

Course Descriptions

Listed below are the courses offered by departments of the University.

Courses numbered 100 to 199 are primarily for freshmen, 200 to 299 are primarily for sophomores, and 300 to 499 are primarily for juniors and seniors. Graduate credit is awarded for courses numbered 500, 600, 700, 800, and 900. Listing a 300 or 400 level course along with a companion 500 number indicates that undergraduate students register for the lower number and graduate students register for the upper number. Courses numbered 600, 700, 800, and 900 are open to graduate students only. Bracketed [] numbers indicate a previous identification of a course. Curricula are arranged so that students are to register for appropriate level courses each year. An H after a course number in this Catalog (e.g., English 101H, History 102H) designates an Honors course.

Common Course Numbering. Courses that are part of the Louisiana Statewide Common Course Catalog have a Louisiana Common Course Number, LCCN, bracketed [] with a Common Statewide descriptor, number, and course title. For example, [LCCN: CMAT 1213, College Algebra] is the cross-listing for Southeastern's college Algebra course. Additional information about Louisiana's Statewide Common Course Catalog can be found on the Board of Regents' website.

Credit Towards the Degree. Some courses are very similar in content to other courses. When a student takes two or more courses that have similar content, only one of the courses can be used toward the degree. Although the other course(s) cannot be used to satisfy a specific course requirement in the degree, all courses and grades will appear on the transcript and will be used in the calculation of the cumulative grade point average. In the calculation of the degree grade point average, however, since only the courses applicable to the student's curriculum are used, the other course(s) will not be included in the degree grade point average.

Descriptions of affected courses contain a phrase such as, "Credit toward the degree will not be granted for ...". Students should read the course descriptions in this section of the catalog, or consult with their academic department, if there are questions about whether or not credit for a course will be applicable toward the degree.

Minimum Length for Academic Courses. For one semester hour of credit, a class should meet approximately 750 minutes in no less than five days. For two semester hours of credit, a class should meet approximately 1,500 minutes in no less than ten days. A three-semester hour course should meet approximately 2,250 minutes in no less than 15 days. Final exam periods may be counted as class time when computing required minutes and required days.

Accounting (ACCT)

200. Introduction to Financial Accounting. [LCCN: CACC 2113, Introduction to Financial Accounting]. Credit 3 hours. Prerequisite: Sophomore standing. An introduction to corporate financial accounting systems including preparing, interpreting, and using financial statements. (Summer, Fall, Spring)

215. Applications of Technology for Accountants. Credit 3 hours. Prerequisite: "C" or better in ACCT 200. A study of the technological skills needed in common software applications used by accountants to reinforce accounting concepts and principles. A laboratory fee is required for this course. (Fall, Spring)

221. Intermediate Financial Accounting I. Credit 3 hours. Prerequisites: "C" or better in ACCT 200 and 2.1 cumulative GPA. A thorough review of the accounting information system emphasizing the accounting cycle, financial statements, and the environment of accounting. (Summer, Fall, Spring)

225. Managerial Accounting. [LCCN: CACC 2213, Introduction to Managerial Accounting]. Credit 3 hours. Prerequisite: ACCT 200. A study of managerial accounting including full cost, differential, and responsibility accounting systems. Emphasis is placed on procedures and methods designed to provide information for management decisions. (Not open to accounting majors). (Summer, Fall, Spring)

312. Intermediate Financial Accounting II. Credit 3 hours. Prerequisites: "C" or better in ACCT 221 and Junior standing. A continuation of ACCT 221 emphasizing accounting for the assets and liabilities of an entity. (Summer, Fall, Spring)

313. Intermediate Financial Accounting III. Credit 3 hours. Prerequisites: "C" or better in ACCT 312 and Junior standing. A continuation of ACCT 312 emphasizing accounting for leases, pensions, income taxes, corporate equity, accounting changes, statement of cash flows, and financial disclosures. (Summer, Fall, Spring)

315. Accounting Systems and Analytics. Credit 3 hours. Prerequisite: "C" or better in ACCT 215. A study of the systems that enable financial data to be collected, organized, and communicated; and a study of the tools and techniques used to analyze how financial and non-financial data are being used to make business decisions. (Fall, Spring)

320. Accounting Information Systems and Procedures. Credit 3 hours. Prerequisites: "C" or better in ACCT 221, OMIS 350, and Junior standing. A study of the system that enables accounting data to be collected, organized, and communicated in an efficient and effective manner. The course emphasizes the accountant's role in evaluating, designing, and controlling the flow of information. The course also develops skills in using common software applications used to automate accounting systems and perform other analyses. (Varies)

331. Cost and Managerial Accounting. [LCCN: CACC 3113, Cost Accounting (Upper Level)]. Credit 3 hours. Prerequisites: "C" or better in ACCT 221 and Junior standing. A study of the concepts, objectives, and procedures of cost and managerial accounting. Topics include cost volume-profit analysis; job costing and process costing systems; activity-based costing; standard costing and variance analysis; budgeting; and relevant information for decision making. (Fall, Spring)

340. Financial Statement Analysis. Credit 3 hours. Prerequisites: Junior standing and ACCT 225. Interpretation, analysis, and evaluation of financial reports primarily from the viewpoints of company managers, investors, and creditors. (Not open to accounting majors.) (Varies)

341. Tax Accounting. [LCCN: CACC 3213, Tax I (Upper Level)]. Credit 3 hours. Prerequisites: "C" or better in ACCT 221 and Junior standing. An introductory course in the fundamentals of federal income taxation. Coverage will primarily focus on the federal tax law as it relates to individuals. (Fall, Spring)

391. Accounting Internship I. Credit 3 hours. Prerequisites: "C" or better in ACCT 312 and 3.0 cumulative Accounting GPA. Provides training and experience through an assignment with a cooperative CPA firm, company, or government agency selected or approved by the Accounting Internship Coordinator. Students will earn three semester hours credit for their 300 hours of approved work experience. Accounting Internship is an accounting elective and will receive a grade of Pass or Fail only. (Summer, Fall, Spring)

393. Accounting Internship II. Credit 1-3 hours. Prerequisites: "C" or better in ACCT 312 and 3.0 cumulative Accounting GPA. Students can earn one semester hour of credit for each 100 hours of approved work experience. The work assignment must be different from that of ACCT 391, if ACCT 391 is taken. ACCT 393 does not count as an accounting elective in the accounting degree program and will receive a grade of Pass or Fail only. The course may be repeated for a total of six credit hours with approval of the Accounting Internship Coordinator. (Summer, Fall, Spring)

395H. Ethics, Judgment, and Decision Making. Credit 3 hours. Prerequisite: Active status in the University Honors Program or permission of Department Head. An honors course to help students answer the question, "What's the right thing to do?" In addition, students will explore the question, "Once I know what to do, how can I summon the organizational support to help me to act in accordance with my intentions?" The course will involve the study of theoretical perspectives on ethics, judgment, and decision making and the application of those perspectives in business and accounting. Open to all majors. (Varies)

400/500. Accounting for Governmental and Not-for-Profit Organizations. Credit 3 hours. Prerequisites: "C" or better in ACCT 312 and Senior or Graduate standing. A study of the specialized accounting, reporting, and auditing requirements applicable to governmental and not-for-profit organizations, as well as issues related to their performance evaluation. Additional work will be required for 500 credit. (Varies)

406/506. Accounting Theory. Credit 3 hours. Prerequisites: "C" or better in ACCT 313, Senior or Graduate standing. A study of past attempts to develop a coordinated statement of accounting theory; an examination of accounting theory with emphasis on financial accounting concepts; and a discussion of the application of accounting concepts to cost, revenue, income, assets, liabilities, and equities. Additional work will be required for 506 credit. (Varies)

407. Auditing. [LCCN: CACC 3313, Auditing (Upper Level)]. Credit 3 hours. Prerequisites: "C" or better in ACCT 313 and Senior standing. A study of audit theory and practice, internal control, audit program development, evidential matter; technology, and reporting. Emphasis will be given to discussion of the ethical, social, and economic forces informing audit judgment. (Summer, Fall, Spring)

411. Advanced Financial Accounting. Credit 3 hours. Prerequisites: "C" or better in ACCT 313 and Senior standing. A study of advanced accounting concepts including corporate consolidations, partnerships, international issues, and not-for-profit organizations. (Summer, Fall, Spring)

413. Independent Study in Accounting. Credit 3 hours. May not be repeated. Prerequisites: "C" or better in ACCT 313, Senior standing, and the permission of Department Head. A course designed primarily to study current accounting issues in an area mutually agreed upon by the instructor and student. (Varies)

432. Advanced Cost Accounting. Credit 3 hours. Prerequisites: C or better in ACCT 331 and Senior standing. A study of advanced topics in cost and managerial accounting include cost allocation, long and short-range budgeting, quantitative techniques for planning and decision making, cost and profit analysis, marginal income analysis, cost of quality, and generating new plans and making corrective actions. (Varies)

442/542. Advanced Tax Accounting. [LCCN: CACC 3223, Tax II (Upper Level)]. Credit 3 hours. Prerequisites: "C" or better in ACCT 341 and Senior or Graduate standing. A course in the federal income taxation of taxpayers other than individuals. Coverage will primarily focus on the federal tax law as it relates to corporations, shareholders, partnerships, and partners. Additional work will be required for 542 credit. (Varies)

444/544. Valuation and Financial Analysis. Credit 3 hours. Prerequisites: ACCT 200 and FIN 381. A study of methods of analytical approaches to financial statements for credit analysis and security valuation. (Varies)

495/595. Special Topics. Credit 3 hours. Prerequisite: "C" or better in ACCT 221. A course focusing on selected current issues in accounting. Course may be repeated up to two additional times for credit with new topics. (Varies)

605. Ethics in Accounting. Credit 3 hours. Prerequisites: ACCT 200 (or equivalent as determined by the department head) and Graduate Standing. A study of ethical perspectives and the application of those perspectives to judgment and decision making in business and accounting contexts. Students who have received credit for ACCT 395H are not eligible for credit. (Varies)

607. Advanced Auditing. Credit 3 hours. Prerequisites: "C" or better in ACCT 407 (or equivalent as determined by the Department Head) and Graduate standing. A study of audit theory and practice accomplished through the analysis of professional standards, current events affecting the professional environment, professional literature, technology, and significant cases impacting the profession. (Varies)

615. Data Analytics for Business and Accounting. Credit 3 hours. Prerequisites: "C" or better in ACCT 200 and Graduate standing. A study of the concepts, tools, and techniques used to analyze how financial and non-financial data are being used to make business decisions. (Varies)

620. Advanced Accounting Information Systems. Credit 3 hours. Prerequisites: "C" or better in ACCT 320 (or equivalent as determined by the Department Head) and Graduate standing. The study of advanced topics relating to accounting information systems including the analysis of selected professional standards; the evaluation, design and control of systems; and the development of skills using common software applications used to perform advanced analyses. (Varies)

625. Accounting for Business Decisions. Credit 3 hours. Prerequisites: "C" or better in ACCT 200 (or equivalent as determined by the Department Head) and Graduate Standing. The fundamental accounting concepts and techniques that relate to planning and control are reviewed. An investigation is made of the concepts that underlie cost behavior patterns, responsibility accounting, cost allocation, and cost systems. Techniques used in budgeting, long-range planning performance measurement and break-even analysis are developed. (Fall, Spring)

661. CPA Review. Credit 3 hours. Prerequisite: Graduate Standing and Department Head permission. A course focusing on preparing students for successful completion of the licensing exam to become a certified public accountant. Course may be repeated up to two times for transcript credit with new topics. The first 3 hours of ACCT 661 alone count towards the MBA degree. Pass or fail only. (Varies)

691. Accounting and Financial Analysis Internship. Credit 3 hours. Prerequisites: Graduate standing and registration in the MBA with a concentration in Accounting and Financial Analysis program or Department Head approval. A course to provide engagement with the profession through professional experience. Learners will earn three hours of credit for a minimum of 300 hours of paid experience. This course is graded on a pass/fail basis. (Varies)

695. Special Topics in Accounting. Credit 3 hours. Prerequisites: ACCT 200 (or equivalent as determined by the Department Head) and Graduate standing. A seminar course focusing on selected current issues in accounting. Course may be repeated for credit with new topic. (Varies)

Applied Computing Technology Software (ACTS)

472. Internet Programming 1. Credit 1 hour. Prerequisite: Junior standing or permission of the Department Head. An intensive course on basic coding in HTML and XML for online publishing. One to two hours of lecture and/or lab per week (based on 15-week semester). A laboratory fee is required for this course. (Varies)

473. Internet Programming 2. Credit 1 hour. Prerequisite: Junior standing or permission of the Department Head. An intensive course on coding in PHP, JavaScript, and jQuery for server-side interactivity in online publishing. One to two hours of lecture and/or lab per week (based on 15-week semester). A laboratory fee is required for this course. (Varies)

474. Web Management. Credit 1 hour. Prerequisite: Junior standing or permission of Department Head. A study of content management systems, introducing database and server management techniques for online publishing. One to two hours of lecture and/or lab per week (based on 15-week semester). A laboratory fee is required for this course. (Varies)

Anthropology (ANTH)

101. Cultural Anthropology. [LCCN: CATR 2013, Cultural Anthropology]. Credit 3 hours. A study of the nature and components of culture and the diversity of human cultures. (Varies)

110. Introduction to Physical Anthropology. [LCCN: CATR 2023, Biological Anthropology]. Credit 3 hours. Evolutionary processes, including adaptation and speciation; examination of fossil and archaeological records of non-human primate and human morphological and social-behavior evolution. (Varies)

301. Exploring Archaeology. Credit 3 hours. An introduction to the past as revealed by the archaeological record. (Fall)

352. Comparative Family Patterns. Credit 3 hours. Prerequisite: Sophomore standing. Also taught as SOC 352. A comparison of selected family patterns in various cultures. Attention given to role performance in each society and comparison of norms, values and attitudes related specifically to the family. Credit is not to be given for both ANTH 352 and SOC 352. (Varies)

400/500. Independent Study. Credit 1-3 hours. Prerequisites: Consent of the Department Head and Junior standing. Student works with an instructor on a one-to-one basis and prepares a research report on an appropriate topic. May be repeated in one to three-hour credits for a total of 6 hours. New materials are investigated in each repeat. (Varies)

401/501. Special Topics in Anthropology. Credit 3 hours. Prerequisite: Junior standing or consent of the Department Head. An in-depth study of a particular anthropological topic. May be repeated for a total of six hours. (Varies)

403. Archaeological Studies. Credit 3 hours. Prerequisite: ANTH 101. An examination of the goals, methods, techniques, and interpretation of archaeological investigation. (Spring)

405/505. Indigenous Peoples of the Americas. Credit 3 hours. Prerequisite: Anthropology 101, Junior standing, or instructor consent. Also offered as Geography 405/505. Examination of the origin, distribution, ecology, culture and social systems of indigenous populations of the New World. May not be used for credit with GEOG 405/505. (Fall)

410/510. Culture and the Environment. Credit 3 hours. Prerequisite: ANTH 101, Junior Standing, or permission of Department Head. A study of the diverse and complex interactions between human culture and the environment. (Varies)

411/511. Race and Ethnic Relations. Credit 3 hours. Prerequisites: SOC 101 or ANTH 101 and Junior standing or consent of the Department Head. Also taught as SOC 411/511. Designed to give an insight into the attitudes of groups, where interrelations are marked by antagonism, discrimination, and conflict. Influence on community welfare considered. Credit is not to be given for both ANTH 411 and SOC 411/511. (Summer, Fall, Spring)

698. Special Topics in Anthropology. Credit 3 hours. Selected topics in areas not available in existing courses. May be new or unique issues or contemporary anthropological topics relevant to various social issues. May be repeated for credit when different topics are studied. (Varies)

Visual Arts (ART)

105. Survey of World Art History I. [LCCN: CART 2103, Art History I]. Credit 3 hours. One semester chronological survey of world art and architecture from the Paleolithic to the Late Gothic eras. Emphasis varies with instructor. Three hours of lecture per week. (Summer, Fall, Spring)

106. Survey of World Art History II. [LCCN: CART 2113, Art History II]. Credit 3 hours. One semester chronological survey of the world art and architecture from the Late Gothic to the present era. Emphasis varies with instructor. Three hours of lecture per week. (Summer, Fall, Spring)

111. Basic Drawing. [LCCN: CART 2203, Beginning Drawing]. Credit 3 hours. An introduction to the materials, skills, and techniques of the drawing process. Six hours of studio a week. A laboratory fee is required for this course. (Summer, Fall, Spring)

112. Intermediate Drawing. [LCCN: CART 2213, Figure Drawing]. Credit 3 hours. Prerequisite: ART 111. Students will investigate the materials and techniques used in drawing – with emphasis on content, the relationship between media to surface, and presentation. The ability 'to see' will be developed through careful observation from life and the human figure, while formal approaches will challenge students to explore a variety of drawing processes. Six hours of studio a week. A laboratory fee is required for this course. (Fall, Spring)

115. Basic Ceramics. Credit 3 hours. A basic introductory course in the techniques of wheel-thrown and hand-built forms, exploration of glazes and glazing procedures, and firing of clay forms. Six hours of studio a week. A laboratory fee is required for this course. (Summer, Fall, Spring)

117. Printmaking I. Credit 3 hours. This course is an introduction to the methodologies and concepts of the relief, intaglio, and silkscreen printmaking techniques. Students will gain a working knowledge of the tools, materials, and equipment of a variety of traditional printmaking techniques while creating original prints in a professional studio environment. Six hours of studio a week. A laboratory fee is required for this course. (Summer, Fall, Spring)

122. Basic Digital Photography. Credit 3 hours. This course introduces students to the techniques and concepts of photography in a digital platform. Students will receive instruction in basic picture taking techniques, photographic composition, basic digital image correction and output in the digital studio. Assignments emphasize the creative use of photography and encourage enhanced visual literacy. Six hours of studio per week. A laboratory fee is required for this course. (Fall, Spring)

124. Basic Darkroom Photography. Credit 3 hours. Prerequisite: Art 122 or permission of Department Head. This course provides a technical foundation in photography using the traditional darkroom. Students are introduced to analogue techniques and equipment, learn to develop film and produce black and white prints. Assignments and critiques familiarize students with the importance of this equipment in contemporary practice as well as the history of the medium. Emphasis is placed on the connection between content and technique with a development of personal vision. A laboratory fee is required for this course. (Fall, Spring)

151. Foundations in Visual Language I: Introduction to Design + Color. [LCCN: CART 2303, Color Theory]. Credit 3 hours. This course is designed to introduce students to the fundamentals of design, color theory, and visual language, while identifying connections between traditional methods and contemporary practices. An emphasis will be placed on craft, vocabulary, and critique dialogue, as students develop studio working methods. Six hours of studio a week. A laboratory fee is required for this course. (Summer, Fall, Spring)

152. Intermediate 2/D Design [LCCN: CART 1113, Art Structure/2-D Design]. Credit 3 hours. Prerequisite: ART 151. Continuation of design techniques including color characteristics, intervals, and mixtures. Six hours of studio a week. A laboratory fee is required for this course. (Fall, Spring)

153. Basic 3/D Design. [LCCN: CART 2303, Color Theory]. Credit 3 hours. A course introducing spatial and formal techniques pertaining to real space and three-dimensional materials. Students will explore formal elements and principals of design in relation to structure, spatial awareness, sculptural materials and technical processes in the practice of three-dimensional design. Six hours of studio a week. A laboratory fee is required for this course. (Fall, Spring)

154. Foundations in Visual Language II: Digital Media, Concepts and Inquiry. Credit 3 hours. Prerequisites: ART 151 or permission of Department Head. This course continues to expand students' foundational understanding of design and color theory while exploring practices and applications of digital media. Students will explore a variety of disciplines such as photography, animation, video, graphic design, and interdisciplinary processes. An emphasis will be placed on technology used in art production, project management, invention, and execution. Six hours of studio a week. A laboratory fee is required for this course. (Summer, Fall, Spring)

160. Typography. Credit 3 hours. Prerequisites: ART 111 and 151 or permission of Department Head. This course introduces the fundamentals of typography and focuses particularly on how typographic form and visual arrangement create and support content. Course work employs both handwork and computer technology. Typographic history and theory are discussed in relation to course projects. Six hours of studio a week. A laboratory fee is required for this course. (Fall, Spring)

161. Print Design I. Credit 3 hours. Prerequisites: ART 111, 151 and registration in or prior credit for ART 160 or permission of the Department Head. This course is an introduction to the history and concepts of communication design including typography; integration of type and image; and compositional structures utilizing digital technology. Graphic design industry prepress standards will be introduced. Six hours of studio a week. A laboratory fee is required for this course. (Fall, Spring)

164. Painting I. Credit 3 hours. Prerequisite: Art 111 or permission of Department Head. This course focuses on providing students with a technical foundation in the craft of painting. Students will be introduced to the material and techniques of the painting process. Historical and contemporary examples of painting will be utilized to increase the students' understanding of painting methods. Six hours of studio per week. A laboratory fee is required for this course. (Fall, Spring)

190. New Media and Animation I. Credit 3 hours. Introduction to theory and practice of digital image manipulation and creation. Students will explore basics of using the computer as an expressive art-making tool including use of vector and raster graphic software, basic animation, an introduction to the web as an artistic medium and digital photography techniques. Six hours of studio a week. A laboratory fee is required for this course. (Fall, Spring)

215. Intermediate Ceramics. Credit 3 hours. Prerequisite: ART 115 or permission of the Department Head. Continuation of ceramic techniques in wheel throwing and hand building, glazing and firing. Six hours of studio a week. A laboratory fee is required for this course. (Summer, Fall, Spring)

217. Printmaking II. Credit 3 hours. Prerequisite: ART 117. This course will introduce the methodologies and concepts of photo-based and digital printmaking techniques. Students will gain a working knowledge of the tools, materials, and equipment of a variety of photo-based and digital printmaking processes. Students will create original prints in a professional studio environment. Six hours of studio a week. A laboratory fee is required for this course. (Summer, Fall, Spring)

