Research (3 Sem. Hrs.)**
Prerequisites: *Marketing Principles, Statistics (BUS 271)*
 This course is a study of research methods and procedures as they apply to marketing operations. This course includes the information sources available to marketing researchers and the design and analysis of research projects concerned with obtaining primary information.
- MK 432 Retailing (3 Sem. Hrs.)**
Prerequisite: *Marketing Principles*
 The course covers principles and methods of store location and layout, promotion, buying, pricing, personnel management, credit, and stock control.
- MK 433 Marketing Strategies and Policies (3 Sem. Hrs.)**
Prerequisite: *Marketing Principles*
 The course examines various policies and problems requiring decisions by marketing managers. Particular emphasis will be given to advertising and promotional strategies.
- MK 461 Internship in Marketing (1 Sem. Hr.) (At least 50 hours of work-based experience is required)**
MK 462 Internship in Marketing (2 Sem. Hrs.) (At least 100 hours of work-based experience is required)
MK 463 Internship in Marketing (3 Sem. Hrs.) (At least 150 hours of work-based experience is required)
Prerequisite: *MG 320 or GBA 300; compliance with College of Business Internship Policies and Procedures*
 These internships in the field of marketing are designed to provide the student with practical work experience leading to a potential career-field in business.

Philosophy (PH)

- PH 300 Moral Values in Today's Society (3 Sem. Hrs.)**
This course examines the moral values of various societies as well as those of individual moral philosophers past and present to see how they legitimize their views of what constitutes a good and desirable life.
- PH 320 Biomedical Ethics (3 Sem. Hrs.) (Also listed as HS 320)**
The course is designed to create a greater understanding of modern ethical issues in the biomedical field. Key topics will include: research on human and animal subjects, stem-cell research, genetic engineering, abortion, euthanasia, issues of justice, healthcare access, and confidentiality. The course begins with an overview of ethical theory and principle, and then explores the practical issues relating to biomedical ethics.
- PH 321 History of Philosophy I (3 Sem. Hrs.)**
This course is a critical survey of the thought of major western philosophers from Thales to Descartes.
- PH 322 History of Philosophy II (3 Sem. Hrs.)**
This course is a critical survey of the thought of western philosophers from Descartes to the present time.
- PH 325 Philosophy of Religion (3 Sem. Hrs.) (Also listed as RE 325)**
This course is a philosophical study of the grounds of religious belief and practice, the relationship of man to God and its implications for morality, and the belief in life after death. Special attention is given to the impact of science upon religion.
- PH 441 Special Topics in Philosophy (1 Sem. Hr.)**
PH 442 Special Topics in Philosophy (2 Sem. Hrs.)
PH 443 Special Topics in Philosophy (3 Sem. Hrs.)
These courses will be offered on occasion of student demand or need.
- PH 461 Directed Study/Research in Philosophy (1 Sem. Hr.)**
PH 462 Directed Study/Research in Philosophy (2 Sem. Hrs.)
PH 463 Directed Study/Research in Philosophy (3 Sem. Hrs.)
Prerequisite: Consent of instructor; open only to superior students who have had at least 15 hours of philosophy in the classroom
(May be repeated for up to ten additional hours of credit.) These courses are to be offered on occasion of student demand or need. The student studies in an area of his or her particular interest approved by the instructor.

Political Science (PO)

- PO 302 Criminal Law (3 Sem. Hrs.) (Also listed as CJ 302)**
This course focuses on the definitions of crimes to include the specific elements of various criminal offenses. Defenses to criminal conduct also are discussed.
- PO 303 Comparative State and Local Government (3 Sem. Hrs.)**
This course is a comparative examination of the structures, operation, and contemporary issues facing state and local governments throughout the United States.
- PO 304 Problems of American Government (3 Sem. Hrs.)**
This course examines numerous institutional dynamics and policy questions facing American national government.
- PO 307 American Constitutional Law (3 Sem. Hrs.) (Also listed as HY 307 and CJ 307)**
This course examines the text of the nation's primary law and key decisions of the U.S. Supreme Court interpreting certain phrases. Organization and operation of the Court are also covered. This course focuses on separation of powers, federalism, interstate commerce, taxation, the contract clause and the takings clause. This course provides a foundation in American constitutionalism for students who plan to attend law school or teach social studies in the secondary schools.
- PO 326 International and Domestic Terrorism (3 Sem. Hrs.) (Also listed as CJ 326)**
This course examines the threat of international and domestic terrorism. There is an emphasis on the people and groups involved in international terrorism, the goals and ideology of the terrorists, major terrorist events, the global war on terrorism, homeland security, and strategies for containing and defeating the terrorist threat.
- PO 341 Statistics With Advanced Topics in Behavioral Science (3 Sem. Hrs.) (Also listed as PS 341 and SO 341)**
Prerequisites: Precalculus Algebra or Finite Mathematics
This course looks at the use of descriptive and inferential statistics to analyze behavioral science data. Advanced inferential topics help prepare students for graduate school.
- PO 342 Methods of Behavioral Science Research (3 Sem. Hrs.) (Lab fee) (Also listed as PS 342 and SO 342)**
Prerequisite: It is strongly recommended that students take PS/SO/PO 341 prior to taking PS/SO/PO 342
This course is concerned with theory design and collection of data in behavioral science research with emphasis on the techniques of collecting, analyzing, and interpreting behavioral science data.
- PO 350 Introduction to the American Legal System (3 Sem. Hrs.) (Also listed as CJ 350 and PSHA 350)**
This course is a review of basic legal doctrines and processes in the American system of jurisprudence. Students are introduced to a wide variety of topics in civil and criminal justice. Topics include the theory and nature of law as a device for social control, torts, contracts, and ownership of property. The course is structured to provide prelaw majors with exposure to the many social conflicts