218. Screen Printing. Credit 3 hours. This course is designed to teach students the principles and concepts of the screen-printing process. Students will explore the artistic and commercial applications of this process including image preparation, stencil making, screen mesh selection and screen exposure. Students will also explore a variety of printing techniques as well as ink and surface compatibility. Six hours of studio a week. A laboratory fee is required for this course. (Fall)

220. Intermediate Photography. Credit 3 hours. Prerequisite: ART 122 or permission of Department Head. This course is designed to refine the techniques and ideas of students working in photography at an intermediate level. Students will complete assignments to expand technical skills in all aspects of the workflow: from image capture, to image manipulation, to archival inkjet printing. Assignments, lectures and readings address theoretical concepts based in historical and contemporary discourses surrounding photography. Students work toward refining ideas and interests through a series of directed projects. A laboratory fee is required for this course. (Varies)

231. Sculpture I. Credit 3 hours. Prerequisite: ART 153. This course is an introduction to concepts and techniques practiced in contemporary sculpture. Through a continuation of experiences gained in ART 153, Three-Dimensional Design, students will expand their knowledge of spatial concepts pertaining to sculpture. Emphasis will be placed on creative problem solving and the development of skills in working with a variety of materials and techniques including welding, wood construction, assemblage and plastic media. Six hours of studio a week. A laboratory fee is required for this course. (Summer, Fall, Spring)

261. Print Design II. Credit 3 hours. Prerequisites: ART 160 and 161 or permission of the Department Head. Exploration of intermediate level graphic design for print with references to graphic design history. Emphasis is placed on complex digital pre-press print concerns. Six hours of studio a week. A laboratory fee is required for this course. (Fall, Spring)

281. Basic Painting. Credit 3 hours. Prerequisite: ART 111. Introduction to painting techniques, canvas preparation, and basic framing. Six studio hours per week. A laboratory fee is required for this course. (Fall, Spring)

284. Painting II. Credit 3 hours. Prerequisite: ART 184 or permission of Department Head. An exploration of the visual language of painting and its relationship to personal expression and content. Study is organized to consider painting techniques, materials, and methods. Work will be done from observation, memory, from imagination, and improvisation. Individual study of contemporary artists will also form part of the individual's exploration and conceptual development. Six hours of studio a week. A laboratory fee is required for this course. (Fall, Spring)

288. Special Topics – Painting and Drawing. Credit 3 hours. Prerequisites: ART 111, 151 and 117 or 281 or permission of Department Head. An exploration of specific topics related to drawing and/or painting. Content will change from semester to semester. May be repeated as topics change, for a total of six hours. Six hours of studio a week. (Varies)

290. New Media and Animation II. Credit 3 hours. Prerequisite: ART 190 or permission of the Department Head. A continuation in the study of computer-generated imagery, animation, interactive media and the Internet as an artistic medium. The course will focus on hyper narratives and an exploration of how electronic media are expanding and changing the role of the artist and the world in which s/he creates. Six hours of studio a week. A laboratory fee is required for this course. (Fall, Spring)

299. Sophomore Review. No Credit. Prerequisites: ART 105, 106, 151, 152, 153, 111, 112 or permission of Department Head. An assessment of student progress through foundation level classes. A committee of Visual Arts faculty will provide feedback on the student's progress and provide guidance in the selection of a specialty area. Students must present a selection of drawings, 2-D and 3-D artworks, and examples of artworks completed in their focus area. Students who do not earn a passing grade in ART 299 may repeat the course one time in order to earn a higher grade. Graded Pass/Fail. (Summer, Fall, Spring)

300. Special Topics – Studio. Credit 3 hours. Prerequisite: ART 299 or permission of Department Head. An inquiry into selected topics in visual art, including the theoretical and practical aspects of studio production. Content may vary from semester to semester. May be repeated for a total of nine credit hours, as topics vary. Six hours of studio a week. (Varies)

311. Advanced Drawing. Credit 3 hours. Prerequisites: ART 112 and 299 or permission of Department Head. Investigation and involvement in a variety of materials and techniques. Emphasis is placed on the inter-relationship of fundamentals, creative techniques, and exploration. Six hours of studio per week. May be repeated for a total of six hours. A laboratory fee is required for this course. (Fall, Spring)

315. Advanced Ceramics. Credit 3 hours. Prerequisites: ART 215 and 299 or permission of the Department Head. A continuation of hand-built and wheel-thrown forms, emphasis on glaze formulation and calculation kiln-firing and experimentation. Six hours of studio a week. May be repeated for a total of six credit hours. A laboratory fee is required for this course. (Summer, Fall, Spring)

317. Printmaking III. Credit 3 hours. Prerequisites: ART 217 and 299 or permission of Department Head. Advanced and specialized study within the printmaking processes of intaglio, relief, silkscreen and lithography. Digital images will be adapted to traditional processes. Emphasis on refinement of technique and individual creative expression with the printmaking process will be stressed. The exploration of content and the development of student ideas will be addressed. An advanced studio course with directed studies. Six studio hours a week. May be repeated for a total of six hours. A laboratory fee is required for this course. (Fall, Spring)

318. Screen Printing II. Credit 3 hours. Prerequisite: ART 218, 299, or permission of the Department Head. Advanced and specialized study within the screen-printing technique. Emphasis on refinement of technique and individual creative expression will be stressed. The exploration of content and the development of student ideas will be addressed. Six hours of studio a week. A laboratory fee is required for this course. (Fall, Spring)

319. Lithography. Credit 3 hours. Prerequisite: ART 117, 217, 299, or permission of the Department Head. This course will introduce the methodologies and concepts of aluminum plate lithography. Students will gain a working knowledge of the tools, materials, and equipment involved in creating original prints in a professional studio environment. A laboratory fee is required for this course. (Fall, Spring)

320. Art and the Environment. Credit 3 hours. Prerequisites: ART 299 or permission of the Department Head. This course asks students to examine the natural world as a subject for visual art as they consider the role artists can play in sustainability. Hands-on, field-based research in the local landscape will be supplemented by studio time, critique, and the exploration of artistic techniques and materials. Students will create a cohesive visual project informed by the interdisciplinary study of historic and contemporary ecocritical artists as well as regional and global environmental issues. A lab fee is required for this course. (Varies)

321. Advanced Photography. Credit 3 hours. Prerequisites: ART 220 and 299 or permission of Department Head. This course investigates the artistic aspects and technical procedures used in advanced image making. Students will employ advanced techniques in chemical and digitally assisted imagery. Each student will complete a self-directed, exhibition quality final portfolio. Class includes bi-weekly critiques, lab work and lectures, and readings on various photographic techniques and the history of photography. Six hours of studio per week. A laboratory fee is required for this course. (Fall, Spring)

322. Photography on Assignment. Credit 3 hours. Prerequisites: ART 122 and 299 or permission of Department Head. This course is designed to enhance students' exposure to industry-specific professional practices in photography and facilitate hands-on experience with photographic project management in real world applications. Students will examine discourse surrounding editorial photography, commercial photography, and portraiture as they execute a series of guided assignments. Topics covered will include portfolio preparation, file management, studio lighting, post-production, and subject/photographer relationships. Students will complete projects with focus on the technical, logistic, legal, and ethical concerns specific to photographic practices in the fields of commercial and editorial photography and their potential intersection with contemporary art practices. A laboratory fee is required for this course. (Varies)

333. Sculpture II. Credit 3 hours. Prerequisites: ART 231 and 299 or permission of Department Head. This course will explore major sculptural traditions. Students begin defining and developing their visual vocabulary and technical skills while completing studio assignments in traditional media. Students will research sculptural concepts and participate in discussions and critiques. Six hours of studio a week. A laboratory fee is required for this course. (Summer, Fall, Spring)

334. Sculpture III. Credit 3 hours. Prerequisite: ART 333. Individual studies in selected media. Emphasis is placed on individual development in contemporary methodologies, research, concepts and technical skills in order to produce a resolved body of work. Six hours of studio a week. A laboratory fee is required for this course. (Summer, Fall, Spring)

340. Greek and Roman Art. Credit 3 hours. Prerequisites: ART 105 or 106 or permission of Department Head. This course surveys the art and architecture of the ancient Greeks and Romans and provides brief introductions of Aegean and Etruscan art. Course content is presented chronologically and considers the styles, techniques, and historical context of the art works. Three hours of lecture a week (Spring)

343. Art in Context. Credit 3 hours. A variable content course. This course is an in-depth study of the art from a geographical region and/or historical period conducted as part of a study abroad program. May be repeated as topics vary. (Varies)

344. Special Topics in Art History. Credit 3 hours. Prerequisites: ART 105 or 106, or permission of the Department Head. The course is a detailed examination of a selected topic. Content may vary from semester to semester. Offerings will include such diverse subjects as specific styles, themes, techniques, media, or artists and their art works. The material is presented as lectures, a research paper, and field trips as applicable. May be repeated once for credit. Three hours of lecture a week. (Varies)

345. Survey of Graphic Design History. Credit 3 hours. Prerequisites: ART 105 or 106 and ENGL 101 or permission of Department Head. Investigation of graphic design, with the examination of its beginning to its current visual communication role. Included in this analysis will be its relationship to visual art, cultural influences, and technological developments. (Spring)

347. History of Photographic and Electronic Imaging. Credit 3 hours. Prerequisites: ART 105 or 106 and ENGL 101 or permission of Department Head. A chronological examination of the significant developments in photography leading up through the development of electronic means of creating and manipulating images. The course will explore the nature of this evolving medium, its relation to the culture in which it exists with emphasis on its reciprocity with other mediums in visual arts. Three hours of lecture a week. (Fall)

348. Baroque Art. Credit 3 hours. Prerequisites: ART 105 or 106 and ENGL 101 or permission of Department Head. This course presents European art of the seventeenth century by region, beginning with Italy and followed by Flanders, Spain, France, and the Netherlands. In conjunction with stylistic developments of individual artists, issues such as political geography, religious conflict, and changing social structures are addressed. Three hours of lecture a week. (Spring)

361. Print Design III. Credit 3 hours. Prerequisites: ART 261 and 299 or permission of Department Head. Complex print design problems and digital pre-press exploration of contemporary communication in graphic design. These may include multi-page publication and package design. Six hours of studio per week. A laboratory fee is required for this course. (Fall, Spring)

362. Motion Design. Credit 3 hours. Prerequisites: ART 261 and 299 or permission of Department Head. This course will investigate the use of motion within the context of typography and image in graphic design as this applies to client and product promotion and communication. Exploration will include branding, animation and contemporary communication design as applied to the movie and television industries. Six hours of studio per week. A laboratory fee is required for this course. (Spring)

371. Art for the Elementary Teacher. Credit 3 hours. Prerequisite: Junior standing. Designed specifically for majors in Elementary Education. A critical analysis of past and present concepts of art education and a study of materials, techniques, activities, and curricula suitable for use in the

elementary school program. Lecture, studio, and competency-based clinical practice required. A laboratory fee is required for this course. (Summer, Fall, Spring)

373. Art Education in the Elementary School. Credit 3 hours. Prerequisite: ART 299. This course is a study of art education purposes, trends, policies, and art education's potential as a discipline. This course is an introduction to and exploration of media available for use by the elementary art educator. Students will earn a minimum of twenty (20) hours of direct teaching experience outside of class time. Lecture, lab, and competency-based clinical practice required. A laboratory fee is required for this course. (Spring)

374. Art Education in the Secondary School. Credit 3 hours. Prerequisite: ART 299. Theoretical and practical constructs in art curriculum development will be highlighted. Specific methodologies will be used to investigate traditional as well as contemporary modes of pedagogy. Media explorations appropriate to the secondary art program will also be highlighted. Students will earn a minimum of twenty (20) hours of direct teaching experience outside of class time. Lecture, lab and competency-based clinical practice required. A laboratory fee is required for this course. (Fall)

375/575. Arts and Crafts for Teachers of Special Education. Credit 3 hours. Prerequisites: Junior standing and ART 371 or permission of the Department Head. Experience with art materials and techniques for the physically handicapped, mentally retarded, learning disabled, and gifted children. Course structure also includes practical experience with special children. One hour of lecture and four hours of studio a week. (Varies)

383. Intermediate Painting. Credit 3 hours. Prerequisites: ART 281 and 299 or permission of Department Head. A combined study of the materials and techniques of painting with emphasis on innovative approaches to content and form. Six hours of studio a week. A laboratory fee is required for this course. (Fall, Spring)

384. Painting III. Credit 3 hours. Prerequisites: ART 299 and 284 or permission of Department Head. Advanced studio course with directed studies. Six hours of studio a week. May be repeated for a total of six hours. A laboratory fee is required for this course. (Varies)

385. Thematic Inquiry in Painting, Printmaking, and Drawing. Credit 3 hours. Prerequisites: ART 217 or 218 or 284 and 299 or permission of Department Head. This course introduces students to working in an interdisciplinary manner using researched-based practices. Students will have the opportunity to work across various media, such as: painting, printmaking and drawing. Students will work through directed thematic assignments, informed by a variety of topics and conceptual approaches, relevant to the history of art and contemporary practices. Six hours of studio a week. A laboratory fee is required for this course. (Varies)

386. Advanced Studio Practice in Painting, Drawing & Printmaking. Credit 3 hours. Prerequisites: ART 299 or permission of the department head. An advanced self-directed studio course emphasizing technical refinement and individual creative expression. This course is intended to develop independence and a personal vision of the creative process. Students produce a unified body of work while engaging in consistent studio practice and critique. Students will have the opportunity to explore the creative possibilities of mixed-media and interdisciplinary techniques within drawing, painting, or printmaking. Six hours of studio a week. A laboratory fee is required for this course. (Varies)

388. Special Topics – Drawing and Painting. Credits 3 hours. Prerequisite: ART 299 or permission of Department Head. An in-depth exploration of specific topics relating to drawing and/or painting. Content will change from semester to semester. May be repeated as topics change for a total of six hours. Six hours of studio a week. (Varies)

390. New Media and Animation III. Credit 3 hours. Prerequisites: ART 290 and 299 or permission of Department Head. An exploration of interactive multimedia technologies for the creation and distribution of artistic content using electronic means. Course work will concentrate on the development of interactive applications and game production for desktop and mobile devices. There will be a focus on both asset creation and scripting for these types of applications. Readings and discussions will focus on technical, aesthetic, and theoretical issues relating to this evolving art medium. Six hours of studio a week. May be repeated for a total of 6 credit hours. A laboratory fee is required for this course. (Varies)

393. Three-Dimensional Digital Media and Animation. Credit 3 hours. Prerequisite: ART 299 or permission of Department Head. A studio course focusing on the production and animation of three-dimensional objects on the computer and in real space. Students will be introduced to concepts of 3-D animation for cinema, video, sculpture, or interactive and Web markets. Movement in three dimensional XYZ coordinate space, timelines and intervals will be studied as well as modeling, lighting, and texture mapping. Students will learn to render virtual objects on the computer and in real space using CNC mill technology. Students will become familiar with the history of the medium and contemporary art practice through the presentation of works by various artists, discussions and readings. Six hours of studio a week. A laboratory fee is required for this course. (Fall, Spring)

394. Time-Based Digital Media I. Credit 3 hours. Prerequisite: ART 299 or permission of the Department Head. A studio course focusing on the production of digital video within a fine art context. Students will be introduced to basic video shooting skills, non-linear digital video, image animation, and the creation of multi-element imagery for video. Students will create their own digital video works, with an emphasis on artistic expression and experimentation in the use of the video medium for projection, or performance/installation works. Students will become familiar with the history of the video medium and contemporary art practice through screenings of works by various artists, discussions and readings. Six hours of studio a week. A laboratory fee is required for this course. (Varies)

395. Independent Study. Variable Credit: 1, 2, or 3 hours. Prerequisite: ART 299 or permission of Department Head. A written proposal of the subject area and procedures, to be approved by the Department Head and the instructor. Option 1-Studio: Private instruction directed to expand the student's technical and innovative skills. Student may select from any studio area. Option 2-Art History: The selection and investigation of a specific art history topic. May be repeated for credit. (Fall, Spring)

396. Advanced Web Arts. Credit 3 hours. Prerequisites: ART 290 and 299 or permission of Department Head. An advanced computer art course that focuses on creating art for presentation on a computer screen or the Internet. Advanced web-based artworks, 2-D animation, scripting, and streaming video will be explored. Students will examine the changing dynamics of the computer and the Web as artistic mediums that challenge contemporary notions of how art is presented and understood. Six hours of studio a week. A laboratory fee is required for this course. (Varies)

397. The Digital Print. Credit 3 hours. Prerequisites: ART 299 and ART 221, or ART 290, or ART 217, or ART 261 or permission of Department Head. An advanced course examining mechanical means of creating a fine art print. Various format digital print methods will be explored. Students will be encouraged to utilize digital tools to create prints and to combine these with traditional printmaking and photographic practices. Six hours of studio a week. May be repeated for a total of six credit hours. A laboratory fee is required for this course. (Varies)

411. Senior Project: Drawing. Credit 3 hours. Prerequisite: ART 311 or permission of Department Head. An intensive study in drawing or related two-dimensional media intended to develop independence, professionalism and a personal vision in drawing. Six studio hours a week. May be repeated for a total of six credit hours. A laboratory fee is required for this course. (Fall, Spring)

415. Senior Project: Ceramics. Credit 3 hours. Prerequisite: ART 315 or permission of Department Head. Intense study of advanced studio problems in clay with emphasis on development of professionalism and high performance. May be repeated for a total of 6 credit hours. Six hours of studio a week. (Summer, Fall, Spring)

417. Senior Project: Printmaking. Credit 3 hours. Prerequisite: ART 317 or permission of Department Head. An intensive study in printmaking intended to develop independence, professionalism, and a personal vision of printmaking. Six studio hours a week. May be repeated for a total of six credit hours. A laboratory fee is required for this course. (Fall, Spring)

421. Senior Project Photography. Credit 3 hours. Prerequisite: ART 321 or permission of Department Head. This course teaches students to develop a long-term body of work. Students will shape and edit their project with the aid of targeted reading and writing assignments, research on the history of art and bi-weekly classroom critiques. Each student will ultimately create an exhibition quality portfolio, a selection of which will be featured in his or her senior exhibition. An emphasis will also be placed on career development and professional practice. May be repeated for a total of 6 credit hours. The two sections of ART 421 required for the Photography concentration must be taken consecutively. Six hours of studio per week. A laboratory fee is required for this course. (Fall, Spring)

422. Senior Projects in Visual Art + Design. Credit 3 hours. Prerequisite: ART 315, 322, 334, 361, 385, 386, 393, 394 or permission of Department Head. This culminating studio course teaches students to develop a long-term, ambitious body of work in preparation for thesis exhibition and portfolio. This intensive exploration of a capstone visual art project is intended to develop independence, professionalism, and a personal vision. Students enter the class prepared with the technical and conceptual expertise of their area of concentration. The interdisciplinary setting of this course is designed to broaden students' exposure to contemporary artmaking practices with an emphasis on expanding communication skills, project management, and creative research practices. May be repeated for a total of 6 credit hours. For those concentrations requiring two sections, they must be taken consecutively. Six hours of studio per week. A laboratory fee is required for this course. (Fall, Spring)

426. Internship: Photography. Credit 3 hours. Prerequisites: ART 421 and permission of Department Head. Field placement within the photography industry will be implemented under the direct supervision of a professional staff member. This internship will give the student practical experience with the realities of the profession. (Summer, Fall, Spring)

433. Senior Project: Sculpture. Credit 3 hours. Prerequisite: ART 334 or permission of Department Head. This course is an intense involvement with a particular sculptural idea resulting in an ambitious body of work for the senior exhibition. Six hours of studio a week. A laboratory fee is required for this course. (Summer, Fall, Spring)

434. Sculpture IV. Credit 3 hours. Prerequisite: ART 334 or 393 or permission of Department Head. An advanced course requiring a strong commitment to sculptural practices resulting in a cohesive body of work. Emphasis is placed on contemporary methodologies including kinetic sculpture, installation, and public and site-specific art. Course may be repeated for up to six credit hours. Six hours of studio a week. A laboratory fee is required for this course. (Summer, Fall, Spring)

440. Nineteenth Century Art. Credit 3 hours. Prerequisites: ART 106 and ENGL 101 or permission of Department Head. Study of art, theory, and criticism in a cultural context from Neo-Classicism through the late 19th century. Three hours of lecture a week (Varies)

442. Early Twentieth Century Art. Credit 3 hours. Prerequisites: ART 106 and ENGL 101 or permission of Department Head. Study of art, theory, and criticism in a cultural context from the late 19th century to circa 1945. Three hours of lecture per week. (Fall)

443/543. Contemporary Art, Theory, and Criticism. Credit 3 hours. Prerequisites: ART 106 and ENGL 101 or permission of Department Head. Study of art, theory, and criticism from circa 1945 to the present. Three hours of lecture per week. (Fall, Spring)

444. Seminar in Art History. Credit 3 hours. Prerequisite: Nine hours in art history, with three hours at the 300-level or above, ENGL 102, or permission of Department Head. The course is an in-depth examination of a selected advanced art historical topic. Content may vary from semester to semester. Offerings will include such diverse subjects as specific styles, themes, techniques, media, or artists and their art works. The material is taught as lectures and readings in research and Methodologies, and includes a position paper. Instructors may also include presentations by visiting lecturers or field trips as they apply. May be repeated for a total of 6 credit hours. (Spring)

445. Western Medieval Art. Credit 3 hours. Prerequisites: ART 105 or 106 and ENGL 101 or permission of Department Head. Medieval Art surveys the visual arts from the end of the Ancient world to the Gothic period. Emphasis is placed on the original function of art works and the historical, cultural, and religious factors that informed their existence. Three hours of lecture per week. (Varies)

446. Northern Renaissance Art. Credit 3 hours. Prerequisites: ART 105 or 106 and ENGL 101 or permission of the Department Head. This course examines the development of art in Northern Europe (the Low Countries, Germany, and France) from the late fourteenth century to the mid-sixteenth century. Focusing on significant artists and art works, emphasis is placed on changing circumstances in artistic practices, function, iconography and patronage. Three hours of lecture per week. (Varies)