managed by law and courts and to provide education majors with an overview of law-related topics necessary for civics instruction.

- PO 351 American Public Policy/Political Sociology (3 Sem. Hrs.) (Also listed as SO 351)**
This course explores factors that impact government's responses to a wide variety of social conditions. The process for making policy, the content of current policy, and the impact of policy receive attention.
- PO 355 Health Policy in the U.S. (3 Sem. Hrs.)**
This course evaluates health as a social issue and reviews major medical service programs of U.S. governments, such as Medicare and Medicaid. Much of the course focuses on the political and economic aspects of current and proposed health care policies.
- PO 364 Civil Liberties (3 Sem. Hrs.) (Also listed as CJ 364)**
This course focuses on the leading cases and doctrines which balance governmental/societal interests with individual rights across a broad spectrum of social relationships. It explores the constitutional foundations for freedoms of expression, due process rights, and equal protection under law.
- PO 377 Public Administration (3 Sem. Hrs.)**
This course is an examination of the major issues and concepts associated with the management of governmental agencies.
- PO 380 Public Budgeting and Finance (3 Sem. Hrs.) (Also listed as PSHA 380)**
This course examines the budgeting process used in the public sector and provides general overview of the field of public finance, with emphasis on budgeting and financial decision making by state and local governments and agencies. The course examines historical changes involving the institutions, principles, and processes used in public sector budgeting; the challenges and political environment faced by decision makers; different budgeting systems used; and recent proposals for change.
- PO 441 Special Topics in Political Science (1 Sem. Hr.)**
PO 442 Special Topics in Political Science (2 Sem. Hrs.)
PO 443 Special Topics in Political Science (3 Sem. Hrs.)
These courses will be offered based on student demand or need.
- PO 453 International Relations: America and the World (3 Sem. Hrs.)**
A survey of the basic characteristics and theories of the international system examining international conflicts, economics, regional and international organizations, international law, strategic studies, and comparative government. The role of foreign affairs in the history of the United States will be given special emphasis.
- PO 455 Ethics in the Public Sector (3 Sem. Hrs.) (Also listed as CJ 455 and PSHA 455)**
This course examines ethical issues encountered by employees of governmental agencies, both in terms of management practices and interactions with the public. The course explores application of codes of ethics, theories of ethical decision making, and ethical principles impacting various aspects of the public sector.
- PO 461 Directed Study/Research in Political Science (1 Sem. Hr.)**
PO 462 Directed Study/Research in Political Science (2 Sem. Hrs.)
PO 463 Directed Study/Research in Political Science (3 Sem. Hrs.)
Prerequisite: Consent of instructor
These courses will offered on occasion of student demand or need and are designed to meet the specific needs of Political Science majors.
- PO 465 Senior Research Project (4 Sem. Hrs.) (Also listed as PSHA 465)**
Prerequisites: Political Science major and consent of instructor
This capstone course should be taken during or near the time of the student's final semester. The student will work closely with the professor in researching and writing a major research paper in an area of their major field that is relevant to the student's career objectives. The student will give an oral presentation of the research findings to other students in the class and faculty members. The instructor may require an observation experience(s) depending on the student's prior background in the subject area. The student will also complete an exit exam covering the principal sub-fields of the discipline of their major.
- PO 470 Internship in Political Science (1-4 Sem. Hrs.)**
This course is designed to let political science majors serve as interns with judges, lawyers, and public administrators in North Alabama.

Psychology (PS)

- PS 301 Gender and Multicultural Studies (3 Sem. Hrs.) (Also listed as SO 301)**
This course is an introduction to the concepts, terminology, and issues in gender and multicultural studies including exploration of America's multicultural composition, gender as an element of culture, and contemporary issues in the field.
- PS 304 Drugs and Behavior (3 Sem. Hrs.)**
This course is a survey of the psychosocial factors related to drug abuse and addiction. Special emphasis will be focused upon estimation of drug epidemiology, consequences of drug usage, and treatment of drug addiction.
- PS 330 Educational Psychology (3 Sem. Hrs.)**
This course applies psychological concepts and principles to classroom teaching and learning especially in the areas of motivation, individual differences, adjustment, and teacher-student interaction.

- PS 331 Social Psychology (3 Sem. Hrs.)**
This course presents an in-depth survey of theory, research findings, and research methods pertaining to how the individual's thoughts, feelings, and behaviors are influenced by the real or imagined presence of others. Understanding and critical analysis of primary research is emphasized with the goal of developing critical thinking skills. Topics include the self, person perception, attitudes and attitude change, interpersonal attraction and intimate relationships, stereotyping, prejudice and discrimination, and prosocial behavior.
- PS 332 Child Psychology (3 Sem. Hrs.)**
This course is an in-depth study of theory, research findings, and methods of obtaining knowledge regarding biological, cognitive, and psychosocial aspects of development from conception to puberty. Underlying mechanisms responsible for developmental change are emphasized. Topics include prenatal development, motor and perceptual development, cognitive development, the self and self-understanding, and the family. Critical analyses of scientific research designs and methods are emphasized.
- PS 334 Adolescent Psychology (3 Sem. Hrs.)**
This course is an in-depth study of theory, research findings, and methods of obtaining knowledge regarding biological, cognitive, and psychosocial aspects of adolescent development. The impact of socio-cultural factors and underlying mechanisms responsible for developmental change are emphasized. Topics include physical change, cognitive development, development of identity, social development within the family and among peers, emotional development and moral attitudes. Critical analyses of scientific research designs and methods are emphasized.
- PS 335 Adult Psychology (3 Sem. Hrs.)**
This course is an in-depth survey of theory, research findings, and methods of obtaining knowledge regarding biological, cognitive, and psychosocial aspects of adult development from emerging adulthood through the end of the lifespan. Developmental sequences of change and the underlying mechanisms responsible for change are covered. Topics include physical changes, intellectual changes, development of identity and social roles, relationships, personality changes, and coping with death and dying. Critical analyses of scientific research designs and methods are emphasized.
- PS 336 Psychology of Learning (3 Sem. Hrs.)**
This course is a survey of the theories and concepts related to learning. The course will cover historical background, respondent conditioning, operant conditioning, imitation and cognitive models.
- PS 341 Statistics With Advanced Topics In Behavioral Science (3 Sem. Hrs.) (Also listed as PO 341 and SO 341)**
Prerequisites: Precalculus Algebra or Finite Mathematics
This course looks at the use of descriptive and inferential statistics to analyze behavioral science data. Advanced inferential topics help prepare students for graduate school.
- PS 342 Methods of Behavioral Science Research (3 Sem. Hrs.) (Lab fee) (Also listed as PO 342 and SO 342)**
Prerequisite: It is strongly recommended that students take PS/SO/PO 341 prior to taking PS/SO/PO 342
This course is concerned with theory design and collection of data in behavioral science research with emphasis on the techniques of collecting, analyzing, and interpreting behavioral science data.
- PS 352 Abnormal Psychology (3 Sem. Hrs.)**
This course presents an in-depth survey of the field of psychopathology. Considerable emphasis is placed upon DSM IV terminology and diagnostic criteria and upon research related to the etiology and treatment of mental disorders. All major diagnoses are covered, but special attention is focused upon schizophrenia and other serious mental disorders. Additional attention is focused upon contemporary issues such as de-institutionalization, commitment procedures, and insanity defense.
- PS 368 Industrial and Organizational Psychology (3 Sem. Hrs.)**
Industrial-organizational (I-O) psychology is the scientific study of the workplace. Rigor and methods of psychology are applied to issues of critical relevance to business, including talent management, coaching, assessment, selection, training, organizational development, performance, and work-life balance.
- PS 380 Experimental Psychology (3 Sem. Hrs.)**
Prerequisites: Psychology Major or Minor and PS/SO/PO 341
This course is an introductory course in experimental methods and procedures in psychology. Topics of discussion will include: hypothesis formation, internal and external validity, true experimental designs, quasi-experimental designs, single-subject designs, evaluation research, data collection, ethics, and formal reporting.
- PS 402 Clinical Psychology (3 Sem. Hrs.)**
This course is an introduction to personality theory and the techniques of counseling and psychotherapy. An approach to psychotherapy and psychotherapeutic techniques will be emphasized within which various schools of thought can be considered in terms of a common framework.
- PS 406 Physiological Psychology (3 Sem. Hrs.) (Lab fee)**
This course is a study of the relationships between physiological and psychological functions with special emphasis on mind-body interaction and the physiological explanations for human behavior. Topics of study include: nervous and endocrine systems, sleeping and waking, ingestive behavior, sexual behavior, reinforcement, punishment, motivation, emotions, and learning (disabilities, dysfunctions, etc.).
- PS 410 History and Systems of Psychology (3 Sem. Hrs.)**
This course considers the scientific and philosophical antecedents of psychology, in addition to the history of the discipline. The course spans pre-Socratic thought to current and emerging issues in the field of psychology.