447. Italian Renaissance Art. Credit 3 hours. Prerequisites: ART 105 or 106 and ENGL 101 or permission of Department Head. This course is a chronological introduction to the major developments in painting, sculpture and architecture of Italy from the beginning of the fourteenth century to the end of the sixteenth century. Along with the careers and styles of the Renaissance" most brilliant artists, consideration will be given to the political, social, and religious dimensions of the art created. Three hours of lecture a week. (Varies)

449. Senior Thesis: Art History. Credit 3 hours. Prerequisites: Senior standing and completion of ART 443. Option 1: Directed research, based on contact with an art historical object or event, leading to the completion of a written thesis based on a specific investigation of the agreed upon topic. Topics are open and will be mutually agreed upon by directing faculty and student. Students are required to observe the chosen object or event in person. Option 2: Internship in an appropriate art historical setting, resulting in a paper documenting an art historical issue or inquiry, relating to the field work. Students are required to present their final paper in a departmental forum. (Fall, Spring)

456. Internship: Theatre Design. Credit 3 hours. Prerequisites: THEA 131, THEA 231, and permission of Department Head. Temporary field placement within the theatre, film, or television industry implemented and supervised by the program coordinator or another professional faculty member. This internship will provide the student with hands-on experience and networking opportunities that come with professional work in the field. (Summer, Fall, Spring)

459. Internet Design. Credit 3 hours. Prerequisites: ART 261 and 299. This course will explore World Wide Web design as it applies to graphic design. Successful integration of typography and image and a focus on integrity of design, client satisfaction, successful navigation of Web sites and technological mastery will be emphasized. Six hours of studio a week. (Fall)

460. Interactive and Environmental Design. Credit 3 hours. Prerequisite: ART 361 or permission of the Department Head. This course will explore client-based information systems for product introduction, demonstration, and promotion. Environmental and information design systems will be explored as they apply to contemporary technological media such as motion display and digital projection. Six hours of studio a week. A laboratory fee is required for this course. (Fall)

461. Senior Project: Graphic Design. Credit 3 hours. Prerequisite: ART 361. Professional-level contemporary communication design assignments including print, motion, Internet, interactive, sound and environmental design. This will be the culminating studio course which will include the creation of a print and digital portfolio for entry into the graphic design industry. Six hours of studio a week. A laboratory fee is required for this course. (Fall, Spring)

466. Internship: Graphic Design. Credit: 3 hours. Prerequisite: ART 461 and permission of Program Coordinator. Field placement within the design industry will be implemented under the direct supervision of a professional staff member. This assignment will give the student a hands-on experience with the realities of the profession. (Fall, Spring)

467. Photo Editing. Credit 1 hour. An intensive course on the principles, production practices, and software for photo editing and manipulation in print and online publishing. One to two hours of lecture and/or lab per week. (Varies)

469. Motion and Digital Animation. Credit 1 hour. An intensive course on the principles, practices, and copyright ethics for motion graphics and animation in the online environment. One to two hours of lecture and/or lab per week. (Varies)

471/571. Arts and Crafts for the Elementary School. Credit 3 hours. Prerequisite: ART 371 or Graduate standing. An in-depth exploratory course dealing primarily with methods and media used in teaching elementary arts and crafts. Media to be covered: clay, fiber, wood, and graphics. One hour of lecture and four hours of studio a week. (Varies)

479. Digital Illustration. Credit 1 hour. An intensive course on the production practices and techniques in illustration software for print and online publishing. One to two hours of lecture and/or lab per week. (Varies)

483. Senior Project: Painting. Credit 3 hours. Prerequisite: ART 384 or permission of Department Head. An intensive study in painting or related two-dimensional media intended to develop independence and professionalism. Six studio hours per week. May be repeated for a total of six credit hours. (Fall, Spring)

490. Senior Project: New Media and Animation. Credit 3 hours. Prerequisites: ART 390, ART 393, 394, 396, or 397 or permission of the Department Head. An intensive study of new media intended to develop a cohesive body of computer-based artworks. Through individualized assignments and group critiques students will develop a body of work in one of the following areas: digitally based still imagery, advanced interactive artworks, digital video, motion graphics, 3-D animation, large-format imagery, or web-based artworks. Students will work on developing a body of work for exhibition, and application to graduate study, or professional activity. May be repeated for a total of 6 hours. A laboratory fee is required for this course. (Fall, Spring)

491H. Honors in Art. Credit 3 hours. Prerequisites: Senior standing, a written project proposal, recommendation of the Art Faculty, and consent of the Head of the Department. An honors course in the Department of Art is designed for students who have demonstrated outstanding ability in studio or art history courses. The course will allow a student to choose one of the following areas: (1) select a concentration in one of the studio areas, (2) research a specific period of art history and/or artistic style, and (3) design and implement a research project which investigates artistic processes and techniques.

492. Senior Seminar in the Visual Arts. Credit 2 hours. Prerequisite: Registration in or prior credit for ART 422 or concurrent enrollment in ART 499. This course provides a forum for the examination of fine art issues as they relate to the preparation of artwork for exhibition and the marketing of an artist's work. Students will be taught how to document artwork, write an artist statement, create a resume, develop an exhibition proposal and create slide portfolios. The class will explore differences in exhibition forums, such as profit and non-profit galleries; university galleries; and museums. Various graduate programs will be explored and the application process reviewed. (Fall, Spring)

493. 3-D Digital Modeling and Animation II. Credit 3 hours. Prerequisite: ART 393 or permission of Department Head. A study of 3-D computer modeling and animation with an emphasis on modeling for gaming content creation or digital sculpture applications. Students will work with game engines and rapid prototyping technology to create 3-D artworks. Six hours of studio a week. May be repeated for a total of six credit hours. A laboratory fee is required for this course. (Fall, Spring)

494. Time-Based Media II. Credit hours 3. Prerequisite: ART 394 or permission of Department Head. Advanced creation and analysis of time-based artwork. Artistic concepts and audio-visual technologies utilized in various means of presentation, such as single channel video, experimental sound composition, and multi-channel installations will be explored. Complex artistic statements will be examined in relation to ephemeral art works, performance art, contemporary pop culture, sound art, and the history of video art. Related historical and theoretical readings will be required. A laboratory fee is required for this course. (Fall, Spring)

495/595. Independent Study. Variable Credit: 1, 2, or 3 hours. Prerequisites: All fundamental Visual Art courses through 281 and at least Junior standing or approval of the Department Head. A written proposal of the subject area and procedures, to be approved by the Department Head and the instructor. Option 1-Studio: Private instruction directed to expand the student's technical and innovative skills. Student may select from studio area. Option 2-Art History: The selection and investigation of a specific art history topic. Option 3-Art Education: Research into relationships to teaching and learning in the Visual Arts. Undergraduates may repeat the course for a total of 6 credit hours. Twelve credit hours of Visual Arts 595 will permit the graduate student to complete a selected cognate area. (Fall, Spring)

497. Internship: New Media and Animation. Credit 3 hours. Prerequisite: ART 490 and permission of Department Head. Field placement within the Animation, Film, Television, or other industry related to New Media and Animation will be implemented under the direct supervision of a professional staff member. This Internship will give the student a hands-on experience with the realities of the profession. (Varies)

499. Thesis Exhibition. Credit 1 hour. Prerequisite: Senior Projects or permission of Department Head. A course designed to prepare students to present an extensive and visually cohesive body of artwork that demonstrates conceptual maturity, technical proficiency, and an understanding of contemporary artistic practice. (Fall, Spring)

Athletic Training (ATHT)

141. Prevention and Management of Motor Performance Injuries. Credit 3 hours. A study of basic prevention, evaluation and management of motor performance injuries. (Fall, Spring)

205. Functional Anatomy for Athletic Trainers. Credit 3 hours. Prerequisite: Formal acceptance for progression into the athletic training curriculum. Functional human anatomy focusing on orthopedic anatomy, neuromuscular anatomy and the fundamental principles of human movement for the physically active individual. (Spring)

206. Athletic Training Foundations and Practice. Credit 3 hours. Prerequisite: Formal acceptance for progression into the athletics training curriculum. Guides students in the application of theory to clinical practice. Focuses on the development of cognitive, psychomotor, communication, and therapeutic interventions as applied to the healthcare of the physically active individual. Introduction to appropriate taping, wrapping, and bracing techniques. A laboratory fee is required for this course. (Spring)

241. Emergency Health Care for the Athletic Trainer. Credit 3 hours. Prerequisite: Formal acceptance for progression into the athletic training curriculum. The purpose of this course is to provide the athletic trainer with the knowledge necessary to help sustain life, reduce pain, and minimize the consequences of sudden injury or illnesses of the physically active individual. (Spring)

305. Lower Extremity Sports Injury Management. Credit 3 hours. Prerequisites: Formal acceptance for progression into the athletic training curriculum, ATHT 205 and concurrent enrollment in ATLB 300. A systematic examination of the fundamental principles and concepts of athletic training. Students will develop knowledge in the prevention, assessment, and rehabilitation of athletic injuries. Particular emphasis will be placed on injury management of the hip, knee, thigh, ankle, foot and lower leg. (Fall)

333. Therapeutic Exercise and Rehabilitation of Athletic Injuries. Credit 3 hours. Prerequisites: Formal acceptance for progression into the athletic training curriculum, ATHT 372, 305, ATLB 370, and concurrent enrollment in ATHT 340, ATLB 344 and ATLB 304. Appropriate use of therapeutic rehabilitation techniques for athletic injuries. Incorporates evidence-based practice for selection criteria, indications/contraindications, clinical applications and psychological aspects of rehabilitation in a variety of populations. (Spring)

340. Upper Extremity Sports Injury Management. Credit 3 hours. Prerequisites: Formal acceptance into the athletic training curriculum and concurrent enrollment in ATLB 344. A systematic examination of the fundamental principles and concepts of athletic training. Includes the

opportunity to develop knowledge in the prevention, assessment, and rehabilitation of athletic injuries of the head, spine, thorax, shoulder, upper arm, elbow, forearm, wrist, and hand. (Spring)

372. Therapeutic Modalities for Athletic Injuries. Credit 3 hours. Prerequisite: Formal acceptance into the athletic training curriculum. Investigates and analyzes indications, contraindications and biophysics of agents that aid in the healing of athletic injuries, reduction of pain, or assistance in the rehabilitation process. Laboratory activities included set-up and operational procedures of contemporary therapeutic modalities as they relate to the care and treatment of athletic injuries. (Fall)

410. Evidence-Based Practice for the Athletic Trainer. Credit 3 hours. Prerequisite: Formal acceptance for progression into the athletic training curriculum. Understanding of evidence-based practice concepts and terminology to maximize patient outcomes through critically analyzing research literature. (Spring)

420. Athletic Training Senior Clinical I. Credit 3 hours. Prerequisites: Formal acceptance for progression into the athletic training curriculum, ATHT 305, ATHT 340, ATLB 300, and ATLB 344. Students are responsible for integrating clinical skills learned in the didactic portion of the program into the clinical setting under direct supervision of a qualified preceptor. Students will build on skills and apply psychomotor/clinical proficiencies. This course has a lecture component. A laboratory fee is required for this course. (Fall)

425. Athletic Training Senior Clinical II. Credit 3 hours. Prerequisites: Formal acceptance for progression into the athletic training curriculum and ATHT 420. Students are responsible for assisting with the healthcare of athletes in the clinical setting under the direct supervision of a qualified preceptor. Students will build on skills and apply psychomotor/clinical proficiencies. Emphasis will be placed on preparing for the Board of Certification exam. This course has a lecture component. A Laboratory fee is required for this course. (Spring)

455. Medical and Pharmacological Aspects of Athletic Training I. Credit 3 hours. Prerequisite: Formal acceptance into the athletic training curriculum. Provides the students with an understanding of a comprehensive health care program and the athletic trainer's role within that program. This course will focus on identification and treatment of medical conditions of the respiratory, gastrointestinal, cardiovascular, and integumentary system. This course will also focus on pharmacological agents in relation to pharmacokinetic effects on body systems and therapeutic use. (Varies)

462. Administration and Psychosocial Intervention in Athletic Training. Credit 3 hours. Prerequisites: Formal acceptance into the athletic training curriculum and concurrent enrollment in ATHT 455. Focuses on the organizational and administrative aspects of athletic training programs. Areas of legal and ethical risks for the athletic trainer, measures to reduce those risks and appropriate professional behavior. Also includes content of psychological considerations of injury and illness. (Fall)

466. Medical and Pharmacological Aspects of Athletic Training II. Credit 3 hours. Prerequisites: Formal acceptance into the athletic training curriculum and completion of ATHT 455. Provides the students with an understanding of a comprehensive health care program and the athletic trainer's role within that program. This course will focus on the identification and treatment of medical conditions of the nervous, urinary, endocrine, and reproductive systems associated with the physically active individual. This course will also focus on pharmacological agents in relation to pharmacokinetic effects on body systems and therapeutic use. (Spring)

611. Foundations of Athletic Training. Credit 3 hours. Prerequisite: Admission into the M.S. in Athletic Training program or permission of the department head. Focuses on the development of cognitive, psychomotor, communication, and therapeutic intervention skills as applied to the healthcare of the physically active individual. Introduction to taping, wrapping, and bracing techniques. Guides students in the application of theory to clinical practice. (Summer)

612. Emergency Care in Athletic Training. Credit 3 hours. Prerequisite: Admission into the M.S. in Athletic Training program or permission of department head. Provides the knowledge necessary to help sustain life, reduce pain, and minimize the consequences of sudden injury and/or illness of the physically active individual. (Summer)

615. Clinical Experiences I. Credit 3 hours. Prerequisite: Admission into the M.S. in Athletic Training program or permission of department head. Students develop clinical reasoning abilities and athletic training clinical proficiencies in a practical environment under the supervision of a qualified clinical preceptor. The course also has a lecture component. The focus is fitting, assembling, and proper use of equipment specific to football, as well as other training practices associated with the clinical placement. A laboratory fee is required for this course. (Summer)

621. Foundational Anatomy. Credit 3 hours. Prerequisite: Admission into the M.S. in Athletic Training program or permission of department head. Functional human anatomy focusing on orthopedic and neuromuscular anatomy, and fundamental principles of human movement for the physically active individual. (Fall)

622. Strength and Conditioning Programs. Credit 3 hours. Prerequisite: Admission into the M.S. in Athletic Training program or permission of department head. Physiological adaptations to strength and speed training, exercise prescription and testing for athletes, facility design and safety. (Fall)

623. Lower Body Pathology and Assessment. Credit 3 hours. Prerequisite: Admission into the M.S. in Athletic Training program or permission of department head. A systematic examination of fundamental principles and concepts of athletic training. Students will develop knowledge in the prevention, assessment, and rehabilitation of athletic injuries. Particular emphasis will be placed on injury management of the hip, knee, thigh, ankle, foot and lower leg. (Fall)

625. Clinical Experiences II. Credit 3 hours. Prerequisite: Admission into the M.S. in Athletic Training program or permission of department head. Students continue developing clinical reasoning abilities and athletic training clinical proficiencies in a simulated lab environment under the supervision of a qualified approved preceptor. The course also has a lecture component. Particular emphasis will be placed on exposure to sports and activities with lower extremity injuries. A laboratory fee is required for this course. (Fall)

631. Therapeutic Modalities. Credit 3 hours. Prerequisite: Admission into the M.S. in Athletic Training program or permission of department head. Indications, contraindications, biophysics, and use of agents that aid in the healing of athletic injuries, reduction of pain, or assistance in the rehabilitation process. Set-up and operational procedures of contemporary therapeutic modalities as they relate to the care and treatment of athletic injuries. (Spring)

632. Therapeutic Exercise. Credit 3 hours. Prerequisite: Admission into the M.S. in Athletic Training program or permission of department head. Use of common therapeutic exercises, equipment, and manual techniques. Also includes an examination of psychosocial and socio-cultural issues in athletic training and sports medicine and the role of the athletic trainer in the intervention, referral, and rehabilitation processes. Development of a complete rehabilitation process for a variety of populations following injury/surgery. (Spring)

633. Upper Body Pathology and Assessment. Credit 3 hours. Prerequisite: Admission into the M.S. in Athletic Training program or permission of department head. A systematic examination of fundamental principles and concepts of athletic training. Students will develop knowledge in the prevention, assessment, and rehabilitation of athletic injuries. Particular emphasis will be placed on injury management of the head, spine, thorax, shoulder, upper arm, elbow, forearm, wrist, and hand. (Spring)

635. Clinical Experiences III. Credit 3 hours. Prerequisite: Admission into the M.S. in Athletic Training program or permission of department head. Students continue developing clinical reasoning abilities and athletic training clinical proficiencies in a simulated lab environment under the supervision of a qualified approved preceptor. The course also has a lecture component. Particular emphasis will be placed on exposure to sports and activities with upper body injuries. A laboratory fee is required for this course. (Spring)

641. Evidence-Based Practice and Clinical Decision-Making I. Credit 3 hours. Prerequisite: Admission into the M.S. in Athletic Training program or permission of department head. Understanding of evidence-based terminology and practice, and research in athletic training to maximize patient outcomes. Critical analysis of research literature. Preparation begins for the capstone project. A laboratory fee is required for this course. (Fall)

642. Pharmacological and Medical Aspects of Athletic Training. Credit 3 hours. Prerequisite: Admission into the M.S. in Athletic Training program or permission of department head. Identification and treatment of medical conditions commonly associated with physically active individuals. Emphasis is placed on the role of the athletic trainer in the assessment and treatment of these conditions as directed by a team physician. Also includes an examination of pharmacological agents in relation to pharmacokinetic effects on body systems and therapeutic use. (Fall)

643. Organization and Administration Issues in Athletic Training. Credit 3 hours. Prerequisite: Admission into the M.S. in Athletic Training program or permission of department head. Focuses on organizational and administrative aspects of athletic training programs. Includes scope of practice, inter-professional relationships, legal and ethical risks for the athletic trainer, risk-reduction practices, and professional behavior. (Fall)

645. Clinical Experiences IV. Credit 3 hours. Prerequisite: Admission into the M.S. in Athletic Training program or permission of department head. Students continue developing clinical reasoning abilities and athletic training clinical proficiencies in a simulated lab environment under the supervision of a qualified approved preceptor. Integration of previous didactic and clinical knowledge, skills, and proficiencies. The course also has a lecture component. A laboratory fee is required for this course. (Fall)

651. Evidence-Based Practice and Clinical Decision-Making II. Credit 3 hours. Prerequisite: Admission into the M.S. in Athletic Training program or permission of department head. Examination, analysis, and application of current research in managing patient outcomes. Results in the development and presentation of a capstone project. A laboratory fee is required for this course. (Spring)

652. Integration of Athletic Training Knowledge and Skills. Credit 3 hours. Prerequisite: Admission into the M.S. in Athletic Training program or permission of department head. A review and re-examination of knowledge and skills, and preparation for the Board of Certification exam. Will also include Standards of Professional Practice, NATA Code of Ethics, and professional development requirements for the entry-level athletic trainer. (Spring)

655. Clinical Experiences V. Credit 6 hours. Prerequisite: Admission into the M.S. in Athletic Training program or permission of department head. Students are responsible for assisting with the healthcare of athletes in the clinical setting under the direct supervision of a qualified preceptor. Students will build on skills and apply psychomotor/clinical proficiencies. This course also has a lecture component. A laboratory fee is required for this course. (Spring)

Athletic Training Lab (ATLB)

210. Clinical Experiences in Equipment-Intensive Sport, Bracing, and Padding. Credit 1 hour. Prerequisites: Formal acceptance into the athletic training curriculum and ATHT 206. The focus will be on fitting, assembling, and proper usage of pads and helmets specific to football. Padding, splinting and bracing application to the entire body will be covered as well. Students develop clinical reasoning abilities during preseason football under the supervision of a qualified preceptor. (Summer)

217. Clinical in Athletic Training. Credit 1 hour. Prerequisites: Formal acceptance for progression into the athletic training curriculum and concurrent enrollment in ATHT 206 and ATHT 205. Students develop clinical reasoning abilities and athletic training clinical proficiencies in a simulated lab environment, under supervision of a qualified preceptor, for a minimum of 150 hours per semester. Introduction to appropriate taping, wrapping, and bracing techniques. (Spring)

244. Emergency Health Care for the Athletic Trainer Lab. Credit 1 hour. Prerequisites: Formal acceptance into the athletic training curriculum and concurrent enrollment in ATHT 241. The purpose of this course is to provide the athletic trainer with the skills necessary to sustain life, reduce pain, and minimize the consequences of sudden injury to the physically active individual. A laboratory fee is required for this course. Two hours of laboratory a week. (Spring)

300. Lower Extremity Clinical Competency Lab. Credit 1 hour. Prerequisites: Formal acceptance into the athletic training curriculum and concurrent enrollment in ATHT 305. Guides students in the application of theory to clinical practice in the prevention, assessment, and rehabilitation of injuries to the knee, hip, thigh, ankle, foot, and lower leg. Two laboratory hours per week. A laboratory fee is required for this course. (Fall)

303. Clinical Integration and Field Experiences in Athletic Training Lab I. Credit 1 hour. Prerequisites: Formal acceptance for progression into the athletic training curriculum and concurrent enrollment in ATLB 358, ATHT 363, ATHT 372. Students continue developing their clinical reasoning abilities and athletic training clinical proficiencies in a simulated lab environment under the supervision of a qualified approved clinical instructor for a minimum of 225 hours per semester. Particular emphasis will be placed on exposure to upper and lower extremity sports. A laboratory fee is required for this course. (Fall)

304. Rehabilitation of Athletic Injuries Lab. Credit 1 hour. Prerequisites: Formal acceptance into the athletic training curriculum, ATHT 372, and concurrent enrollment in ATHT 333. Application of contemporary therapeutic rehabilitation techniques designed to meet specific treatment goals. During the course, students will use the results of on-going clinical examination to determine when the therapeutic intervention should be progressed, regressed, or discontinued. Two hours of laboratory per week. (Spring)