- PS 420 Cognitive Psychology (3 Sem. Hrs.)**
This is an advanced psychology course that surveys the major topics in cognitive psychology. Special emphasis will be focused on attention, memory, language usage, problem solving, and decision making. It is strongly recommended that the student have completed Statistics With Advanced Topics in Behavioral Science and either Experimental Psychology or Methods of Behavioral Science Research.
- PS 441 Special Topics in Psychology (1 Sem. Hr.)**
PS 442 Special Topics in Psychology (2 Sem. Hrs.)
PS 443 Special Topics in Psychology (3 Sem. Hrs.)
PS 444 Special Topics in Psychology (4 Sem. Hrs.)
 These courses will be offered on occasion of student demand or need.
- PS 461 Directed Studies in Psychology (1 Sem. Hr.)**
PS 462 Directed Studies in Psychology (2 Sem. Hrs.)
PS 463 Directed Studies in Psychology (3 Sem. Hrs.)
 These courses will be offered on occasion of student demand or need. The student studies in an area of his/her particular interest approved by the instructor.
- PS 498 Practicum in Psychology (3 Sem. Hrs.)**
Prerequisite: Consent of instructor
 This course provides the student an opportunity to experience the theoretical concepts and knowledge obtained in the classroom. The practicum entails approximately eight hours per week of supervised field experiences in appropriate community agencies, institutions, industrial or research settings, and bi-weekly in-class seminars.
- PS 499 Thinking, Writing, and Speaking in the Behavioral Sciences (3 Sem. Hrs.) (Also listed as SO 499)**
Prerequisite: Senior standing
 All students majoring in the Behavioral Science department must take during their last semester prior to graduation. It will emphasize thinking, writing, and speaking effectively. Therefore, areas in which students are deficient will be emphasized individually, through writing and speaking engagements during the course. Students will be taught critical thinking skills and will be intermittently assessed for such skills through objective examinations. Also, students will be assessed upon completion of the course for improvement in critical areas.

Public Safety and Health Administration (PSHA)

- PSHA 349 Human Resources Management (3 Sem. Hrs.) (Also listed as MG 349)**
 This course is a study of the technical functions of HRM. Emphasis is on their application to programs that foster employee commitment to objectives in a competitive, global economy. Course will explore challenges facing the HRM professional, as well as specific focus on the role of managers in the administration of HR activities. The challenges include technical functions such as recruitment and selection, training and development, design, administration of compensation and benefits plans, collective bargaining, and initiatives like quality-of-work life programs. The ways in which HRM works toward organizational goals in a time of rapid change will also be examined.
- PSHA 350 Introduction to the American Legal System (3 Sem. Hrs.) (Also listed as CJ 350 and PO 350)**
 This course is a review of basic legal doctrines and processes in the United States system of jurisprudence. Students are introduced to a wide variety of topics in both civil and criminal justice. Topics include the theory and nature of law as a device for social control, torts, contracts, and ownership of property. The course is structured to prelaw majors with limited exposure to the many social conflicts managed by law and courts, and to provide education majors with an overview of law-related topics necessary for civics instruction.
- PSHA 380 Public Budgeting and Finance (3 Sem. Hrs.) (Also listed as PO 380)**
 This course examines the budgeting process used in the public sector and provides general overview of the field of public finance, with emphasis on budgeting and financial decision making by state and local governments and agencies. The course examines historical changes involving the institutions, principles, and processes used in public sector budgeting; the challenges and political environment faced by decision makers; different budgeting systems used; and recent proposals for change.
- PSHA 400 Public Safety and Health Education (3 Sem. Hrs.) (Also listed as HS 400)**
 This course surveys the development and current state of training and education for selected safety and health related professions and "paraprofessional" fields. The focus of the course will be on the development of professional education in allied health and safety fields, and students will be able to pursue research regarding education and training programs from particular safety and health disciplines and paraprofessional fields.
- PSHA 441 Special Topics in Public Safety and Health Administration (1 Sem. Hr.)**
PSHA 442 Special Topics in Public Safety and Health Administration (2 Sem. Hrs.)
PSHA 443 Special Topics in Public Safety and Health Administration (3 Sem. Hrs.)
PSHA 444 Special Topics in Public Safety and Health Administration (4 Sem. Hrs.)
 These courses will be offered on occasion of student demand or need.
- PSHA 446 Public Sector Organizational Theory and Management (3 Sem. Hrs.) (Also listed as CJ 446)**
 This course examines the structure and functioning of public sector organizations focusing on agencies involved in the areas of public safety and health administration. Major theories and concepts relating to structure, behavior, and management practices of public organizations are examined.

- PSHA 448 Managing the Public Safety and Health Emergency (3 Sem. Hrs.)**
Prerequisite: This course is open only to majors in PSHA, CJ, Health and Wellness, or Health Science, or by permission of a PSHA faculty member
 This course utilizes case studies and current literature to examine issues involved in preparation for and response to various situations faced by responders to major incidents involving public safety and health emergencies and crises. Special focus is placed on the structure and functioning of an incident command system under the National Incident Management System.
- PSHA 451 Environmental Health and Regulation (3 Sem. Hrs.) (Also listed as HS 451)**
 This course provides an in-depth examination of the creation, development, and operations of governmental processes and agencies at all levels relating to environmental awareness and protection activities in the public sector. The interactions among the historical development of environmental awareness in America, the emergence of the Environmental Movement and advocacy groups, and various governmental actors are examined. The course examines governmental responses in terms of the creation of environmentally-focused agencies, passage of legislation, and administrative rule-making and regulation.
- PSHA 455 Ethics in the Public Sector (3 Sem. Hrs.) (Also listed as CJ 455 and PO 455)**
 This course examines ethical issues encountered by employees of governmental agencies, both in terms of management practices and interactions with the public. The course explores application of codes of ethics, theories of ethical decision making, and ethical principles impacting various aspects of the public sector.
- PSHA 465 Senior Research Project (4 Sem. Hrs.) (Also listed as PO 465)**
Prerequisites: Public Safety Health Admin. major and consent of instructor
This capstone course should be taken during or near the time of the student's final semester. The student will work closely with the professor in researching and writing a major research paper in an area of their major field that is relevant to the student's career objectives. The student will give an oral presentation of the research findings to other students in the class and faculty members. The instructor may require an observation experience(s) depending on the student's prior background in the subject area. The student will also complete an exit exam covering the principal sub-fields of the discipline of their major.

Religion (RE) [Please see catalog [addendum](#) for revised course descriptions]

Please see catalog addendum for revised Religion course descriptions.

Please see catalog addendum for revised Religion course descriptions.

Please see catalog addendum for revised Religion course descriptions.

Secondary Education (SC)

SC 331 Classroom Management in Secondary Education (3 Sem. Hrs.)

Prerequisite: Admission to the Teacher Education Program

Field experience is required. This course is designed to facilitate the acquisition of professional attributes, to improve oral and written communication skills, to acquire classroom management skills appropriate for middle and high school classrooms and become cognizant of the impact of significant educational trends and issues.

SC 333 Teaching Reading/Writing in the Content Areas (3 Sem. Hrs.)

Prerequisite: Admission to the Teacher Education Program

Course requirements include mandatory campus-based training. Consult the College of Education Calendar of Events Webpage for more information. Teaching Reading and Writing in the Content Area is designed to model creative strategies to promote reading comprehension, vocabulary development, English as a Second Language strategies, and study skills in humanities, social sciences, natural sciences, mathematics, collaborative education, and vocational education for students in middle school and secondary school.

SC 362 Assessment and Evaluation in Secondary Education (3 Sem. Hrs.)

Prerequisite: Admission to the Teacher Education Program

This course addresses issues related to creating effective assessment tools for classroom use, factors which impact student performances and achievement, and strategies to effectively assess student understanding. Standardized tests are also studied along with the foundation of analysis and interpretation as well as the effects of "high stakes" testing.

SC 486 Internship in High School (6-12 Sem. Hrs.) (Teaching Internship fee)

Prerequisites: Admission to the Teacher Education Program, satisfactory completion of all TEP courses, and clearance by the Internship Office

Fifteen-week internship program. This culminating experience of the Teacher Education Program provides practical experience in teaching classes in state-accredited schools under the guidance of a cooperating teacher and supervision by a University supervisor. Seminar attendance is required.

Special Education (SE)

SE 301 Survey of Exceptional Learners (3 Sem. Hrs.)