317. Clinical Integration and Field Experiences in Athletic Training Lab II. Credit 1 hour. Prerequisites: Formal acceptance for progression into the athletic training curriculum, and concurrent enrollment in ATLB 366, ATHT 333, and ATHT 367. Students continue developing their clinical reasoning abilities and athletic training clinical proficiencies in a simulated lab environment and under the supervision of a qualified approved clinical instructor for a minimum of 225 hours per semester. Particular emphasis will be placed on exposure to upper and lower extremity sports. A laboratory fee is required for this course. (Spring)

344. Upper Extremity Clinical Competency Lab. Credit 1 hour. Prerequisites: Formal acceptance for progression into Athletic Training curriculum and concurrent enrollment in ATHT 340. Guides students in the application of theory to clinical practice in prevention, assessment, and rehabilitation of injuries to the head, spine, thorax, shoulder, upper arm, forearm, elbow, wrist, and hand. A laboratory fee is required for this course. (Spring)

370. Therapeutic Modalities in Athletic Training Lab. Credit 1 hour. Prerequisites: Formal acceptance into the athletic training curriculum and concurrent enrollment in ATHT 371. Set-up and operational procedures of contemporary therapeutic modalities as they relate to the care and treatment of athletic injuries. Two hours of laboratory per week. (Varies)

613. Emergency Care in Athletic Training Lab. Credit 1 hour. Prerequisite: Admission into the M.S. in Athletic Training program or permission of department head. A laboratory course accompanying ATHT 612. Provides skills necessary to sustain life, reduce pain, and

minimize the consequences and sudden injury or illness of the physically active individual. Three hours of laboratory a week. A laboratory fee is required for this course. (Summer)

624. Lower Body Pathology and Assessment Lab. Credit 1 hour. Prerequisite: Admission into the M.S. in Athletic Training program or permission of department head. A laboratory course accompanying ATHT 623. Guides students in the application of theory to clinical practice in the prevention, assessment, and rehabilitation of injuries to the knee, hip, thigh, ankle, foot, and lower leg. Three laboratory hours per week. A laboratory fee is required for this course. (Fall)

634. Upper Body Pathology and Assessment Lab. Credit 1 hour. Prerequisite: Admission into the M.S. in Athletic Training program or permission of department head. A laboratory course accompanying ATHT 633. Guides students in the application of theory to clinical practice in the prevention, assessment, and rehabilitation of injuries to the head, spine, thorax, shoulder, upper arm, forearm, elbow, wrist, and hand. Three laboratory hours per week. A laboratory fee is required for this course. (Spring)

Botany (BOT & BOTL)

205. Introduction to Botany. [LCCN: CBIO 2314, Botany I Lec + Lab]. Credit 4 hours. Prerequisites: GBIO 153 and BIOL 154 or equivalent. The biology of plants, emphasizing the ecology, evolution, morphology, and systematics of flowering plants. Two hours of lecture and four hours of laboratory per week. A laboratory fee is required for this course. (Varies)

347. Vascular Plant Systematics. Credit 4 hours. Prerequisites: GBIO 153 and BIOL 154 or equivalent and Sophomore standing, or permission of the Department Head. An introduction to the identification, naming, classification and evolution of vascular plants. Two hours of lecture and 4 hours of laboratory per week. (Varies)

401/501. Plant Pathology. Credit 4 hours. Prerequisites: GBIO 153 and BIOL 154 or equivalent and Junior standing or permission of the Department Head. A study of the nature and causes of disease in plants, emphasizing the principal diseases in Louisiana crops. Two hours of lecture and four hours of laboratory per week. A laboratory fee is required for this course. (Varies)

426/526. Plant Physiology. Credit 4 hours. Prerequisites: GBIO 153 and BIOL 154 or equivalent, Chemistry 101/121-102/122 or equivalent and Junior standing or permission of the Department Head. A study of the life processes of plants emphasizing plant water relations, photosynthesis, transport process, and interactions with the environment. Three hours of lecture and three hours of laboratory per week. A laboratory fee is required for this course. (Spring)

427/527. Plant Stress Ecophysiology. Credit 4 hours. Prerequisite: Botany 426/526 or equivalent and Junior standing or permission of the Department Head. An advanced course in plant physiology with emphasis on the stress physiology of plants in coastal and changing environments. Topics include non-destructive indicators of plant growth, nutrient stress, drought stress, salt stress, flooding stress, and plant responses to global change, such as increased carbon dioxide concentrations and temperature stress. Three hours of lecture and three hours of laboratory per week. (Varies)

429/529. Native Plants of Louisiana. Credit 4 hours. Prerequisite: GBIO 153 or BIOL 154 or equivalent. An introduction to flowering plant diversity, with a focus on local Louisiana flora. The course will include lectures, laboratories, and field trips. Topics covered will include important plant families, flowering plant systematics, structure of plants with an emphasis on flowers, how to key out plants, use of herbarium specimens for identification, and identification and examination of representative specimens of plant families in the wild. Two hours of lecture and four hours of laboratory per week. (Summer)

433/533. Phycology. Credit 4 hours. Prerequisites: GBIO 153 and BIOL 154 or equivalent and Junior standing or permission of the Department Head. A study of the freshwater algae of southeastern Louisiana, emphasizing the ecology, taxonomy, and morphology of natural collections. Two hours of lecture and four hours of laboratory per week. A laboratory fee is required for this course. (Varies)

458/558. General Mycology. Credit 3 hours. Prerequisites: GBIO 153 and BIOL 154 and Junior standing or permission from the Department Head. A study of the morphology, taxonomy, and physiology of fungi. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Varies)

481/581. Plant Ecology. Credit 4 hours. Prerequisites: GBIO 153 and BIOL 154 and Junior standing or permission of the Department Head. A study of plants in relationship to their environments, with examples from recent publications in autecology, physiological ecology, population biology and plant community ecology, and with experience in the vegetation and habitats of Louisiana. Two hours of lecture and four hours of laboratory per week. (Varies)

482/582. Plant Anatomy. Credit 4 hours. Prerequisites: GBIO 153 and BIOL 154 or equivalent and Junior standing or permission of the Department Head. A study of the anatomy and morphology of seed plants. Two hours of lecture and four hours of laboratory per week. A laboratory fee is required for this course. (Fall)

Business Law (BLAW)

231. The Legal Environment of Business. [LCCN: CBUS 2003, Legal Environment]. Credit 3 hours. A survey of business in its legal environment including topics of ethics, courts, and alternative dispute resolution, torts and criminal law, intellectual property, contracts, sales and product liability, creditor-debtor relations and bankruptcy, business organizations, employment law and discrimination, administrative agencies, and consumer protection. Credit will not be given for both BLAW 231 and 234. (Summer, Fall, Spring)

232. Business Law. [LCCN: CBUS 2103, Business Law]. Credit 3 hours. A study of the laws affecting the operation of businesses. Topics include commercial paper (checks, promissory notes, certificates of deposit, etc.), credit transactions and security devices (mortgages, pledges, liens, etc.), agency, and bankruptcy. Credit will not be given for both BLAW 232 and 333. (Fall, Spring)

234. The Legal Environment of Business for Accountants. Credit 3 hours. Prerequisites: Major in Accounting and/or CPA candidate, Sophomore standing, and ACCT 200. Law and legal institutions in society, emphasizing areas of law relevant to business operations, such as federal agencies, courts, contracts, employment obligations, and business organizations; plus the effect of ethical considerations on such institutions and processes. Credit will not be given for both BLAW 231 and 234. (Summer, Fall, Spring)

333. Commercial Law for Accountants. Credit 3 hours. Prerequisites: Major in Accounting and/or CPA candidate, Junior standing, and BLAW 234. Legal concepts underlying the Uniform Commercial Code as applied in sales of goods, commercial paper, and secured transactions; applications of bankruptcy, agency, debtor/creditor relationships, insurance, real property, and an accountant's legal liability. Credit will not be given for both BLAW 232 and 333. (Fall, Spring)

Career Planning (CPL)

104. Career Planning. Credit 3 hours. Prerequisite: Freshman or Sophomore standing. A course designed for students to explore their abilities, goals, and values, to research and explore the opportunities offered in major areas of interest, and to develop the skills of making informed decisions. (Summer, Fall, Spring)

304. From College to Employment. Credit 3 hours. Prerequisite: Junior Standing. A course designed to assist students in the transition from the college environment to a related career setting. Students in this course learn job search, application and interviewing strategies using current technology. (Summer, Fall, Spring)

Chemistry (CHEM & CLAB)

Students who violate the departmental laboratory safety policy may be reported for violating the Student Code of Conduct.

Credit toward the degree will be granted for only one of the Chemistry courses in each of the following combinations: 101-107-121, 102-122, 103-123, 104-124, 261-265, 263-267, 281-481, 283-485.

101. General Chemistry I. [LCCN: CCEM 1103, Chemistry I (Non-Science Majors)]. Credit 3 hours. Prerequisite: An ACT score in Mathematics of 19 or greater or concurrent registration in or prior credit for MATH 105, 107 or 161. The first of a two-semester sequence covering the following general topics: metric and temperature conversions, density, calorimetry, mixtures/ compounds/ elements, chemical and physical properties, structure of the atom and electron configuration, periodic table, bonding, chemical formulas and nomenclature, moles, stoichiometry, chemical reactions, gas laws, and properties of gases, liquids and solids. This course is not recommended for students whose curricula require CHEM 251, 271, 265, 266, and courses numbered 300 and above. (Summer, Fall, Spring)

102. General Chemistry II. [LCCN: CCEM 1113, Chemistry II (Non-Science Majors)]. Credit 3 hours. Prerequisite: CHEM 101. A continuation of CHEM 101 covering topics such as: solutions, concentrations (% composition and molarity), acids/bases, pH, buffers, kinetics, equilibrium, solubility, oxidation/reduction, nuclear chemistry, and an introduction into organic chemistry and biochemistry. This course is not recommended for students whose curricula require CHEM 251, 254, 265, 266, and courses numbered above 300. (Summer, Fall, Spring)

103. General Chemistry Laboratory I. [LCCN: CCEM 1101, Chemistry I Lab (Non-Science Majors)]. Credit 1 hour. Prerequisite: Registration in or prior credit for CHEM 101. A series of laboratory experiments designed to illustrate the material studied in CHEM 101 covering such topics as density determination, chromatography, calorimetry, emission spectra, gas laws, chemical changes and data collection. Two hours of laboratory per week. A laboratory fee is required for this course. (Fall, Spring)

104. General Chemistry Laboratory II. [LCCN: CCEM 1111, Chemistry II Lab (Non-Science Majors)]. Credit 1 hour. Prerequisites: CLAB 103 and registration in or prior credit for CHEM 102. A continuation of CLAB 103 covering data collection, solutions chemistry, graphing, colligative properties, titrations, acid-base reactions, limiting reagents, kinetics, equilibrium, oxidation-reduction, organic chemistry syntheses, and qualitative analysis of inorganic and organic substances. Two hours of laboratory per week. A laboratory fee is required for this course. (Fall, Spring)

107. Survey of Chemistry. Credit 4 hours. Prerequisite: An ACT score in Mathematics of 19 or greater or current registration in or prior credit for MATH 105, 107 or 161. A survey course in the applied aspects of general chemistry with related topics in organic chemistry and biochemistry. This course is designed primarily for students majoring in the Colleges of Business, Education, Nursing and Health Sciences; and Arts, Humanities and Social Sciences. This course may not be used to satisfy the General Education sequence requirement in the Natural Sciences. (Summer, Fall, Spring)

108. Forensic Science. Credit 3 hours. Scientific aspects of law enforcement; role and functions of the crime laboratory. This course may not be used to satisfy the General Education sequence requirement in the Natural Sciences. Course consists of three hours of lecture and demonstrations a week. (Fall)

120. Critical Concepts in Chemistry. Credit 3 hours. Prerequisite: ACT Math score of 25 or completion of Math 161. A chemistry course designed to develop fundamental skills necessary for success in general chemistry for science majors through enhancement of problem solving, mathematical and reasoning skills. Topics include measurements, nomenclature, stoichiometry, and chemical equations. (Varies)

121. General Chemistry I for Science Majors. [LCCN: CCEM 1123, Chemistry I (Science Majors)]. Credit 3 hours. Prerequisite: ACT Math score of 25 or completion of MATH 161 with a grade of "C" or better, or completion of CHEM 120. First semester chemistry course designed for engineering, natural sciences, or life sciences majors. Topics include nomenclature, atomic and molecular structure, chemical equations and stoichiometry, and gas laws. (Summer, Fall, Spring)

121H. General Chemistry I for Science Majors Honors. Credit 3 hours. Prerequisites: ACT Math score of 25 or completion of MATH 161 with a grade of "C" or better, and active status in the University Honors Program or approval of the Department Head. First semester chemistry course designed for engineering, natural science, or life sciences majors. Topics include nomenclature, atomic and molecular structure, chemical equations and stoichiometry, and gas laws. Instructors may choose to assign an experiential project as part of the course. (Fall)

122. General Chemistry II for Science Majors. [LCCN: CCEM 1133, Chemistry II (Science Majors)]. Credit 3 hours. Prerequisite: Chemistry 121. A continuation of CHEM 121. Topics include intermolecular forces, properties of solutions, kinetics, equilibria, acids and bases, chemical thermodynamics, and electrochemistry. (Summer, Fall, Spring)

122H. General Chemistry II for Science Majors Honors. Credit 3 hours. Prerequisites: CHEM 121H or 121 with a grade of "B" or better, and active status in the University Honors Program or approval of the Department Head. A continuation of CHEM 121H. Topics include intermolecular forces, properties of solutions, kinetics, equilibria, acids and bases, chemical thermodynamics, and electrochemistry. Instructors may choose to assign an experiential project as part of the course. (Spring)

123. General Chemistry Laboratory I for Science Majors. [LCCN: CCEM 1121, Chemistry I Lab (Science Majors)]. Credit 1 hour. Prerequisite: Registration in or prior credit for Chemistry 121. This laboratory course is designed to illustrate materials studied in CHEM 121. Experiments involve mass/volume measurements and relationships, yield and stoichiometry, calorimetry and thermochemistry, and the manipulation and measurement of gases. Three hours of laboratory per week. A Laboratory fee is required for this course. (Summer, Fall, Spring)

124. General Chemistry Laboratory II for Science Majors. [LCCN: CCEM 1131, Chemistry II Lab (Science Majors)]. Credit 1 hour. Prerequisites: CLAB 123 and registration in or prior credit for CHEM 122. This laboratory course is designed to illustrate materials studied in CHEM 122. Experimental methods include quantitative, gravimetric and volumetric analysis, electrochemistry, plus kinetics with computer analysis of experimental data. Three hours of laboratory per week. A laboratory fee is required for this course. (Summer, Fall, Spring)

211. Introduction to Chemistry Research. Credit 1 hour. This course is open to all students. Prerequisite: Consent of faculty mentor and Department Head. This course will teach the fundamental skills necessary to conduct chemical research. This course is given as pass/fail only. Three contact hours per week. This course will be graded Pass/Fail only. A laboratory fee is required for this course. (Summer, Fall, Spring)

221. Mathematics for Chemists. Credit 3 hours. Prerequisites: CHEM 122 and MATH 200. Single and multi-variable calculus, ordinary differential equations, statistics, and computer modeling applied to problems in physical chemistry, analytical chemistry and biochemistry. (Spring)

251. Analytical Chemistry. [LCCN: CCEM 2303, Analytical Chemistry]. Credit 3 hours. Prerequisites: CHEM 122/CLAB 124. This course examines the analytical process from method selection and sample preparation to interpretation and presentation of results focusing primarily on wet chemical methods of quantitative analysis. In depth theoretical and practical aspects of equilibria and complexation chemistry, volumetric and gravimetric analyses, potentiometry, basic spectroscopy, and statistical analysis are included. (Spring)

256. Analytical Chemistry Laboratory. Credit 1 hour. Prerequisites: CHEM 122/CLAB 124 and concurrent enrollment in or prior credit for CHEM 251. This laboratory course emphasizes classical methods of quantitative analysis. Experimental methods including volumetric titration, gravimetric analysis, and elementary spectroscopy and potentiometry. Statistical treatment of data and presentation of results are essential. Three hours of laboratory per week. A laboratory fee is required for this course. (Spring)

261. Survey of Organic Chemistry. [LCCN: CCEM 2203, Organic Chemistry, Survey]. Credit 3 hours. Prerequisite: CHEM 102 or 122. An introduction to the nomenclature, preparation, properties, and reactions of organic compounds, with attention to biological significance. This course is designed for students in Biological and Applied Sciences who are required to take only one semester of organic chemistry. (Summer, Spring)

263. Survey of Organic Chemistry Laboratory. Credit 1 hour. Prerequisites: CHEM 102/CLAB 104 or CHEM 122/CLAB 124 and registration in or prior credit for CHEM 261. Designed to acquaint the student with some of the important laboratory operations and techniques in organic chemistry. Two hours of laboratory a week. A laboratory fee is required for this course. (Summer, Spring)

265. General Organic Chemistry I. [LCCN: CCEM 2213, Organic Chemistry I]. Credit 3 hours. Prerequisite: CHEM 122. A study of the compounds of carbon, including nomenclature, properties, structure, stereochemistry, transformations and reactions of organic compounds; principles of organic reaction mechanisms; and the importance of organic chemistry in real world applications. This course is the first half of a two-semester sequence and concentrates on the chemistry of alkanes, alkyl halides, alkenes, alkynes, and alcohols. A course designed for students in biological sciences, chemistry, and pre-professional curricula. (Fall, Spring)

266. General Organic Chemistry II. [LCCN: CCEM 2223, Organic Chemistry II]. Credit 3 hours. Prerequisite: CHEM 265. A study of the compounds of carbon, including nomenclature, properties, structure, stereochemistry, transformations, synthesis and reactions of organic compounds; principles of organic reaction mechanisms; and the importance of organic chemistry in real world applications. This course is the second half of a two-semester sequence and concentrates on the chemistry of alcohols, ethers, aromatics, ketones, aldehydes, amines, and carboxylic acids and their derivatives. A course designed for students in biological sciences, chemistry and pre-professional curricula. (Fall, Spring)

267. General Organic Chemistry Laboratory I. [LCCN: CCEM 2211, Organic Chemistry I Lab]. Credit 1 hour. Prerequisites: CLAB 124 and registration in or prior credit for CHEM 265. A course designed to acquaint the student with basic organic laboratory techniques including recrystallization, melting point determination, extraction, distillation, and column, thin layer and gas chromatography as well as basic synthetic techniques. A course designed for students in biological sciences, chemistry, and pre-professional curricula. This course is the first half of a two-semester lab sequence. Three hours of laboratory per week. A laboratory fee is required for this course. (Fall, Spring)

268. General Organic Chemistry Laboratory II. [LCCN: CCEM 2221, Organic Chemistry II Lab]. Credit 1 hour. Prerequisites: CLAB 267 and registration in or prior credit for CHEM 266. This course is the second half of a two-semester lab sequence. A course designed to acquaint the student with synthetic techniques and structure determination techniques including classical qualitative analysis and spectroscopic analysis including NMR and IR. A course designed for students in biological sciences, chemistry, and pre-professional curricula. Three hours of laboratory per week. A laboratory fee is required for this course. (Fall, Spring)

271. Introduction to Inorganic Chemistry. Credit 3 hours. Prerequisite: CHEM 122. An introduction to inorganic chemistry focusing on atomic/molecular structure, analytical techniques, coordination chemistry, and applications. (Spring)

274. Introduction to Inorganic Chemistry Laboratory. Credit 1 hour. Prerequisites: CHEM 122 and CLAB 124 and enrollment in or prior credit for CHEM 271. A series of laboratory experiments designed to illustrate the material studied in Chemistry 271 and to introduce the student to the experimental techniques of synthetic inorganic chemistry. Three hours of laboratory per week. A laboratory fee is required for this course. (Spring)

281. Survey of Biochemistry. Credit 3 hours. Prerequisite: CHEM 261 or 266. A one-semester survey of basic biochemistry covering the structures and functions of amino acids, proteins, enzymes, carbohydrates, lipids and nucleic acids, metabolism, and gene expression. Other topics include acid-base properties, buffers, enzyme kinetics, membrane structure and transport, and hormones. This course may not be used for a major or minor in chemistry. (Fall)

283. Survey of Biochemistry Laboratory. Credit 1 hour. Prerequisites: CHEM 263 and registration in or prior credit for CHEM 281. A one-semester laboratory to accompany CHEM 281 covering such topics as biochemical techniques; buffering capacity; amino acid titrations; detection of proteins, carbohydrates and lipids; enzyme kinetics and inhibition; gene expression and metabolism. This course may not be used for a major or minor in chemistry. Two hours of laboratory per week. A laboratory fee is required for this course. (Fall)

290. Survey of Physical Chemistry. Credit 3 hours. Prerequisites: CHEM 122/CLAB 124, PHYS 192/PLAB 194, and MATH 163 or 200. An introduction to the structure and physical states (gaseous, liquid, and solid) of matter, properties of solutions, electrochemistry, kinetics, and chemical thermodynamics. (Varies)

391. Physical Chemistry Laboratory I. Credit 1 hour. Prerequisites: CHEM 251/CLAB 256 and CHEM 221 and registration for or prior credit for CHEM 395. Experiments in kinetics and atomic and molecular spectroscopy along with numerical calculations and simulations. Three hours of laboratory per week. A laboratory fee is required for this course. (Fall)

392. Physical Chemistry Laboratory II. Credit 1 hour. Prerequisites: CHEM 395, CLAB 391, and registration for or prior credit for CHEM 396. A continuation of CLAB 391. Three hours of laboratory per week. A Laboratory fee is required for this course. (Spring)

395. Physical Chemistry I. Credit 3 hours. Prerequisites: CHEM 122/CLAB 124, MATH 201, and CHEM 221. A calculus-based study of physical chemistry. The two main topics of the course are (1) kinetics in the gas phase and in solution, and (2) quantum mechanics and its application to atoms and molecules. (Fall)

396. Physical Chemistry II. Credit 3 hours. Prerequisite: CHEM 395. Continuation of CHEM 395. A study of thermodynamics, its statistical foundation in atomic and molecular structure, and its application to kinetics and the chemical equilibrium. (Spring)

401/502. Chemistry Seminar. Credit 1 hour. Prerequisite: Senior standing in the Chemistry curriculum or permission of the Department Head. Attendance at departmental seminars, panel discussions, and related professional events and individual presentation of a topic of current research interest. (Spring)

404/504. Special Topics in Chemistry. Credit 1-3 hours. A reading course with topics and credit to be decided by agreement between the Department and student. This course may be repeated for a maximum of 9 credit hours if different topics are studied. (Fall)

410/510. Chemical Literature. Credit 1 hour. Prerequisite: CHEM 266 or permission of the Department Head. Familiarization with and review of the chemical literature designed to serve as preparation for CHEM 411. (Spring)

411/511. Chemical Research. Credit 1-4 hours. Maximum credit four hours. Prerequisites: Prior credit for CHEM 122/CLAB 124 and CHEM 211 (or equivalent research experience) and permission of Department Head. A course designed to give students experience in performing research in one of the fundamental areas of chemistry under the direction of a faculty mentor. Requirements include the keeping of an up-to-date laboratory notebook and the submission of a comprehensive final report. Three clock hours per week per credit hour. A laboratory fee is required for this course. (Summer, Fall, Spring)

412. Advanced Chemical Research. Credit 1-4 hours. Three in-lab hours per week per credit hours. Prerequisites: CHEM 395 and CLAB 411 (or equivalent research experience) with consent of the faculty mentor and Department Head. A course designed to provide an environment for students to devise, develop, and carry out an independent research project containing a substantial amount of novelty or originality. The final semester of 412 will culminate with a comprehensive written project report. May be repeated for a total of six credit hours maximum. A laboratory fee is required for this course. (Varies)

413. Chemistry Internship. Credit 1-3 hours. Prerequisites: CHEM 251, 266 and CLAB 254, 288, and permission of the Department Head. This course provides practical experience working with professionals in the field of chemistry. Students are responsible for finding a professional sponsor and a faculty mentor when enrolling in this course. Students must maintain an accurate record of work completed, submit a comprehensive final report, and give a seminar presentation. A minimum of 40 hours of supervised work is required per credit hour. May be taken for a total of up to 3 credit hours. (Varies)

452/552. Modern Instrumental Analysis. Credit 3 hours. Prerequisites: CHEM 251 and 266. This course provides a detailed examination of instrument components and design, methods of signal enhancement, methods of calibration, and spectral interpretation. Topics include advanced spectroscopy (AAS, FT-IR, UV-visible, and NMR), modern separations (GC, HPLC, ion chromatography and capillary electrophoresis), electro analysis (voltammetry, amperometry, coulometry, and chemically and enzyme modified electrodes), and mass spectrometry. (Fall)

456. Instrumental Analysis Laboratory. Credit 1 hour. Prerequisites: CLAB 256, 268 and concurrent enrollment in or prior credit for CHEM 452. This laboratory course emphasizes modern instrumental methods of analysis and hands-on operation of modern instrumentation. Experimental methods include spectroscopy, mass spectrometry, electro analysis, and chromatography. Three hours of laboratory per week. A laboratory fee is required for this course. (Fall)

462/562. Physical Organic Chemistry. Credit 3 hours. Prerequisites: CHEM 266/CLAB 268 and 396. Quantitative mathematical approaches to organic mechanisms; structure related to reactivity. (Varies)

471/571. Advanced Inorganic Chemistry. Credit 3 hours. Prerequisites: CHEM 266, 271, and enrollment in or prior credit for CHEM 395. An in-depth study of inorganic systems, including coordination chemistry, spectroscopy, and group theory. Advanced applications of inorganic systems will also be studied. (Fall)

476/576. Advanced Inorganic Chemistry Laboratory. Credit 1 hour. Prerequisites: CLAB 274 and registration in or prior credit for CHEM 471. A course designed to acquaint the student with important laboratory operations and techniques in inorganic and organometallic chemistry. An emphasis will be placed on synthesis and characterization of compounds including the manipulation of air-sensitive materials. Three hours of laboratory per week. A laboratory fee is required for this course. (Spring)

481/581. Biochemistry I. [LCCN: CBIO 3403, Biochemistry I (Upper Level)]. Credit 3 hours. Prerequisite: CHEM 266. A study of the structure and function of biological macromolecules with emphasis on proteins, enzymes, lipids, carbohydrates, and nucleic acids. A course designed for majors in biology and chemistry. (Fall)

482/582. Biochemistry II. [LCCN: CBIO 4413, Biochemistry II (Upper Level)]. Credit 3 hours. Prerequisite: CHEM 481/581. A continuation of CHEM 481/581 with emphasis on gene expression and metabolism. A course designed for majors in biology and chemistry. (Spring)

485/585. Biochemistry Laboratory I. [LCCN: CBIO 3401, Biochemistry I Lab (Upper Level)]. Credit 1 hour. Prerequisite: CLAB 268 and registration for or prior credit for CHEM 481. A laboratory to accompany CHEM 481. Experiments are designed to demonstrate the properties of amino acids, proteins, carbohydrates, lipids, and nucleic acids with emphasis on enzyme kinetics and protein purification. Three hours of laboratory a week. Students taking this course for graduate degree credit must complete an independent research project and a written research paper summarizing the project. A laboratory fee is required for this course. (Fall)

486/586. Biochemistry Laboratory II. [LCCN: CBIO 4411, Biochemistry II Lab (Upper Level)]. Credit 1 hour. Prerequisites: Registration for or prior credit for CHEM 482 and prior credit for CLAB 485. A laboratory to accompany CHEM 482. Experiments are designed to demonstrate some of the major metabolic pathways with emphasis on energy considerations and interrelationships of the pathways. It also emphasizes the flow of genetic information through replication, transcription, and translation. Three hours of laboratory a week. A laboratory fee is required for this course. Students taking this course for graduate degree credit must complete an independent research project and a written research paper summarizing the project. (Spring)

491/591. Theoretical Chemistry. Credit 3 hours. Prerequisites: CHEM 396 and PHYS 222/PLAB 224. Advanced treatment of fundamental principles of physical chemistry. Selected topics chosen from electro-chemistry, photochemistry, surfaces and colloids, solid state chemistry, crystallography, solutions (ideal and real), and statistical thermodynamics. (Varies)

492/592. Quantum Chemistry. Credit 3 hours. Prerequisite: CHEM 491. Fundamental concepts of quantum mechanics with application to atomic and molecular structure, the chemical bond, symmetry, and spectroscopy. (Varies)

610. Chemical Processes. Credit 3 hours. Prerequisite: CHEM 266 or equivalent. A course designed to study important chemical processes in industry. Examples from the commodity chemical, polymer, pharmaceutical and agricultural industries will be studied. The content will include basics in the scientific, legal, and economic issues associated with the industry such as petrochemical processing, costs associated with raw materials, scale-up marketing, energy, and process waste. (Varies)

650. Environmental Chemistry. Credit 3 hours. Prerequisite: CHEM 251 or equivalent. Critical phenomena in the environment will be studied. Topics include redox equilibria in natural waters, complexation in natural water, environmental chemistry of soil, atmospheric pollutants, and techniques for monitoring these phenomena. There will be a field component to this course. (Varies)

Child Life (CL)

100. Orientation to Child Life. Credit 1 hour. An orientation to the field of child life including requirements for clinical placements and certification. (Fall, Spring)

324. Theory and Guidance of Play. [FCS] Credit 3 hours. Prerequisite: HDFS 302. A study of the foundations of play theory, including the social, emotional, cognitive, and physical benefits of play for children and youth. (Fall)

325. Introduction to Child Life. [FCS] Credit 3 hours. Prerequisites: HDFS 302 and 321. A study of the child life profession, with emphasis on Child Life theoretical foundations, assessment, preparation, play, coping, and the role of Child Life within the healthcare setting. (Fall)

326. Child Life Practicum. [FCS] Credit 3 hours. Prerequisites: HDFS 302 and CL 325, and a cumulative GPA of 3.0 or higher. Fifteen hours per week of individual learning experiences with patients, their families and the hospital personnel in various hospital settings under the supervision and direction of a Certified Child Life Specialist. (Varies, Fall, Spring)

- 328. Child Life: Assessment, Preparation, and Therapeutic Play.** [FCS] Credit 3 hours. Prerequisite: CL 325. Advanced study of the assessment of the hospitalized child, focusing on therapeutic play skill development and pre-procedural preparation in a Pediatric setting. (Spring)
- 404/504. Child Life Theory and Family-Centered Care.** Credit 3 hours. Prerequisite: Permission of the Department Head. Advanced study of the research and literature on the psychosocial needs of children and their families in the pediatric health care setting. (Fall)
- 412/512. Parenting Children with Chronic Illness.** Credit 3 hours. Prerequisite: Permission of the Department Head. Advanced study of the theoretical approaches to parenting with an emphasis on parenting children with chronic illness. (Spring)
- 414/514. Child and Family Perspectives on Death, Dying, and Loss.** Credit 3 hours. Prerequisite: Permission of the Department Head. Examination of developmental and conceptual frameworks surrounding children's understanding of illness, dying, and death. Bereavement, grief, and loss will be discussed in the context of child and family development. (Spring)
- 421/521. Advanced Child Development.** Credit 3 hours. Prerequisites: HDFS 302, 320, 321, 322, and 3.0 or higher GPA, or permission of the Department Head. Advanced study of child development from the prenatal period through middle school. (Fall)
- 422/522. Advanced Adolescent Development.** Credit 3 hours. Prerequisites: HDFS 302, 320, 321, 322, and 3.0 or higher GPA, or permission of the Department Head. Advanced study of adolescent development from late middle childhood through emerging adulthood. (Fall)
- 430/530. Special Topics in Child Life.** Credit 3 hours. Prerequisite: Permission of the department head. The study of selected issues related to Child Life. Topics will be determined each semester based on current issues and trends related to Child Life. May be repeated for up to 6 credit hours if different topic areas are studied. (Varies)
- 516. Child Life Procedural Explanations and Interventions.** Credit 3 hours. Advanced study of medical play and psychosocial interventions used in the clinical and medical setting. (Varies)
- 602. Developmental Perspectives on Illness and Health.** Credit 3 hours. Prerequisite: Admission to the Child Life program or permission of the Department Head. An overview of developmental theories and psychosocial perspectives as they apply to children and adolescents experiencing injury or illness in the pediatric health care setting. (Fall)
- 608. Family Dynamics and Psychosocial Interventions.** Credit 3 hours. Prerequisite: Admission to the Child Life program or permission of the Department Head. Examination of family system dynamics and processes, with an emphasis on health-related factors that influence family functioning and well-being. (Spring)
- 618. Communication Skills in Clinical and Therapeutic Settings.** Credit 3 hours. Prerequisites: Admission to the Child Life program and permission of the Department Head. Examination of communication and interactions between children, families, health care professionals, and society, with emphasis on communication skills in pediatric healthcare settings that support clinical and therapeutic interventions across diverse populations. (Varies)
- 622. Child Life Practicum.** Credit 3 hours. Prerequisite: Admission to the Child Life program or permission of the Department Head. Fifteen hours per week of individual learning experiences with patients, their families and the hospital personnel in various hospital settings under the supervision and direction of a Certified Child Life Specialist. (Varies)
- 624. Child Life Internship.** Credit 3-12 hours. Prerequisite: Admission to the Child Life program or permission of the Department Head. In order to receive twelve credit hours, students must participate in six-hundred hours of individual learning experiences with patients, their families and the hospital personnel in various hospital settings under the supervision and direction of a Certified Child Life Specialist. (Varies)
- 628. Child Life Administration and Program Development.** Credit 3 hours. Prerequisite: Admission to the Child Life program or permission of the Department Head. An overview of the skills needed to plan, implement, and assess Child Life program. Administrative responsibilities, supervision of volunteers and students, and grant writing will also be addressed. (Spring)
- 630. Advanced Medical Play and Psychosocial Interventions.** Credit 3 hours. Prerequisite: Admission to the Child Life Graduate Program or permission of the Department Head. Advanced study of medical play and psychosocial interventions used in the clinical and medical settings. (Summer)
- 770. Thesis.** Credit 1-6 hours each semester, with six hours needed for graduation. Prerequisites: Admission to the Child Life program and permission of the Department Head. Independent study of a selected topic in Child Life requiring a written proposal, data collection and analyses, and resulting in a written thesis under the guidance of graduate faculty in the College of Nursing and Health Sciences. An oral defense of the thesis is required. The thesis is graded Pass/Fail. The student must enroll in this course each semester the thesis is in progress. (Varies)

Chinese (CHIN)

- 101. Elementary Mandarin Chinese I.** [LCCN: CCHIN 1013, Elementary Mandarin I]. Credit 3 hours. The beginning course for students with no knowledge of Mandarin. All appropriate elements of basic language learning are utilized for the purpose of providing a foundation in the language and culture of the provinces where Mandarin is spoken. Classwork supplemented by aural-oral drill in the language laboratory. Offered as the first of sequential courses (101 and 102) designed to provide an overall desired proficiency. (Summer, Fall, Spring)
- 102. Elementary Mandarin Chinese II.** [LCCN: CCHIN1023, Elementary Mandarin Chinese II]. Credit 3 hours. Prerequisite: CHIN 101 or equivalent. Continuation of the study of the Chinese language on the elementary level, with emphasis on the development of the basic communicative skills (speaking, listening, reading, writing) and grammatical structures. (Summer, Fall, Spring)
- 201. Intermediate Mandarin Chinese I.** Prerequisite: CHIN 101, 102, or equivalent. Continuation and review of basic elements of grammar; practice speaking, listening to, and writing the language. Reading material of moderate difficulty will be introduced. (Varies)
- 202. Intermediate Mandarin Chinese II.** Prerequisite: CHIN 101, 102, 201, or equivalent. Continuation and review of basic elements of grammar; practice speaking, listening to, and writing the language. Reading material of moderate difficulty will be introduced and discussed. (Varies)
- 314. Chinese Culture and Civilization.** Credit 3 hours. This course provides a survey of the geography, history, literature, art, music, educational system, economy of the Chinese people. (Varies)

Communication (COMM)

- 101. Orientation to the Study of Communication.** Credit 1 hour. Prerequisites: Open only to communication majors and communication education majors. Students who are undecided on a major may register for the course with the permission of the Department Head. An exploratory survey focused on socializing students to the discipline of communication. The course provides an overview of the fields of applied communication, electronic media, multi-platform communication, organizational communication, public relations and speech communication and an in-depth examination of the roles of producers, directors, managers, and journalists in an information society. Emphasis is also placed on developing an understanding of the importance of communication among people with diverse cultural backgrounds. (Fall, Spring)

102. Professional Traditions in Communication. Credit 1 hour. A preparation for advanced study of the field of communication. Students will examine the role of professional associations, become acquainted with professional literature, and investigate internship and cooperative employment opportunities. (Fall, Spring)

121. Photojournalism. Credit 3 hours. The course includes basic picture-taking techniques, the beginnings of photographic composition, basic camera-handling, basic lighting, photo documentation, and reporter-editor relationships. (Varies)

151. Writing for the Mass Media. Credit 3 hours. Prerequisite: English 101 eligibility. A study of basic information gathering and writing techniques for the Communication profession. (Fall, Spring)

155. Applied Digital Media. Credit 3 hours. A study and application of digital media tools for presentation design and display in the communication profession. Topics may include: cloud collaboration software, social media platforms, graphic design tools, still and video photography. (Varies)

159. Introduction to Communication and Media Studies. Credit 3 hours. Prerequisites: Successful completion of or concurrent enrollment in COMM 101 or permission of the Department Head. A survey of the influences of the mass media on our society and culture. This course examines the content of the news media and the entertainment industry and its effects on such areas as politics, social mores, public opinion and economics. The implications of present-day rapid communication technology are also examined. (Fall, Spring)

210. Communicating in the Classroom. Credit 3 hours. The course offers prospective teachers a study of basic communication skills and how they relate to the teaching and learning process. Students cannot receive credit for both COMM 210 and 211. This course competency-based clinical practice required. (Fall, Spring)

211. Introduction to Public Speaking. [LCCN: COMM 2013, Public Speaking] Credit 3 hours. Training in the organization of materials and the oral and physical aspects of delivery in various speaking situations. Intended to give the beginning student an understanding of and practice in public speaking. (Summer, Fall, Spring)

211H. Introduction to Public Speaking for Honors Students. Credit 3 hours. Prerequisite: Authorization by the Director of the Honors Program. Training in the organization of materials and the oral and physical aspects of delivery in various speaking situations. Intended to give the beginning student an understanding of and practice in public speaking, with in-depth examination of rhetoric and historic speeches. (Fall, Spring)

213. Debate. [LCCN: COMM 2113, Argumentation and Debate] Credit 3 hours. A study of the theory of argumentation and debate; class debating on vital local and national questions. (Varies)

215. Interpersonal Communication. [LCCN: COMM 2213, Interpersonal Communication] Credit 3 hours. Survey and application of intra-and interpersonal communication with special emphasis given to communication models, the message, the sender, and resulting behavior. (Fall, Spring)

249. Content Creation for Digital Media. Credit 3 hours. Students will develop the knowledge base and skills required for creating and distributing digital media content to attract and retain a clearly defined audience with the goal of engaging users, delivering messages and building relationships. (Varies)

256. Introduction to Audio Production. Credit 3 hours. A study of the techniques of audio production. Actual hands-on experience in studio program production procedures used in audio broadcasting. Studies will engage in practical work in all areas of production as well as several program formats. (Varies)

257. Introduction to Television Production. Credit 3 hours. A study of the techniques used in basic studio and remote productions including film-style productions. The course will concentrate on the use of equipment, providing actual hands-on experience in television production. Students will study all areas of production skills dealing with the major formats in programming. (Fall, Spring)

260. Field Video Production and Editing. Credit 3 hours. Prerequisite: COMM 257. An intermediate study of remote video preproduction, production and an introduction to postproduction technique. Concentration on producing, directing, film-style, videography, and editing. Practical application of shooting and interviews, stand-ups, and video segment footage to work in tandem with news, news magazine, entertainment-oriented and sports shows. (Fall, Spring)

270 [370]. Introduction to Public Relations Communication. Credit 3 hours. An introductory course that explores the role of communication in the field of public relations. Emphasis will be placed on public relations as a career that utilizes a variety of professional communication skills to help organizations build and maintain relationships with their publics. Students will learn about communication strategies, theories, roles, and opportunities within the context of public relations. (Varies)

272. Introduction to Strategic Communication. Credit 3 hours. In this course, students will develop a broad understanding of the technical, creative, and analytical skills required of professional communicators in the 21st century. (Varies)

276. Strategic Planning for Sports Communication. Credit 3 hours. Students will gain an understanding of the rapid change in the world of sports communication through the advent of digital and social media platforms which have shifted the power structure of the industry. Topics will include understanding name, image, likeness, branded content, strategic partnerships across the sports industry and on-platform monetization. (Fall, Spring)

316. Communication Approaches to Training and Development. Credit 3 hours. Prerequisite: Junior Standing. Emphasizes development of training sessions within organizations. Diagnostic methods for assessing needs and determining the utility of specific training are explored. Roles of consultants, in-house human resource trainer, and liaison with subject matter experts are differentiated. Students will develop training modules for communication skills training. (Varies)

320. Screenwriting. Credit 3 hours. Prerequisite: ENGL 102. In this course, students will learn how to write a screenplay from concept to treatment, outline and completed short script. The focus will be on developing character arcs, story structure and screenwriting format. Students will learn to develop their creative voice and write for film and television. (Varies)

321. Magazine Writing and Editing. Credit 3 hours. Prerequisite: COMM 151. An intensive study of non-fiction magazine writing and editorial methods. This course includes study of traditional magazines as well as developing electronic forms. (Varies)

328. Survey of Sports Communication. Credit 3 hours. A survey of the field of sports communication. Specific topics include models of sports communication, print and electronic media, sports advertising, public relations, media relations, and employment opportunities. Students will have the opportunity to critically assess the communication efforts of a sports organization as well as construct their own communications in the field of sports. (Varies)

329. Creating the Television Pilot. Credit 3 hours. Prerequisites: ENGL 102 and COMM 320. In this course, students will learn how to develop a serialized TV drama. The focus will be on developing long term storylines, what makes TV serials different from feature films and the genres of TV drama. The focus will be on understanding leads and supporting characters, the recurring storyline, season and the collaborative creative process of TV. Students will develop a show pitch and a pilot episode. (Varies)

340. Public Affairs and Depth News Reporting. Credit 3 hours. Prerequisite: COMM 151. Practice in precision journalism methods and in gathering and writing news stories on government, industry, education, and society. (Varies)

344. Feature Writing. Credit 3 hours. Prerequisite: COMM 151. Developing and writing human interest and in-depth articles. (Varies)