A general survey course which addresses etiology, identification, incidence, curriculum modification, parent interaction, placement options, and inclusion of all types of educationally exceptional learners in general education settings. Includes required SDE training in Addressing Disproportionality In Alabama Schools.

SE 303 Introduction to Early Childhood Special Education (3 Sem. Hrs.)

Prerequisite: SE 315

This course provides a rationale for Early Childhood Special Education programs covering legislative, empirical evidence, and ethical considerations. The course provides information pertaining to typical development and factors affecting that development. Partnerships with families are discussed pertaining to family-centered practices, family support systems, and elements of effective

partnerships. Developmental domains such as gross-motor development, fine motor development, self-care skills, cognitive development, communication development, and social/emotional development are also taught within this course.

- SE 315 Characteristics and Identification of Low Incidence Disabilities (3 Sem. Hrs.)**
Prerequisite: SE 301
This course provides an overview of causes, characteristics, educational needs of, and issues associated with mental retardation, orthopedic impairments, and other health impairments.
- SE 325 Characteristics and Identification of High Incidence Disabilities (3 Sem. Hrs.)**
Prerequisite: SE 301
This course provides an overview of causes, characteristics, and issues associated with learning disabilities, emotional disabilities, and behavioral disabilities.
- SE 335 Curriculum Development and Adaptations (3 Sem. Hrs.)**
Prerequisites: Math or reading courses (ER 323 or EL 324) as well as SE 301 or concurrent enrollment
This course teaches the sources and development of appropriate curricula for a wide variety of students. It will include familiarity with state courses of study for inclusive settings as well as intense curricula for social and occupational needs in the special education setting.
- SE 355 Curriculum and Instruction for Learners with High Incidence Disabilities (3 Sem. Hrs.)**
Prerequisites: ER 323, SE 325, and SE 402
Field experience is required. This course provides the pre-service teacher with alternative corrective procedures for a variety of academic, social, and occupational problems. Lee v. Macon Training on "Makes Sense Strategies" is included.
- SE 400 Methods Adapting Early Childhood Curricula for Children with Special Needs (3 Sem. Hrs.)**
Prerequisite: SE 315
This course provides a strong emphasis on the importance of understanding the natures of all young children and how they learn. A thorough understanding of the complex development domains such as social-emotional, motor, communication, and cognitive skills will be emphasized throughout this course. Strategies for meeting the developmental education needs of infants and young children who have disabilities or who experience circumstances or conditions that potentially interfere with optimal growth and adjustment will be the focus.
- SE 402 Assessment of Exceptional Learners (3 Sem. Hrs.) (Lab fee)**
Prerequisites: SE 301 and SE 315 or SE 325
This course provides training and hands-on experience with formal & informal tests and rating scales for use with exceptional students at elementary and secondary school levels. Topics include basic concepts of measurement, test development and technical characteristics, test administration, test scoring, and score interpretation. Administration of a battery of tests and preparation of a formal report are required.
- SE 415 Transition Planning and Learning Strategies for Adolescents with Disabilities (3 Sem. Hrs.)**
Prerequisite: SE 301, 315, 325, or concurrent enrollment
This course provides Collaborative 6-12 majors with strategies for preparing secondary students with disabilities for successful high school experiences and for a variety of post-school outcomes.
- SE 425 Collaboration for Instruction and for Program Planning (3 Sem. Hrs.)**
Prerequisite: Admission to the Teacher Education Program
This course provides models of collaboration which can be implemented in any public school setting. Furthermore, collaborative techniques which address interaction with a wide variety of stakeholders throughout the special education process will be addressed. Legal requirements of the Individuals with Disabilities Education Improvement Act (IDEA), its accompanying federal regulations, and state requirements will be thoroughly investigated. Requirements of the course include written Individual Education Plans (IEPs) which are legally defensible and participation in simulated special education process meetings. This course has no field experience.
- SE 435 Curriculum and Instruction for Learners with Low Incidence Disabilities (3 Sem. Hrs.)**
Prerequisites: SE 315, SE 355, SE 402, and Admission to the Teacher Education Program
Course requirements include mandatory campus-based training. Consult the College of Education Calendar of Events Webpage for more information. Seven days of field experience are required. This course provides training and hands-on experience with intervention strategies for students with severe cognitive, physical, and emotional disabilities. It will include intensive field experience in functional skills, movement and medical procedures, and in functional behavior assessment and planning behavior interventions. Senior methods portfolio will be submitted during this capstone class.
- SE 455 Language Development and Developmental Interactions (3 Sem. Hrs.)**
Prerequisite: SE 301, 315, 325, or concurrent enrollment
This course emphasizes the development of language (including phonology, morphology, syntax, semantics, and pragmatics), cognitive, social development and their relationship to language development. Topics include theory and stages of language and cognitive development and strategies and materials used to meet the developmental needs of young children who are developing typically and those with developmental delay and disability.
- SE 465 IEPs and Other Legal Issues (3 Sem. Hrs.)**
Prerequisite: Admission to the Teacher Education Program
This course provides an overview of laws and regulations governing the implementation of special education services including federal and state regulations as well as relevant court cases. It will include development of IEPs for a variety of students. Senior methods portfolio will be submitted in this course.

- SE 476 Internship for Collaborative Education K-6 (6-12 Sem. Hrs.) (Teaching Internship fee)**
Prerequisites: *Admission to the Teacher Education Program and clearance by the Internship Office*
 Fifteen-week internship program. This culminating experience of the Teacher Education Program provides practical experience in teaching classes in state-accredited schools under the guidance of a cooperating teacher and supervision by a University supervisor. Seminar attendance is required.
- SE 477 Internship for Collaborative Education K-6 (3 Sem. Hrs.) (Teaching Internship fee)**
Prerequisites: *Admission to the Teacher Education Program and clearance by the Internship Office*
 Seven-week internship program for persons seeking certification through the Elementary/Collaborative K-6 degree.
- SE 478 Internship for Collaborative Education 6-12 (6-12 Sem. Hrs.) (Teaching Internship fee)**
Prerequisites: *Admission to the Teacher Education Program and clearance by the Internship Office*
 Fifteen-week Internship Program. This culminating experience of the Teacher Education Program provides practical experience in teaching classes in state-accredited schools under the guidance of a cooperating teacher and supervision by a University supervisor. Seminar attendance is required.
- SE 495 Classroom Management and Discipline (3 Sem. Hrs.)**
Prerequisites: *SE 301 and either SE 315 or SE 325*
 This course is designed to develop students' understanding of classroom dynamics and behavioral problems. Topics include physical environment management and curriculum management as well as a variety of disciplinary strategies. Functional behavioral assessment and behavior intervention/management planning are covered. Course includes Lee v. Macon Training on Positive Behavioral Supports.

Social Science (SS)

- SS 300 Culture and Globalization (3 Sem. Hrs.)**
 Globalization has brought myriad cultures into intimate contact with each other through business and travel. An understanding of the basic concepts of cultural anthropology as applied to contemporary cultures will promote better understanding and empathy in a globalized world.
- SS 430 Globalization: Concepts and History (3 Sem. Hrs.) (Also listed as HY 430)**
 Globalization is a phenomenon that in the last fifty years has come to be explicitly recognized in the worlds of politics, economics, and culture. It also has ancient roots. This course will investigate the history, historiography, themes, and concepts associated with globalization.
- SS 450 Materials and Methods of Teaching the History and Social Sciences in the Middle School/High School (3 Sem. Hrs.) (Also listed as HY 450)**
Prerequisite: *Admission to the Teacher Education Program*
 Senior methods portfolio must be submitted during this class (LiveText required). This course is intended to enhance students' abilities to plan, implement, and evaluate instructional activities in teaching history and social sciences and to select and use appropriate materials and equipment. Knowledge of the history and social sciences curriculum and middle and high school student characteristics will be increased. Students will actively participate in demonstrating and modeling strategies and techniques. The role of research will be emphasized.

Sociology (SO)

- SO 301 Gender and Multicultural Studies (3 Sem. Hrs.) (Also listed as PS 301)**
 This course is an introduction to the concepts, terminology, and issues in gender and multicultural studies including exploration of America's multicultural composition, gender as an element of culture, and contemporary issues in the field.
- SO 304 Sociology of Work (3 Sem. Hrs.)**
 This course consists of sociological analysis of work in pre-industrial and industrial societies; a consideration of problems involved in the conceptual and empirical study of occupations and professions; an examination of the process of professionalism; and the study of leisure and the social consequences of changes in occupations and professions.
- SO 312 Majority/Minority Group Relations (3 Sem. Hrs.)**
 This course is a study of the principles and processes which shape the patterns of relations between majority groups, racial, ethnic, and other groups, with emphasis on American society, along with a comparison of intergroup relations in other societies.
- SO 314 Population Study (3 Sem. Hrs.)**
 This course examines the relationship of demographic factors to the social structure. Trends in fertility, mortality, population growth, distribution, migration, and composition will be investigated.
- SO 327 Sociology of Religion (3 Sem. Hrs.) (Also listed as RE 327)**
 This course looks at the interaction, interpretation, and interrelationships of religion, society, and individual morality in American religious behavior and institutions.
- SO 341 Statistics With Advanced Topics In Behavioral Science (3 Sem. Hrs.) (Also listed as PO 341 and PS 341)**
Prerequisite: *Precalculus Algebra or Finite Mathematics*
 This course looks at the use of descriptive and inferential statistics to analyze behavioral science data. Advanced inferential topics help prepare students for graduate school.