- 354. Copywriting, Sales and Promotion.** Credit 3 hours. Prerequisites: COMM 151 and 159. Writing of commercial and public service spot announcements; design of sales and promotion campaigns. The course will include designing a campaign for a local merchant. (Varies)
- 357. Television Studio Production.** Credit 3 hours. Prerequisites: COMM 151 and 257. A course designed to develop studio production skills for students seeking a professional career in television and video, including the study and operation of studio and control room positions for television news shows. Includes studio anchoring, producing, camera operation, computer graphics, and teleprompter operation. (Varies)
- 359. Podcasting and Digital Journalism.** Credit 3 hours. Prerequisites: COMM 151 and 159. The study and practice of news gathering and writing for podcasting, radio, and television. (Varies)
- 363. Television Reporting.** Credit 3 hours. Prerequisites: COMM 151 and 260. A course designed to develop reporting skills for future news, sports, and entertainment reporters and producers. This course is meant for students who seek professional careers as television journalists. Includes researching, writing, reporting, producing, shooting, and editing news sports, and entertainment stories and feature packages. (Varies)
- 364 Public Relations Case Studies.** Credit 3 hours. Prerequisite: Junior standing. Advances the student's knowledge of public relations through the exploration of case studies which exemplify the successful use of research, objectives, programming and evaluation in different types of public relations organizations. (Varies)
- 369. Film History.** Credit 3 hours. Prerequisite: Junior standing or permission of Department Head. A study of the history of film encompassing motion pictures' birth as an industry in the late 1800s and continuing through the present day. The course will study a timeline of film and technology of film focusing on films' ability to communicate ideas and emotions and how audiences can be influenced by filmmakers. (Varies)
- 376. Visual Communication.** Credit 3 hours. A study of the visual aspects of information within a framework of personal, technical, ethical, cultural, and critical perspectives. (Varies)
- 391 [291]. Communication Theory and Research.** Credit 3 hours. Prerequisite: COMM 101, and 102 or permission of the Department Head. Application of theories to communication examples and examination of research tools used in the study of communication. Recommended to be taken during the sophomore year. (Fall, Spring)
- 400. Special Topics in Communication.** Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A variable content course which treats subjects of special interest. The content will change from semester to semester and will be advertised in advance. May be repeated for a total of 15 hours as topics change. (Varies)
- 401. Scholastic Journalism.** Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A study of theories and practice in the teaching of mass media principles and/or advising of student newspapers, magazines, yearbooks, on-line operations and broadcast programming on the secondary school level. Variable content. May be repeated for a total of six hours. (Varies)
- 402. Television Sports Show Production.** Credit 3 hours. Prerequisites: COMM 151 and 260. Writing, reporting, producing, shooting, and editing sports stories and feature packages for television sports shows. (Varies)
- 403-404. Independent Study in Communication.** Credit 3 hours. Prerequisite: Junior standing and permission of the Department Head. Readings, conferences, reports, and/or special projects in one of the subject areas of the fields of Communication. (Varies)
- 408. On Camera Performance.** Credit 3 hours. Prerequisites: COMM 151 and 257. A course designed to develop talent for future performers on camera and on microphone. Course meant for students who plan to seek professional careers as on-air talent. Examination of past and current presentational styles and techniques through lectures and demonstration. Analysis of current professionals on the local, regional, and network levels of television and radio. (Varies)
- 409. News Magazine Show Production.** Credit 3 hours. Prerequisites: COMM 151, 159, 257, and 260. A study of what makes a memorable television news feature story for a general broadcast audience. Students are guided through the reporting, writing, and editing stages as they produce features to be aired on the award-winning quarterly news magazine show, "The Southeastern Times." (Fall)
- 410/510. Intercultural Communication.** Credit 3 hours. Prerequisite: Junior standing or permission of Department Head. A course designed to explore the various studies, theories, problems, and opportunities related to cross-cultural communication. Application of findings intended to enhance the student's knowledge of cross-cultural communication and to facilitate the student's communication abilities. (Summer, Fall, Spring)
- 411. Persuasion.** Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A contemporary study of persuasion offering a comprehensive examination of the nature of persuasion, persuasion theory, and its social influences with additional emphasis on techniques and strategies in persuasive communication. (Varies)
- 413. Business and Professional Speaking.** Credit 3 hours. Prerequisite: COMM 210 or 211. Advanced training in rhetoric, interviewing, group dynamics, leadership, and audience analysis. (Varies)
- 417/517. Web Page Communication and Design.** Credit 3 hours. Requires instructor authorization. The course deals with Hypertext Markup Language (HTML), design basics, and how the Web acts as a communication tool in today's business and social environment. This class teaches students Web page design and construction as it relates to the concepts of communication theory. Students will be required to have their own Internet Web account and construct a fully-functioning Web site that will be posted to the World Wide Web. This course will be offered in both an online and in-class format. Students will choose which format to take. (Varies)
- 418. Small Group Communication.** Credit 3 hours. Prerequisite: Junior standing. An investigation of the dynamics of small group communication, leadership, and decision-making, particularly as these groups function as subgroups of larger organizations. (Varies)
- 424. Television Advertising Design and Production Studio.** Credit 3 hours. Prerequisites: COMM 260 for Communication majors or ART 290 for Art majors or MRKT 303 for Marketing majors or permission of the Department Head. The marketing strategy and development, sale, design, and film-style production of video commercials, promotional spots, PSAs, infomercials and image campaigns for broadcast on television and the Internet. Includes broadcast graphics, animation, and design. Students design and produce spots and promotional programs for real-life clients. (Varies)
- 425. Variable Topics in Sports Media.** Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A variable content study of sports writing, public relations or broadcasting, which during alternating semesters, may focus on traditional sports news writing; public relations; or on radio or TV game coverage, announcing, producing, shooting, and editing for live sporting events. Can be repeated for credit twice with a change in focus. (Varies)
- 427. Field Study in Professional Communication.** Credit 1 hour (May be repeated for a total of 6 hours). Prerequisites: Junior standing, major in communication and permission of the Department Head. Intended to provide students with first-hand experience with various phenomena or organizations associated with professional communication. Students will focus their interests on areas related to the focus areas in the communication major. (Varies)
- 430. Convergence Media.** Credit 3 hours. COMM 151. This course will introduce students to convergence media. Students will participate in advanced journalistic writing and practice their skills through live, edited web blogging. The lectures will focus on technology in journalism and on adding multi-media elements to support stories. (Varies)
- 433. Leadership and Communication.** Credit 3 hours. Prerequisite: Junior Standing. An investigation into approaches to leadership from a communication perspective. Students enrolled in this course will learn about approaches to leadership and the theories emanating from these

approaches from both historical and contemporary sources; each student will complete a number of self-report leadership assessment instruments. (Varies)

441. Integrated Marketing Communication. Credit 3 hours. Prerequisite: COMM 272. The course emphasizes understanding the role of public relations, advertising, and other promotional tools in achieving effective campaigns based on clear objectives and audience segmentation within established time and cost parameters. (Varies)

449. Advanced Video Production and Editing. Credit 3 hours. Prerequisite: COMM 260. An exploration of advanced videography, lighting and audio techniques. Emphasis on field production using film-style shooting and editing. (Varies)

451/551. Media Management and Economics. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A study of legal regulations, audience analysis, marketing, administrative policies and financial conditions affecting the operation of print and broadcast media. (Varies)

453. Communication Law and Policy. Credit 3 hours. Prerequisite: COMM 159 or permission of the Department Head. This course will study the relationship between media and government. In its discussions, the course will study issues such as First Amendment Rights and those court cases which have shaped the present constitutional and legal environment of information gathering and writing for the mass media in America. (Summer, Fall, Spring)

456. Social and Ethical Issues in Mass Communication. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. Mass media from an ethical viewpoint. Includes the theory of mass communication, media functions, and the process and effects of mass communication. (Varies)

458. International Communication and Media. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A study of the history and development of current practices in international communication. Emphasis placed on objectives, policies, and problems of international communication. (Varies)

459. Communication Internship. Credit 3 hours. Prerequisite: Junior standing and approval by Communication Internship Committee. Provides training and experience in a working environment with a newsroom, station or other approved setting. Periodic reports and meetings with a faculty supervisor are required. (Varies)

460. Advanced Audio Production. Credit 3 hours. Prerequisite: COMM 256. To extend the student's mastery of the production techniques taught in the introductory course. Assignments are of greater length and difficulty, working toward professional broadcast quality productions through supervision, guidance, and critiquing. Topics may include: multi-track recording, advanced editing techniques, remote and studio productions, recording aesthetics, music technological advances, audio for film/TV. Six hours of lecture/laboratory per week. (Varies)

461. Media Criticism. Credit 3 hours. Prerequisite: Junior standing or permission of Department Head. An investigation of the critical process as it applies to the news media and entertainment industry in America. (Varies)

463. Writing for Public Relations. Credit 3 hours. Prerequisite: COMM 151. Writing of scripts, press releases and online items for educational organizations, government and business. Emphasis is placed on conceptualization, audience analysis, research, dialogue and visualization. (Varies)

465. Public Relations Campaigns. Credit 3 hours. Prerequisites: COMM 364 and 463. Gives students the opportunity to apply what they have learned of public relations strategies, writing and case studies in the creation of a public relations campaign. (Varies)

466. Special Events Planning. Credit 3 hours. Prerequisite: Junior Standing or permission of the Department Head. In this course, students will be provided the opportunity to plan, organize, manage, promote and evaluate special events such as festivals, conventions and trade shows. (Varies)

467. Public Relations Crisis Communication. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. The course will cover corporate crisis management, global crises and the cultural factors that affect them, product recall, issues management, creating a crisis response plan, internal and media relations during a crisis and the seven deadly sins of crisis response. (Varies)

471. Organizational Communication. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A course designed to explore the various theories, approaches, and opportunities relating to oral and nonverbal communication in organizations. (Varies)

475. Race and Gender Communication. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. Explores the various approaches, methodologies, issues, theories, and controversies related to race and gender communication. (Varies)

476. Social Media Communication. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. An examination of the underlying principles of social media used to accomplish communication goals. Emphasis on key concepts, best practices, data analysis, law and ethics – all needed to effectively communicate in social media space. (Fall)

477. Social Media Data Analytics. Credit 3 hours. Prerequisite: Junior standing or permission of Department Head. Students will examine the analytical process for social media as well as current technologies and software utilized to process data. (Spring)

478. Video Documentary Production. Credit 3 hours. Prerequisite: COMM 260 or permission of the Department Head. This course will act as a hands-on exploration of long-form documentary video. Students will create, videotape, and edit projects over the course of a semester. (Varies)

485. Health Communication. Credit 3 hours. Prerequisite: Junior standing. Health Communication is an emerging specialty in the field of communication. The study is concerned with human interaction in the health care process. (Varies)

490. Digital Audience Research and Behavior. Credit 3 hours. Prerequisite: COMM 476. This course will prepare students for the field of consumer and audience analytics with an emphasis on key metrics, data mining, data visualization, industry tools, software, and certifications. (Varies)

493. History of Mass Communication. Credit 3 hours: Prerequisite: Junior standing or permission of the Department Head. A lecture course emphasizing the development of print and broadcast media in the United States. (Varies)

495/595. Opinion Writing: Editorials and Critical Reviews. Credit 3 hours. Prerequisite: COMM 151 or ENGL 102. Practice in writing editorials and critical reviews of the arts for print, online, and broadcast, and a review of opinion/editorial and arts and entertainment media coverage policies. (Varies)

498. Professional Seminar in Communication. Credit 3 hours. Prerequisites: A major in communication with 100 or more credit hours earned which must include successful completion of COMM 151, 211, and a completed graduation application or permission of the Department Head. A study of the opportunities for professional growth and development within the student's chosen concentration. (Fall, Spring)

604. Independent Study in Strategic Communication. Credit 3 hours. Prerequisite: Graduate standing and permission of the Department Head. Readings, conferences, reports and/or special projects in one of the subject areas of the fields of Strategic Communication. (Varies)

610. Social Media Strategy. Credit 3 hours. This course will focus on strategically using social media to increase brand awareness, identify key audiences, generate leads, create personas, and build meaningful relationships with customers. Emphasis on identifying the social tools and technologies needed to utilize communication strategies and tactics to reach target audiences effectively. (Varies)

616. Communication Training, Assessment, and Development. Credit 3 hours. Prerequisite: Graduate standing. Covers topics such as diversity awareness, media relations, intercultural communication, leadership, conflict management, and creativity as well as covers theories of

learning and motivation, needs assessment, learning environments, and instructional technology. Students taking COMM 616 will be required to complete a project in which they conduct an analysis and needs assessment of an organization. (alternating Fall semesters)

620. Strategic Communication in a Multicultural Marketplace. Credit 3 hours. Prerequisite: Graduate standing. This course examines strategic communication and organizational culture and diversity. It will apply intercultural and critical communication theories to situations and issues that arise in multicultural organizations and multicultural marketplaces. Special attention will be given to the intersection of internal and external communication strategies, culture in communication, motivation, negotiation and conflict resolution. (Varies)

621. Strategic Communication Campaigns. Credit 3 hours. Prerequisite: Graduate standing. Students will research, create, produce, execute and evaluate a number of campaigns for real clients for all media. They will address the essential elements in devising a strategic issues management and communications campaign. The focus will be on how strategic communication can be used to proactively address 1) a company or an organization's reputation, and 2) stakeholders in terms of creating or regaining a positive brand in the eye of the public, the media and key opinion leaders. (Spring)

622. Digital Strategic Communication Analytics. Credit 3 hours. Students will develop a managerial understanding of web and social media analytics measures and operations to perform web performance optimization. Using tools and statistical programming languages, students will learn applications of web analytics, social network analysis, network representation, visualization, cohesion, clustering and semantic tree analysis. (Varies)

623. Strategic Integrated Marketing Communication. Credit 3 hours. This course will provide students a grounding in consumer behavior and decision making in the context of customer relationship management. Emphasis will be placed on planning and creating integrated, seamless messaging content based on competitor and audience analysis (Varies)

624. Digital Audience Strategy. Credit 3 hours. This course will provide digital audience research skills by investigating digital communication platforms and technologies used to evaluate online consumer behavior. Emphasis on using data to advance organizational objectives by developing strategic plans to reach target markets, including customers, users, influencers, and other core audiences. (Varies)

626. Law and Ethics for Emerging Media. Credit 3 hours. Prerequisite: Graduate standing. This course will examine the laws and ethics pertaining to new and emerging technologies of internet and social media, exploring such topics as accountability, employee voice, legitimacy, copyright protection, sexual harassment, age and gender discrimination, ADA requirements, and court decisions related to the evolving digital workplace. (Fall)

630. Media Planning and Buying. Credit 3 hours. This course covers the goal-oriented activities of planning, organizing and buying within the framework of the creation and distribution process for information or entertainment content in media enterprises. Student will develop commercial, strategic, and managerial skills to be successful in an industry constantly in a state of innovation and change. (Varies)

631. Digital Communication. Credit 3 hours. Prerequisite: Graduate standing. Students will be introduced to digital media tools, including online content creation, SEO, website management, email marketing, social media engagement, digital advertising, analytics and emerging technologies that are used to create and build integrated digital campaigns for engagement. This course will provide students with the ability to actively use digital communication tools, a foundational understanding of creating content across a wide range of media platforms and knowledge of using digital media platforms in a strategic communication mix. (Alternating Spring semesters)

633. Strategic Communication Leadership. Credit 3 hours. This course will study collaborative leadership models used to create a strategic vision of robust communication for an organization. Emphasis will be placed on data-driven decision making, ethical and inclusive practices, community relations and the global environment. (Varies)

640. Emerging Media Entrepreneurship. Credit 3 hours. Prerequisites: COMM 631 and 691. This course covers the process of identifying a new, digital media enterprise and quantifying market opportunities, then conceptualizing, planning, and executing a detailed business plan for a media startup. (Varies)

642. Strategic Crisis Communication. Credit 3 hours. Students will learn the practical application of crisis communication principles using various tools, techniques and technology to anticipate, identify and navigate crises as part of conducting an effective communication strategy. (Varies)

647. Strategic Communication in Global Networks. Credit 3 hours. Students will gain the knowledge and skills necessary to be strategic communicators in a global media environment that encompasses cross border connectivity, international commerce and policy. This course will address trade, border policy, regulation and culture. (Varies)

648. Content Creation for Strategic Communication. Credit 3 hours. Prerequisite: Graduate Standing. Provides practical training in the planning and creation of content to be used in strategic communication campaigns. (Fall)

649. Visual Design for Strategic Communication. Credit 3 hours. Prerequisite: Graduate Standing. Students develop analytical skills in visual communication. They also learn the visual approaches and techniques that enhance message exposure, awareness, and behavioral change. (Spring)

650. Strategic Communication for Nonprofits. Credit 3 hours. Prerequisites: COMM 631 and 691. Students will gain the knowledge and skills in communication, public relations and digital media as they are used in the nonprofit sector. They will also learn current strategies and techniques for successfully positioning the nonprofit organization and developing a strategic communication program that will augment the organization's vital fundraising efforts. (Varies)

659. Communication Internship. Credit 3 hours. Prerequisite: Graduate standing. Provides training and experience in an approved working environment. Periodic reports and meetings with the faculty supervisor are required. (Varies)

671. Applied Qualitative Research. Credit 3 hours. Prerequisite: Graduate standing. Explores the various qualitative theories, methods, approaches, and opportunities related to strategic communication in modern organizations. Emphasis on relationship between research and practice (Spring)

691. Quantitative Measurements for Strategic Communication. Credit 3 hours. Prerequisite: Graduate standing. This course is designed to acquaint students with the common quantitative measures utilized in strategic communication research. Emphasis will be placed on the design, execution, theories, and evaluation of quantitative methods and measures. (Fall)

698. Strategic Communication Capstone. Credit 3 hours. Prerequisite: Graduate standing. This is the culminating course in the Master of Arts in Strategic Communication Program. Students will synthesize and apply knowledge and skills from previous courses to demonstrate competence in a specialized area of strategic communication of interest. The Capstone project proposal must be approved by the instructor. It must be taken in the student's last semester or with permission of the Department Head. (Summer, Fall, Spring)

699. Special Topics. Credit 3 hours. Prerequisite: Graduate standing and approval of Department Head. A variable content course, which treats subjects of special interest. The content will change from semester to semester and will be advertised in advance. May be repeated once for a total of 6 hours credit. (Varies)

Communication Sciences and Disorders (CSD)

101. Introduction to Communication Sciences and Disorders. Credit 3 hours. A study of etiology, types, and characteristics of communication problems. An overview of the profession and concepts are presented. (Fall, Spring)

201. Introduction to Audiology. Credit 3 hours. The course is designed to provide students with a study of hearing, hearing disorders/impairments, hearing tests, and hearing management. Basic instruction in pure-tone air and bone conduction audiometry, masking, speech audiometry, and physiological procedures are included to acquaint students with the entire field of audiology. (Fall, Spring)

203. Introduction to Language. Credit 3 hours. This course will introduce the student to the basic concepts of language structure. Practice in discovering and describing language patterns will support the development of an objective approach to language differences. The course will include a survey of related topics such as animal vs. human communication and neurological and psychological issues in the study of language. (Fall, Spring)

205. Phonetics. Credit 3 hours. A study of the physical bases of sound production and perception, with emphasis on analysis, description and transcription of the phonological patterns of normal and disordered speech. (Fall, Spring)

212. Speech Sound Development and Disorders. Credit 3 hours. Prerequisites: CSD 101, 203, 205, and 213. This course will include a review of phonetics, the study of the development of the speech sound system and an examination of the identification, evaluation, and treatment of speech sound disorders. (Fall, Spring)

213. Anatomy and Physiology of the Speech and Hearing Mechanism. Credit 3 hours. Structure, function, and control of the anatomy and physiology involved in the speech and hearing mechanism. (Fall, Spring)

300. Beginning Clinical Practicum in Speech, Language, and Hearing. Credit 1 - 6 hrs. Prerequisites: CSD 201, 203, 327, 328, and minimum cumulative GPA of 2.5. Students conduct assessments, write treatment plans, and plan and implement therapeutic procedures for clients with communication disorders. Attendance at clinical staffing is required. A laboratory fee is required for this course. (Summer, Fall, Spring)

309. Beginning Assessment in Communication Disorders. Credit 3 hours. Prerequisites: CSD 101, 205, 212, and 213 and cumulative GPA of 2.5 or higher or permission of the Department Head. Introduction to the terminology, major theories, types and methods of assessment used in speech-language pathology. Students will explore assessment materials, observe clinical assessment procedures, and practice professional report writing. (Fall, Spring)

326. Acoustics and Speech & Hearing Science. Credit 3 hours. Prerequisites: CSD 201 and cumulative GPA of 2.5. The course is designed to provide students with basic principles concerning sound and speech production, transmission, modification, analysis and reception. The course is also designed to address the relationship of these principles to the practice of speech language pathology and audiology. (Fall)

327. Introduction to Clinical Methods for Communication Disorders. Credit 3 hours. Prerequisites: CSD 101, 205, 212, 213, 415, concurrent enrollment in or prior credit for CSD 328 and a cumulative GPA of 2.5 or permission of the Department Head. This course presents information on the fundamentals of clinical methods in speech-language pathology. Course content covers clinical procedures to prepare students for subsequent clinical experiences with individuals with a variety of speech and language disorders. (Fall, Spring)

328. Introduction to Clinical Experiences. Credit 1-3 hrs. Prerequisites: CSD 101, 203, 205, 212, and 213, 415, concurrent enrollment in or prior credit for CSD 327, cumulative GPA 2.5 or permission of the Department Head. This course introduces students to clinical experiences across the life span and from culturally/linguistically diverse backgrounds. Twenty-five hours of observations of clinical sessions are required. Graduate students with regular admission who do not have 25 observation hours must register for this course. (Fall, Spring)

329. Introduction to Voice and Fluency Disorders. Credit 3 hours. Prerequisites: CSD 212, 213, and cumulative GPA of 2.5 or permission of the Department Head. This course is designed to provide a broad overview of pertinent anatomy and physiology, theories, etiologies, characteristics, assessment and treatment methods for common voice and fluency disorders. (Fall)

365. Behavior Management Strategies for Individuals with Communication Disorders. Credit 3 hours. Prerequisites: CSD 101 and cumulative GPA of 2.5 or higher or approval of Department Head. This course focuses on a continuum of effective clinical approaches for solving behavioral problems in individuals with communication disorders. Emphasis will be placed on strategies for discovering the underlying reasons for problematic behaviors, as well as crafting the communication component of behavioral intervention. Students will develop and demonstrate positive behavior management plans. (Varies)

409. Directed Readings in Communication Science Disorders. Variable credit: 1, 2, or 3 hours. Prerequisite: Cumulative GPA of 2.5. Directed individual study of selected area(s) in speech, language, and hearing. Area(s) of study to be designated by instructor. Students may repeat the course for a total of 6 credit hours. Number of credit hours will be determined by the instructor based on the complexity and depth of the subject matter. (Varies)

410. Intermediate Clinical Practicum in Speech, Language and Hearing. Credit 1 - 6 hrs. May be repeated for credit. Prerequisites: CSD 300 and 309, and a minimum cumulative GPA of 2.5, and 35 clinical contact hours. Students acquire more advanced skills in the therapeutic and assessment processes and in writing various types of professional reports. Attendance at clinical staffing is required. A laboratory fee is required for this course. (Summer, Fall, Spring)

411. Aural Habilitation and Rehabilitation. Credit 3 hours. Prerequisites: CSD 201, CSD 326, and a cumulative GPA of 2.5, or permission of the Department Head. Exploration of communication training options for individuals with congenital and acquired hearing loss. Credit cannot be given for both CSD 411 and CSD 511. (Spring)

413. Public School Speech, Language, and Hearing Services: Methods and Materials. Credit 3 hours. Prerequisites: CSD 212, 300, 309, 327, 328, 415, and cumulative GPA of 2.5 or permission of the Department Head. This course presents a study of the organization and delivery of SLH services in the public-school setting. Course content emphasizes practical information regarding the foundation, implementation and maintenance aspects of conducting a public school SLH program. Topics to be covered include: legislation program structure, diagnostic and therapeutic methods, inclusion, the speech pathologist as a consultant and data manager. Development of I.E.P. and I.F.S.P. plans included. Credit cannot be given for both CSD 413 and CSD 513. (Varies)

415. Speech and Language Development. Credit 3 hours. Prerequisites: CSD 203, CSD 205 and a Cumulative GPA of 2.5 or permission of the Department Head. A study of the major theories of language acquisition. The normal sequence of child development will be highlighted. Cultural and linguistic differences will be discussed. Credit cannot be given for both CSD 415 and CSD 515. (Fall, Spring)

416. Management of Child Language Disorders. Credit 3 hours. Prerequisites: CSD 415 or CSD 515 and cumulative GPA of 2.5. This course provides an overview of children's language disorders. Linguistic and extra linguistic characteristics associated with various disorders are discussed, and the bases for differential diagnosis are provided. General and specific strategies for intervention are introduced. Credit cannot be given for both CSD 416 and CSD 516. (Spring)

430. Introduction to Manual Communication. Credit 3 hours. An introduction to fingerspelling and sign language, including applications for individuals with disabilities. Supervised practice in fingerspelling and signing vocabulary. (Varies)

440. Intermediate Assessment in Communication Disorders. Credit 3 hours. Prerequisites: CSD 309 and a cumulative GPA of 2.5 or higher or approval of Department Head. This course is designed to provide pre-professional students with the knowledge to understand assessment in the following areas: communication, educational performance, cognitive aspects of communication, and adaptive behavior. Students will demonstrate assessment skills consistent with the scope of practice for speech-language pathology assistants. (Varies)

447. Intermediate Manual Communication. Credit 3 hours. Prerequisite: CSD 430 or 530 or permission of Department Head. A continuation of beginning manual communication with emphasis on American Sign Language. Applications for working with individuals with hearing impairments. Concentrated supervised practice in signing for functional communication. (Varies)

451. Introduction to Augmentative/Alternative Communication. Credit 3 hours. Prerequisite: Cumulative GPA of 2.5. Course presents an overview of communication and the role of augmentative and alternative communication in educational/therapeutic programs. Attention is focused on service delivery for individuals with severe communication disorders. Assessment, intervention, program development, and expansion of existing augmentative and alternative communication systems are included. Credit cannot be given for both CSD 451 and CSD 551. (Varies)

500. Introductory Clinical Practicum in Communication Disorders. Credit 1-6 hours. Prerequisites: CSD 201, 327, 328, 615, and in good academic standing, or permission of the Department Head. Designed for students without a bachelor's degree in speech-language pathology who are at beginning level of clinical competency and who are seeking licensure and/or certification as a speech-language pathologist. Students conduct assessments, write and implement treatment plans. Attendance at clinical staffing is required. A laboratory fee is required for this course. (Summer, Fall, Spring)

510. Beginning Clinical Practicum in Communication Disorders. Credit 1-6 hours. May be repeated for credit. Prerequisites: 25 observation hours, CSD 309, 327, and 500, and in good academic standing, or permission of Department Head. Designed for students at a beginning level of clinical competency and who are seeking licensure and/or certification as speech-language pathologists. Students acquire additional skills in therapeutic and assessment processes and write various types of professional reports. Attendance at clinical staffing is required. A laboratory fee required. (Summer, Fall, Spring)

511. Aural Habilitation and Rehabilitation. Credit 3 hours. Prerequisite: CSD 201 or permission of the Department Head. Exploration of communication training options for individuals with congenital and acquired hearing loss. Credit cannot be given for both CSD 411 and 511. (Varies)

513. Public School Speech, Language, and Hearing Services: Methods and Materials. Credit 3 hours. Prerequisites: CSD 212, 309, 327, 328, 415 and 500 or permission of Department Head. This course presents a study of the organization and delivery of speech language and hearing services in the public-school setting. Course content emphasizes practical information regarding the foundation, implementation and maintenance aspects of conducting a public-school speech language and hearing program. Topics to be covered include: legislation program structure, diagnostic and therapeutic methods, inclusion, the speech pathologist as a consultant and data manager. Development of I.E.P. and I.F.S.P. plans included. Credit cannot be given for both CSD 413 and CSD 513. (Varies)

514. Clinical Practicum. Credit 1 hour. Participation in supervised direct clinical activities dealing with audiometric evaluation and rehabilitation. Credit cannot be given for both CSD 400 and CSD 514. (Varies)

515. Speech and Language Development. Credit 3 hours. A study of the major theories of language acquisition. The normal sequence of child development will be highlighted. Cultural and linguistic differences will be discussed. Credit cannot be given for both CSD 415 and 515. (Varies)

516. Management of Child Language Disorders. Credit 3 hours. Prerequisite: CSD 415 or CSD 515. This course provides an overview of children's language disorders. Linguistic and extralinguistic characteristics associated with various disorders are discussed, and the bases for differential diagnosis are provided. General and specific strategies for intervention are introduced. Credit cannot be given for both CSD 416 and CSD 516. (Varies)

530. Introduction to Manual Communication. Credit 3 hours. An introduction to fingerspelling and sign language, including applications for individuals with disabilities. Supervised practice in fingerspelling and signing vocabulary. (Varies)

535. Advanced Hearing Testing. Credit 3 hours. Prerequisite: CSD 201 or permission of the Department Head. Emphasis on site of lesion tests and testing procedures that require additional information beyond the standard audiometric evaluation. Interpretation of the test results and clinical applications will be included. (Varies)

547. Intermediate Manual Communication. Credit 3 hours. Prerequisite: CSD 430 or 530 or permission of Department Head. A continuation of beginning manual communication with emphasis on American Sign Language. Applications for working with individuals with hearing impairments. Concentrated supervised practice in signing for functional communication. (Varies)

551. Introduction to Augmentative/Alternative Communication. Credit 3 hours. Course presents an overview of communication and the role of augmentative and alternative communication in educational/therapeutic programs. Attention is focused on service delivery for individuals with severe communication disorders. Assessment, intervention, program development, and expansion of existing augmentative and alternative communication systems are included. Credit cannot be given for both CSD 451 and CSD 551 or SPED 457/557. (Varies)

552. Computer Applications for Individuals with Special Needs. Credit 3 hours. A course designed to provide an overview of microcomputers and other technology with an emphasis on applications for special populations. Topics include: basic computer operations/adaptations, learning theories related to educational/clinical uses of technology, computer-managed instruction, and computer-assisted instruction. Awareness of technology-related ethical issues and knowledge of resources useful to computer users will be components of the course. Credit cannot be given for both CSD 452 and CSD 552 or SPED 458/558. (Varies)

560. Oral Reporting/Professional Communication Skills for Speech-Language Pathologists. Credit 3 hours. Prerequisites: CSD 213, 309, 327, 328, 415, or permission of Department Head. Students will be trained to perform a variety of oral reports, ranging from brief informal discussions to highly prepared formal case presentations and grand rounds. Students will also become skilled at organizing and writing clinical reports, educational programs and computerized report writing. Credit cannot be given for both CSD 460 and CSD 560. (Varies)

600. Psycholinguistics. Credit 3 hours. Prerequisites: CSD 602 and 624. A survey of the processes involved in encoding and decoding language at four levels of structure: phonology (the sound system), lexicon (words), morpho-syntax (phrases and sentences), and discourse (conversation), with specific attention to disturbance affecting the normal functioning of each of these levels. (Varies)

602. Aphasia. Credit 3 hours. Prerequisite: CSD 606 or permission of the Department Head. A study of aphasia syndromes, etiologies, assessment strategies and treatment options. (Fall, Spring)

603. Advanced Clinical Practicum in Communication Disorders. Credit 1-6 hours. May be repeated for credit. Prerequisites: CSD 602, 606, 611, 614, 200 clinical hours, and in good academic standing, or permission of Department Head. Designed for graduate students in good standing, performing at an advanced level of clinical competency and seeking licensure and/or certification as speech-language pathologist. Students administer assessment, write treatment plans, plan and implement therapeutic procedures. Emphasis is on adults with communication disorders. Attendance at clinical staffing is required. A laboratory fee is required for this course. (Summer, Fall, Spring)

604. Speech Science and Perception. Credit 3 hours. Prerequisite: Admission to the master's program or permission of the Department Head. A study of the production, transmission, and perception of speech signals; anatomy, physiology, phonetics, acoustic, psychoacoustics, and acoustic cues. Laboratory experience and clinical applications will be included. (Varies)

606. Neurophysiological Bases of Human Communication. Credit 3 hours. Prerequisite: Admission to the master's program or permission of the Department Head. Advanced principles in anatomy and physiology of the nervous system will be reviewed with an emphasis on usage in medical speech-language pathology. (Fall, Spring)

607. Seminar in Audiology. Credit 3 hours. Prerequisites: CSD 201 and admission to the master's program, or permission of the Department Head. The course is designed to provide students with an understanding of audiology specific to the scope and practice of speech language pathology. Diagnosis and management of hearing loss will be discussed, with a focus on acoustics, clinical procedures, and the impact of hearing loss on speech, language, and communication. (Fall, Spring)

608. Craniofacial Anomalies. Credit 3 hours. Prerequisite: Regular Admission to the CSD graduate program or permission of the Department Head. A study of craniofacial anomalies as they affect speech production. Assessment and management will be studied within the context of a team approach. (Varies)

609. Independent Research in Communication Sciences and Disorders. Credit 3 hours. Students will design, carry out, and write, in journal style, a research project with guidance of the instructor. (Varies)

610. Phonological Processes and Disorders. Credit 3 hours. The course presents an in-depth study of the phonological component of the linguistic system with an emphasis on the assessment and treatment of phonological disorders in children. (Varies)

611. Intermediate Clinical Practicum in Communication Disorders. Credit 1-6 hours. May be repeated for credit. Prerequisites: CSD 510, 617, 100 clinical hours, and in good academic standing, or permission of Department Head. Designed for students at an intermediate level of clinical competency and who are seeking licensure and/or certification as speech-language pathologists. Students acquire additional skills in therapeutic and assessment processes and the writing of various types of professional reports. Emphasis is on children with communication disorders. Attendance at clinical staffing is required. A laboratory fee is required for this course. (Summer, Fall, Spring)

612. Instrumentation in Hearing, Speech and Voice. Credit 3 hours. Principles for applying instruments in the field of speech and hearing with an emphasis on clinical approaches to speech and hearing pathologies. A survey of the principal equipment and instrumentation which will be available to speech pathologists and audiologists in their professional activities within a variety of settings. (Varies)

613. Motor Speech Disorders. Credit 3 hours. Prerequisite: CSD 606. Advanced survey of perceptual and physio-acoustic dimensions of dysarthria and apraxia. The course will include in-depth training in differential diagnosis of each of these disorders. In addition, applications for treatment will be addressed. (Fall, Spring)

614. Dysphagia. Credit 3 hours. Prerequisite: CSD 606 or permission of the Department Head. The study of swallowing disorders in all age groups from newborns to the elderly that result from a variety of medical conditions. An in-depth review of the literature will include pre-feeding skills of infants as well as the disorders of deglutition and aging. Students will learn to evaluate radiographic examinations and make recommendations for therapy to be carried out by a team of experts that could include physicians, nurses, caregivers, occupational and physical therapists and nutritionists. (Fall, Spring)

615. Structure and Processing of Language. Credit 3 hours. Prerequisite: Admission to the master's program or permission of the Department Head. This introductory survey will examine the structural properties of language (both universal and language-specific) in relation to the diagnosis and treatment of language and articulation disorders. The course will cover the core areas of phonetics, phonology, morphology, syntax, semantics, and pragmatics, along with psycholinguistic and sociolinguistic perspectives. Rudimentary training in the computerized analysis of language data will be included. (Varies)

616. Language and Literacy. Credit 3 hours. The course emphasizes the interactive processes of language and literacy. Factors affecting the acquisition and development of literacy will be reviewed. Training in assessment procedures and intervention techniques for individuals with language-learning disorders will be stressed. (Fall, Spring)

617. Advanced Diagnosis of Communicative Disorders. Credit 3 hours. Prerequisites: CSD 606 and 624 or permission of the Department Head. Advanced instruction in the theory, methods and current research in diagnosis of communication disorders. Clinical assignment(s) is/are a component of the class. (Fall, Spring)

618. Augmentative and Alternative Communication Intervention. Credit 3 hours. Prerequisite: CSD 451/551 or permission of the Department Head. The course emphasizes intervention for individuals in need of augmentative or alternate communication (AAC) systems. Intervention includes the processes of assessment and program development for individuals with severe communication disorders. Variables that affect the development and implementation of AAC systems in various service delivery settings will be a major component of the course. (Varies)

619. Bilingualism. Credit 3 hours. This introduction to bilingualism will focus primarily on children. Bilingualism will be viewed from social, psychological and linguistic perspectives; both advantages and potential problems associated with bilingualism will be considered. Specific analysis will be devoted to the acquisition, use and loss of two languages. (Varies)

621. Principles of Communication Sciences and Disorders. Credit 3 hours. The course presents an advanced study of concepts and methods in the field of communication disorders. (Varies)

622. Speech Disorders. Credit 3 hours. Prerequisite: CSD 604 or consent of the Department Head. This course provides a detailed examination of the etiology, characteristics, assessment and intervention for articulation, fluency, voice and resonance disorders. (Varies)

623. Special Topics in Communication Sciences and Disorders. Credit 1-3 hours. Prerequisite: Permission of the Department Head. Selected topics in the field of communication sciences and disorders will be presented. Current issues and trends as well as traditional practices will be explored. May be repeated for a total of six hours credit. (Summer, Fall, Spring)

624. Advanced Seminar in Language Disorders and Differences. Credit 3 hours. Prerequisite: Admission to the Master's program or permission of the Department Head. This course provides an expanded view of normal language development with an emphasis on cross-cultural comparison and contrast. Developmental and acquired language disorders will be differentially examined. Best practices for non-biased assessment, clinical intervention, and the ethical support of linguistically/culturally diverse populations will be explored. (Varies)

626. Autism Spectrum Disorders. Credit 3 hours. A study of the nature of autism, including current thinking relative to etiology, cognition, and various behavioral aspects, with emphasis on communication and socialization. Practical applications for assessment and intervention will be highlighted. (Varies)

627. Neuropathologies of Communication. Credit 3 hours. Prerequisite: CSD 606. Advanced survey exploring a variety of developmental and acquired neurogenic communication disorders, including cerebral palsy, dementia, right hemisphere syndrome and traumatic brain injury. Emphasis is on such clinical applications as dynamic assessment, differential diagnosis, and approaches to intervention. (Varies)

628. Language Intervention for Infants and Toddlers. Credit 3 hours. This course is a concentrated study of current models of language intervention with infants and toddlers. Topics will include a review of the normal prelinguistic and early linguistic periods, etiological issues, and dynamic assessment procedures designed for very young children. Practical applications for intervention will be emphasized throughout. (Fall, Spring)

629. Advanced Clinical Methods for Communication Disorders. Credit 3 hours. Prerequisite: Admission to the master's program. This course provides an extensive review of the methods of outcomes assessment and intervention for people with various types and severities of communication disorders. Emphasis is placed on evidence-based clinical practice and an oral and written communication skills necessary for effective professional practice. (Varies)

630. Advanced Specialty Clinical Practicum in Communication Disorders. Credit 1-6 hours. May be repeated for credit. Prerequisites: CSD 611 and/or CSD 603, more than 200 clinical hours and in good academic standing, or permission of the Department Head. Designed for students seeking licensure and/or certification as speech language pathologists and who are performing at an advanced level of clinical competency. Students administer assessments, write treatment plans, plan and implement therapeutic procedures. Emphasis is on children and/or adults with communication disorders. Attendance at clinical staffing is required. A laboratory fee is required for this course. (Summer, Fall, Spring)

631. Counseling in Communication Disorders. Credit 3 hours. Prerequisite: CSD Major or permission of Department Head. The course emphasizes active listening and interpersonal communication principles and counseling approaches that are within the scope of practice in speech-language pathology and audiology to guide decision-making by individuals with communication disorders and their families. (Varies)

632. Seminar in Voice and Resonance. Credit 3 hours. Prerequisites: CSD 606 and 607, or permission of Department Head. A study of the etiologies, characteristics, assessment strategies, and treatment procedures associated with disorders of voice and resonance in pediatric and adult populations. (Fall, Spring)

633. Seminar in Fluency. Credit 3 hours. A study of the etiologies, characteristics, assessment strategies, and treatment procedures associated with disorders of fluency in pediatric and adult populations. (Fall, Spring)

634. Developmental and Acquired Cognitive-Communication Disorders. Credit 3 hours. Prerequisite: CSD 606. Advanced survey exploring a variety of developmental and acquired neurogenic communication disorders, including intellectual disabilities, dementia, right hemisphere syndrome and traumatic brain injury. Emphasis on prevention, formal and informal assessment, differential diagnosis, and approaches to evidence-based interventions. (Fall, Spring)

687. Research Methods in Communication Sciences & Disorders. Credit 3 hours. Principles, procedures, and techniques of research with an intensive survey of scientific investigations in communication sciences and disorders and related fields. Emphasis on practical application for clinicians. (Fall, Spring)

770. Thesis. Credit 1-6 hours each semester, with six (6) hours needed for graduation. The student must enroll in the thesis course each semester the thesis is in progress. The thesis is graded Pass/Fail. (Varies)

Computer Science (CMPS)

101. Introduction to Computer Science. Credit 3 hours. Introduction to the major areas of computer science including operating systems, machine architecture, programming languages, data representation and storage, and algorithm development. Includes major emphasis in problem solving and simple programming concepts. (Summer, Fall, Spring)

105. Computers in Society. Credit 3 hours. Topics include historical, modern, and future developments, as well as an overview of a computer system's hardware, software and people. Issues concerning security, privacy, and ethics will be discussed. Includes practical application of using communication software networks, including the Internet and the World Wide Web. (Summer, Fall, Spring)

110. Computer Fluency. Credit 3 hours. An introduction to modern computer hardware and software. Software includes an operating system, human-computer interaction, networking and the web, word processing, and electronic spreadsheets. Credit toward the degree will not be granted for both CMPS 110 and MGMT 210. (Summer, Fall, Spring)

120. Visual Programming. Credit 3 hours. Prerequisite: Registration in or prior credit for MATH 161 or 175. An introduction to visual programming using a modern, visual programming language. Topics to include programming fundamentals such as variables, looping, and arrays, as well as graphical user interface (GUI) design and event-driven programming. (Summer, Fall, Spring)

121. Principles of Cybersecurity. Credit 3 hours. An introduction to the basics of modern cybersecurity at the individual and organizational level. This course will explore modern best practices, technologies and threats in the field. Past breaches will be examined to determine how they happened, how those breaches were managed by the individual or organization, and how such breaches can be prevented. (Varies)

152. Introduction to Programming for Scientists. Credit 3 hours. Prerequisite: MATH 161 or permission of the Department Head. An introductory programming course designed for technology, mathematics, natural science, and life science majors. Topics include problem solving, algorithms development, and library usage as applied to scientific applications. (Fall)

161. Algorithm Design and Implementation I. Credit 3 hours. Prerequisite: Eligibility to enroll in MATH 161, or permission of the Department Head. Basic concepts of computer programming, problem solving, algorithm development, and program coding using a high-level, block-structured language. Credit may be given for both CMPS 110 and 161. (Summer, Fall, Spring)

173. Software for Management of Data. Credit 3 hours. Prerequisite: MATH 161 or permission of the Department Head. Concepts of acquisition, organization, exchange and storage of quantitative data through the use of visual languages and packages. (Summer, Fall, Spring)

204. Fundamentals of Information Technologies and Systems. Credit 3 hours. Survey course to provide a foundation for understanding Computer Information Technology. Coverage of the fundamentals of information system and information technology concepts, strategies and skills. (Summer, Fall, Spring)

209. Introduction to Applied Networking. Credit 3 hours. An introduction to networking from an applied perspective. Includes configuration and physical setup of both wired and wireless local area networks using popular platforms. Also covers client/server basics. File and printer sharing, and basic network security settings. (Summer, Fall, Spring)

210. Social Software. Credit 3 hours. An application-based introduction to development of Social Software. Blogs, microblogs, podcasting, social networking and related issues will be examined. Emphasis will be on gaining hands-on experience in the use of content authoring tools. (Fall)

225. Advanced Spreadsheets, Programming and Applications. Credit 3 hours. Use of software to perform data analysis, graphing, macros, datasets, financial, and specialized functions. (Summer, Fall, Spring)

233. Desk Top Publishing. Credit 3 hours. Topics include assembling, and design of document, fonts, art layout, photos, black and white images, shading, colors, graphics, using microcomputers, scanners, and other peripheral devices. (Summer, Fall, Spring)

234. An Introduction to Applications of Database Management Systems. Credit 3 hours. A course covering relational database basic structure, method of design, implementation and manipulation. Student will design and implement a major database project using a production version database management system. (Summer, Fall, Spring)

235. Website Design and Construction. Credit 3 hours. Design and construction of websites using modern website design software tools. Includes tools for creation of HTML/XHTML, visual elements and inclusion of turn-key interactive and dynamic components. Also covers selection and use of typical website hosting services. (Summer, Fall, Spring)

257. Discrete Structures. Credit 3 hours. Prerequisites: CMPS 161 and MATH 161 or 175. Introduction to discrete structures of computing. Topics include sets, relations, functions, digraphs, matrices, recursion, partially ordered sets, Boolean Algebra, artificial languages, and finite state machines. (Summer, Fall, Spring)