- SO 342 Methods of Behavioral Science Research (3 Sem. Hrs.) (Lab fee) (Also listed as PO 342 and PS 342)**
Prerequisite: It is strongly recommended that students take PS/SO/PO 341 prior to taking PS/SO/PO 342
 This course is concerned with theory design and collection of data in behavioral science research with emphasis on the techniques of collecting, analyzing, and interpreting behavioral science data.
- SO 345 Social Stratification (3 Sem. Hrs.)**
 Social stratification is the study of the unequal distribution of resources that are scarce, but widely desired, and of the processes by which these resources are allocated to individuals and groups in society. It encompasses the study of inequality along lines of income and wealth, occupational and class hierarchies, educational opportunity, poverty, inter and intra generational social mobility, gender, race and ethnicity, and the consequences of inequality for society.
- SO 351 American Public Policy/Political Sociology (3 Sem. Hrs.) (Also listed as PO 351)**
 This course explores factors that impact government's responses to a wide variety of social conditions. The process for making policy, the content of current policy, and the impact of policy receive attention.
- SO 352 Sociology of Health and Illness (3 Sem. Hrs.)**
 This course utilizes the sociological perspective to introduce a range of topics which illustrate the intimate connection between human behavior and health outcomes, the behavior of the healthcare institution, and the nature of the United States healthcare system.
- SO 353 Sociology of Death and Dying (3 Sem. Hrs.)**
 This course is a study of the sociological aspects of death and dying. This course will explore both the historical and contemporary issues within the sociology of death and dying. The study of death and dying will provide a foundation for dealing with death in your personal life as well as in your profession/career.
- SO 360 Contemporary American Family (3 Sem. Hrs.)**
 This course examines the origins and evolution of the American family as a social institution and the relationship of family structure to social organization. Emphasis will be placed upon the development of the family from colonial days to its contemporary forms and the larger social context within which the family has developed.
- SO 361 Social Analysis (3 Sem. Hrs.)**
 This course examines the basic principles of social organization including an examination of the structure and function of groups and complex organizations including social institutions, with special emphasis on their operation in American society.
- SO 362 Deviant Social Behavior (3 Sem. Hrs.)**
 This course is an in-depth examination of the social implication of labeling deviant behavior and its effects upon both the individual and society.
- SO 363 Social Structure and Personality (3 Sem. Hrs.)**
 This course analyzes the relationship of the culture and individual behavior through social influences.
- SO 441 Special Topics in Sociology (1 Sem. Hr.)**
SO 442 Special Topics in Sociology (2 Sem. Hrs.)
SO 443 Special Topics in Sociology (3 Sem. Hrs.)
SO 444 Special Topics in Sociology (4 Sem. Hrs.)
 These courses are a study of social issues and contemporary social problems and their consequences.
- SO 460 Sociological Theories (3 Sem. Hrs.)**
 This course examines the history of theories and principles of sociological theory with emphasis on current theory and its relationship to research.
- SO 461 Directed Study/Research in Sociology (1 Sem. Hr.)**
SO 462 Directed Study/Research in Sociology (2 Sem. Hrs.)
SO 463 Directed Study/Research in Sociology (3 Sem. Hrs.)
Prerequisite: Senior-level majors only
 These courses are designed to examine selected topics from a sociological perspective.
- SO 471 Aging in a Mass Society (3 Sem. Hrs.)**
 This course is a study of the aging process, the special problems encountered by the aging and by the institutions of society involved in the care of the aging.
- SO 498 Practicum in Sociology (3 Sem. Hrs.)**
Prerequisite: Consent of instructor
 This course provides the student an opportunity to experience the theoretical concepts and knowledge obtained in the classroom. The practicum entails approximately eight hours per week of supervised field experiences in appropriate community agencies, institutions, industrial or research settings, and bi-weekly in-class seminars.
- SO 499 Thinking, Writing, and Speaking in the Behavioral Sciences (3 Sem. Hrs.) (Also listed as PS 499)**
Prerequisite: Senior Standing
 All students majoring in the Behavioral Science department must take during their last semester prior to graduation. It will emphasize thinking, writing, and speaking effectively. Therefore, areas in which students are deficient will be emphasized individually, through writing and speaking engagements during the course. Students will be taught critical thinking skills and will be intermittently assessed for such skills through objective examinations. Also, students will be assessed upon completion of the course for improvement in critical areas.