273. Software for Storing and Analyzing Data. Credit 3 hours. Prerequisites: MATH 175 or 241 and CMPS 173 or permission of the Department Head. Topics include methods for designing database schema and spreadsheet programs based on quantitative data analysis requirements; implementation of spreadsheet programs and database schema using integrated methodologies with visual languages and software packages. (Summer, Fall, Spring)

280. Algorithm Design and Implementation II. Credit 3 hours. Prerequisite: CMPS 161 and eligibility to enroll in MATH 175. An intensive capstone of the material covered in CMPS 161 and an introduction to elementary data structures, searches and complex sorts, and objects. (Summer, Fall, Spring)

285. Software Engineering. Credit 3 hours. Prerequisite: CMPS 280 or SC 200 or permission of the Department Head. Introduction of the methods used for specifying, designing, implementing, and testing medium and large-scale software systems; methods for organizing and managing software development projects; professionalism and ethical responsibilities in software development. (Summer, Fall, Spring)

290. Computer Organization. Credit 3 hours. Prerequisite: CMPS 280 or ET 212. An introduction to the structure and function of computing machines. The primary components of the computer are examined from an organizational and logical standpoint. Topics include introduction to digital systems; machine level representation of data; assembly level machine organization; memory system organization and architectures; and introduction to language translation. Credit toward the degree will not be granted for both CMPS 290 and 293. (Summer, Fall, Spring)

293. Introduction to Assembly Language. Credit 3 hours. Prerequisite: CMPS 120 or CMPS 280 or ET 212. Fundamentals of assembly language programming. Topics include machine representation of data, fixed point, floating point, and decimal arithmetic, macros, address modification, bit manipulation, and subroutine linkage. Credit toward the degree will not be granted for both CMPS 290 and 293. (Summer, Fall, Spring)

294. Internet Programming. Credit 3 hours. Prerequisite: CMPS 280 or ET 221. This course concerns the art and science of programming for WWW Internet applications from a client-side perspective. Basic and advanced HTML will be covered, with emphasis on current scripting technologies. (Spring)

295. Special Problems. Credit 1-3 hours. Prerequisite: CMPS 110 or equivalent. Independent investigation and application of computing software that is not covered in existing courses. May be repeated for up to 3 hours credit. (Varies)

297. Digital Logic. Credit 3 hours. Principles of digital logic, to include gates, combinational circuits, flip-flops, registers, counters, timers, memory, buses, input/output interfaces and microprocessors. (Fall)

315. System Administration. Credit 3 hours. Prerequisite: CMPS 285. This course teaches skills and concepts that are essential to the administration of operation systems, networks, software, various computing support systems, and system documentation, policies, and procedures. This also includes education and support of the users of these systems. (Fall)

321. Embedded Computing with Microcontroller and IOT based Systems. Credit 3 hours. Prerequisite: CMPS 290 or 293 or ET 215 or permission of Department Head. An introduction to embedded computing covering various types of microcontrollers; IOT: Internet-of-Things; IOT devices as servers and appropriate server-side programming and administration; IOT system design and interfacing. (Varies)

329. Computer Networking and Security. Credit 3 hours. Prerequisite: CMPS 290 or 293 or ET 215. Topics include protocols used in local area and wide area networks, network administration, and the conceptual and technical aspects of computer security and information assurance, especially as it impacts computer networks and the Internet. (Spring)

333. Advanced Desktop Publishing and Multimedia. Credit 3 hours. Prerequisite: Registration in or prior credit for CMPS 290 or CMPS 293. Students will develop various informative and promotional materials. Emphasis will be on independent work, and developing concepts with outside clients when possible. Projects will include work with traditional print media as well as digital media. Credit toward the degree will not be granted for Computer Science majors. (Spring)

335. Advanced Web Publishing. Credit 3 hours. Prerequisites: CMPS 235 and one introductory programming course or permission of the Department Head. Topics include using a variety of markup languages and scripting techniques for both server and client WWW applications. (Fall, Spring)

339. Database Administration. Credit 3 hours. Prerequisite: CMPS 280 or SC 200. A hands-on comprehensive study of database administration and applications to include selecting, installing, configuring, tuning, maintaining, and reviewing modern database systems. (Fall)

340. Introduction to Data Science. Credit 3 hours. Prerequisites: CMPS 280 or SC 200 and eligibility to enroll in MATH 200, or permission of Department Head. Topics include basics of programming for data science, data science libraries, random variables, descriptive statistics, basic linear algebra, scaling and plotting data, model assessment, introduction to supervised and unsupervised learning. (Summer, Fall, Spring)

355. Object-Oriented Programming. Credit 3 hours. Prerequisite: CMPS 280. Introduction to the Object-Oriented Paradigm, including data abstraction, encapsulation, polymorphism, inheritance, and garbage collection. Implementation of these concepts using an Object-Oriented language. (Varies)

375. Computer Architecture. Credit 3 hours. Prerequisite: CMPS 280 or ET 215. Hardware organization and implementation of computer architecture. Instruction set considerations and addressing modes. System control concepts. CPU control, microprogramming, I/O interface and memory organization. Parallel and data flow architecture. (Spring)

383. Information Systems. Credit 3 hours. Prerequisite: CMPS 285. A study of file organization and management, analysis of the concept of information systems, approaches and techniques for evaluating information systems. Fourth generation languages will be explored. (Spring)

389. Computer Graphics. Credit 3 hours. Prerequisites: MATH 200 and CMPS 280. Introduction and techniques of computer graphics. Topics include interactive versus passive graphics, input-output devices, and programming techniques suitable for the visual representation of data and images. (Odd Year Spring Semesters)

390. Data Structures. Credit 3 hours. Prerequisites: CMPS 280 or SC 200. Further study of trees, including: balanced trees, B-trees, 2-3 trees, and tries; external sorting, symbol tables, and file structures. (Summer, Fall, Spring)

391. Numerical Methods. Credit 3 hours. Prerequisites: CMPS 280 and MATH 201. Computer-oriented numerical methods for scientific problems. Topics include error analysis, Taylor series, solutions of equations, linear simultaneous equations, and interpolation. (Even Year Fall Semesters)

394. Web Systems and Technologies. Credit 3 hours. Prerequisite: CMPS 294. This course covers the setup and management of important web-based services, server-supported programming technologies, and some other host-management issues such as user support, security, staffing, and purchasing. (Even Year Fall Semesters)

398. Cloud Software Applications Development. Credit 3 hours. Prerequisites: CMPS 285 and CMPS 390. A hands-on, comprehensive study of Cloud concepts and capabilities across the various Cloud service models including infrastructure as a Service (IaaS), Platform as a Service (PaaS), Software as a Service (SaaS), and Business Process as a Service (BPaaS). IaaS topics start with a detailed study the evolution of

infrastructure migration approaches from VMWare/Xen/KVM virtualization, to adaptive virtualization, and Cloud Computing / on-demand resources provisioning. Mainstream Cloud infrastructure services and related vendor solutions are also covered in detail. (Varies)

400. Internship. Credit 1-6 hours. Prerequisites: CMPS 390 and permission of the Department Head. Student must be an integral part of a software project team in industry during the semester. Graded as Pass/Fail only. Can be counted as a general elective only, not as a Computer Science Elective (300-400). May be taken more than once for up to 6 credit hours. (Varies)

401. Survey of Programming Languages. Credit 3 hours. Prerequisite: CMPS 390. Involves the formal study of programming languages, specification, and analysis in terms of data types and structures. (Fall)

408. Ethical Hacking. Credit 3 hours. Prerequisite: CMPS 329. An introduction to the techniques of modern ethical hacking. This course will explore how an offensive mindset to network security can be leveraged to provide effective defenses for current network environments. This course will include the tools and techniques of penetration testing, social engineering, system hacking and evasion. The legal, ethical, and policy implications will be examined as well. (Varies)

409. Advanced Computer Networking. Credit 3 hours. Prerequisite: CMPS 329. Topics include security, optimization, custom modules, protocols, information flow management, disaster recovery, wireless applications, and legal and ethical issues. (Fall)

411. Capstone I. Credit 3 hours. Prerequisite: CMPS 390. This course must be taken in the academic year in which the student intends to graduate. Through participation in a major capstone project, this course presents a formal approach to the top-down design, development, and maintenance of software systems. Topics include organization and management of software projects, security, programmer teams, validation and verification. (Fall, Spring)

412. Capstone II. Credit 3 hrs. Prerequisite: CMPS 411. This course provides for direction to students wishing to extend a completed capstone experience from CMPS 411. Students are expected to make a substantial change or improvement that extends their basic capstone experience. (Varies)

415. Integrated Technologies for Enterprise Systems. Credit 3 hours. Prerequisite: CMPS 390. This course provides an introduction to several current technologies, and how they can be used to integrate software solutions into a functional large interconnected system. The course will focus on contemporary technologies used for enterprise software development. (Spring)

420. Human Computer Interaction. Credit 3 hours. Prerequisite: CMPS 390. Designing, implementing, and evaluating computer systems. Task analysis, prototyping, usability evaluation, dialogue specification, interaction styles and techniques, human factors, virtual reality, multimedia, and hypermedia systems. (Fall)

431. Operating Systems. Credit 3 hours. Prerequisites: CMPS 390 and registration in or prior credit for CMPS 375. Design and implementation of operating systems. Topics include process management, processor management, memory management, device management, file management, process synchronization and inter-process communication, and user interface. Other issues such as distributed computing and system performance may be discussed. (Fall, Spring, Summer)

434/534. Fundamental Algorithms. Credit 3 hours. Prerequisites: CMPS 257 or MATH 223, and CMPS 390. The design, implementation, and complexity of algorithms analysis. (Fall)

439/539. Database Systems. Credit 3 hours. Prerequisite: CMPS 340 or 390. Design and implementation of database systems. Topics include hierarchical, relational, and network models, normalization of relations, data integrity and security, and database administration. A programming project using a relational DBMS is required. (Spring)

441. Artificial Intelligence. Credit 3 hours. Prerequisite: CMPS 340. Introduction to intelligent processes and their performance by a computer. Topics include computer representation of knowledge, problem solving, game playing, knowledge and reasoning, and natural language. (Varies)

443/543. Simulation and Modeling. Credit 3 hours. Prerequisites: CMPS 390 and MATH 380. Construction and use of computer and mathematical models, parameter estimation, simulation techniques, applications of simulation, examples, and cases and studies taken from physical, social and life sciences, engineering, business and information sciences. (Even Year Fall Semesters)

447. Introduction to Robotics. Credit 3 hours. Prerequisite: CMPS 280. An introduction to robotics including the history of robots, the sense-plan-act paradigm, any-time learning systems, and the three-layer architecture. The class will emphasize concepts and practical application of robotics. (Even Year Fall Semesters)

450/550. Spatial Database and Applications. Credit 3 hours. Prerequisite: CMPS 390. Topics include introduction to GIS, map projections and coordinate systems, spatial data structures, data entry, spatial database management, spatial analysis, remote sensing, GPS and GIS, Internet GIS, and GIS scientific applications. (Odd Year Fall Semesters)

451/551. Data Mining. Credit 3 hours. Prerequisite: CMPS 340 or permission of Department Head. Topics include need for data mining, preparing data, data exploration tools, basics of classification, association rule mining, similarity measures, and cluster analysis. A programming project that utilizes a data mining library is required. (Fall)

455/555. Computational Aspects of Game Programming. Credit 3 hours. Prerequisites: MATH 175 and CMPS 280. This course will investigate computational aspects of game programming, and students completing the course will have sufficient technical background, well founded in science, to be able to successfully develop computer video games. Topics covered include coordinate systems, geometric elements, transformations, hyperspace, numerical analysis, rendering, graphics, lighting, code optimization, and other system design and programming issues related to game programming. (Varies)

458/558. Expert Systems. Credit 3 hours. Prerequisite: CMPS 340. An introduction to expert systems. Topics include artificial intelligence techniques for Expert Systems, knowledge bases, knowledge representation, inference engines, system shells, natural language processing, heuristic techniques, rule-based systems, and meta level languages. (Varies)

460. Design and Implementation of Neural Networks. Credit 3 hours. Prerequisites: CMPS 340 and MATH 200. An introduction to neural networks. Topics include connections, processing elements, n-dimensional geometry, self-adaptive equations, data transformation structures, mapping networks, and neurocomputing applications. (Varies)

470/570. Machine Learning. Credit 3 hours. Prerequisites: CMPS 340 or MATH 241 or MATH 380 or permission of Department Head. Topics include preprocessing, model assessment and regression, K-NN, neural networks, decision trees, support vector machines, and basics of statistical learning. A programming project that utilizes a machine learning library is required. (Spring)

473/573. Introduction to Computer Vision. Credit 3 hours. Prerequisites: CMPS 340 and MATH 200 or permission of Department Head. Topics include formation of images, image features, color spaces, image operators, mathematical morphology for images, digital signal processing, and image segmentation. (Spring)

479. Automata and Formal Languages. Credit 3 hours. Prerequisites: CMPS 257 or MATH 223 and senior standing. Introduction to computing device capabilities through study of abstract machines and corresponding formal languages. Topics include Turing machines, recursion, Chomsky grammars, context-free languages, regular languages, and finite automata. (Spring)

481. Seminar. Credit 1 hour. Prerequisite: Senior Classification. Discussion of social, ethical, and professional issues. Students present reports on topics of current interest in Computer Science. (Varies)

482. Current Trends in Computer Science. Credit: 3 hours. Prerequisites: Senior Classification and registration in or prior credit for CMPS 411. Topics include computer and information ethics, social implications of technology, current trends in computer science and information technology applications and development, professional issues, and emerging trends and current topics in computer science research. (Summer, Fall, Spring)

491/591. Special Topics. Credit 1-3 hours. Prerequisite: Permission of Department Head. Special topics in computer science that are appropriate for major electives in the Scientific and Data Science concentrations. Any combination of 491/591, 493/593, and 494/594 may be taken for up to 9 hours of credit, provided that the specific topics are different. (Varies)

493/593. Special Topics in Computer Science Theory. Credit 1-3 hours. Prerequisite: Permission of the Department Head. Special topics in computer science that are appropriate for a Theory elective in the Information Technology concentration. Any combination of 491/591, 493/593, and 494/594 may be taken for up to 9 hours of credit, provided that the specific topics are different. (Varies)

494/594. Special Topics in Information Technology. Credit 1-3 hours. Prerequisite: Permission of the Department Head. Special topics in computer science that are appropriate for an Information Technology elective in the Information Technology concentration. Any combination of 491/591, 493/593, and 494/594 may be taken for up to 9 hours of credit, provided that the specific topics are different. (Varies)

495/595. Special Problems. Credit 1-3 hours. Prerequisite: Permission of Department Head. Permits work by students on special projects in Computer Science. May be taken more than once for credit.

580. Advanced Networking and System Administration Principles. Credit 3 hours. Prerequisite: Graduate standing or permission of the Department Head. This course examines system administration and networking topics and technologies that serve as the basis for later course work in both areas. Topics covered include: the role of the system administrator in an organization, determining the needs of an organization, the ethical and legal considerations that must be made, networking principles related to maintaining a complex network and computer system, user privileges, and managing operations. (Varies)

609. Network Design and Performance. Credit 3 hours. Prerequisite: Graduate standing or permission of the Department Head. This course will examine the design and performance of networks. Students will learn to design networks based on identified needs and analyze the performance of that network. The designs include site, campus, and enterprise networks. WAN technologies will be combined with LAN technologies in the design of enterprise networks. Students will learn to assess the business goals and their application to the network goals. Students will learn to evaluate the security goals of the network and to integrate these goals in the design. (Varies)

615. Enterprise Computing. Credit 3 hours. Prerequisite: Graduate standing or permission of the Department Head. This course explores enterprise systems (clouds, server farms, etc.) from the environment, networking, storage, security, and system administration perspectives. Students in this course gain an understanding of the knowledge and concepts needed to manage and administrate those enterprise systems. (Varies)

616. Advanced System Administration Concepts. Credit 3 hours. Prerequisite: Graduate standing or permission of the Department Head. This course examines the role of the system administrator and their duties. Topics include: determining an organization's computing and networking needs, evaluating and optimizing performance, user provisioning, managing an organization's servers, desktop, and mobile equipment. (Varies)

620. Advanced Networking Concepts. Credit 3 hours. Prerequisite: Graduate standing or permission of the Department Head. This course will cover the principles of both wired and wireless networking with a focus on algorithms, protocols and implementation with a focus on advanced networking concepts. The course will begin with in-depth background in architecture and protocols at physical, MAC, IP, and transport layers. Also, theoretical aspects of network challenges are discussed with a research focus. The course also explores the realm of technologies such as peer-to-peer networks, future internet, real-time applications, smart grid and IPv4 and IPv6 integration and translation. Students will learn about these technologies through lectures and explore some of them through class projects and exercises. (Varies)

621. Cybersecurity Policy and Infrastructure. Credit 3 hours. An in-depth look into the issues and strategies that are involved in the establishment and enforcement of cybersecurity infrastructure and policy. Course topics include: Governance, Compliance, Risk Management, Strategy and Implementation. The focus of these topics will center both on the organizational effectiveness concerns and ethical issues involved. (Varies)

626. Industrial Applications for Data Science. Credit 3 hours. Prerequisite: CMPS 340 or permission of Department Head. This course aims to provide a practical hardware component for data science and a view into the infrastructure that facilitates data science practical application in the field. The main learning focus is on data acquisition, manipulation, and storage. The collection and pre-processing of data using sensors and microcontrollers is emphasized. Topics include Data acquisition methods and hardware, types of sensors, A/D and D/A conversion, microcontrollers (Raspberry-pi) and the GPIO, scientific computation environment, remotely accessing the GPIO via HTTP, data transmission and storage, data processing methods. (Varies)

631. Network Modeling and Analysis. Credit 3 hours. Prerequisite: Graduate standing or permission of the Department Head. The course provides comprehensive exposition of the core concepts in network modeling and simulation. It will cover both graph theoretical and statistical models of complex networks such as the Internet and social networks. It also introduces different types of modeling techniques and simulation tools. The course also systematically addresses some practical and theoretical consideration for developing complex modeling. It offers real world examples to illustrate the process of modeling to address specific problems. (Varies)

632. Network Management. Credit 3 hours. Prerequisite: Graduate standing or permission of the Department Head. This course introduces network management concepts with hands-on laboratory exercises in developing network management applications and using it to study and analyze the performance of networks, data communications hardware and software, and use of these components in computer networks. Topics include, but are not limited to, introduction to network management, performance management, accounting management and security management; introduction to SNMP and its versions; remote monitoring and different network management architectures. (Varies)

635. Applications of Cyber Defense and Cryptography. Credit 3 hours. Prerequisite: Graduate standing or permission of the Department Head. This course provides a look at theoretical and practical approaches to firewalls, intrusion detection systems, and cryptography. In addition to technical approaches, this course contextualizes cybersecurity threats and responses in national and international law while recognizing the limits of current law, the need for further policy evolution, the real-world impacts of different legal and policy options, and ethics. Topics include: configuration, implementation, rule creation, and filtering for firewalls and intrusion detection systems, classical and contemporary ciphers, cryptographic protocols, applications of cryptography, and hardware/software fault tolerance. (Varies)

650. Advanced Large-Scale Computing. Credit 3 hours. Prerequisite: Graduate standing or permission of the Department Head. This course explores in-depth, large-scale systems (mainframes, clusters/grids) from an advanced perspective in the environment, networking, storage, security, and system administration. Students in this course gain the ability needed to design, justify and administer those large-scale systems. (Varies)

651. Emerging Computing and Networking Technologies. Credit 3 hours. Prerequisite: Graduate standing or permission of the Department Head. Students will research the current state of the most significant emerging technologies. The course will consist of a combination of lectures where technologies will be presented and explained; independent labs, modeling and simulation exercises that will reinforce the

students' understanding of the technologies by allowing them to work with them in a hands-on fashion, and independent literature research to serve as a foundation for future work in this degree program. (Varies)

652. Advanced Storage Technologies. Credit 3 hours. Prerequisite: Graduate standing or permission of the Department Head. This course explores the spectrum of storage technologies ranging from DAS to JBODS to SANs. Media types including Ramdisk, Flash, SSD, magnetic, optical, and other emerging technologies will be investigated. The issues to be faced as systems grow to enterprise scale will also be addressed. Features of local, distributed, and networked storage including SANs will be introduced as well as issues such as capacity planning, virtualization, decentralized storage, security, crash recovery and load balancing, and maintenance of support of high-performance systems. (Varies)

672. Deep Learning. Credit 3 hours. Prerequisite: CMPS 340 or permission of Department Head. This course treats the topic of machine learning to generalize patterns extracted in collected data, and thus perform automated tasks of prediction, classification, sequence learning utilizing different learning frameworks of supervised or unsupervised algorithms, attention models, and sequence modelling. Topics include regression, Neural Networks, optimization basics, Recurrent Neural Networks, Long/Short Term Memory, Convolutional Neural Networks and advanced deep learning models such as Autoencoders, Generative Adversarial Networks, and Residual Networks. (Varies)

685. Software Engineering for Data Science. Credit 3 hours. Prerequisites: CMPS 340 and 390. Topics include project management, software disciplines (requirements, analysis, design, implementation, testing), application of Software Engineering in Data Science including Python Enhancement Proposal process, cloud-based software application development, software application development for big data systems. Students work in teams to develop a significant software system related to data science. (Varies)

689. Managing the Software Project Lifecycle. Credit 3 hours. An in-depth look into software project management as objectives, a defined software life cycle, cost and performance outcomes. Content focuses on managerial tasks required at various stages of the software development life cycle with the corresponding level of effort as well as the computer-aided software engineering tools necessary to perform the tasks. The SCRUM development methodology will be explored in depth. (Varies)

690. IoT for Data Science. Credit 3 hours. Prerequisite: CMPS 409 or permission of Department Head. Topics include network protocols, IoT architectures, sensor networks, edge, fog and mobile computing, IoT security, IoT applications and use cases. (Varies)

691. Advanced Special Topics. Credit 1-3 hours. Prerequisite: Permission of Department Head. Special topics in advanced computer science that are appropriate for graduate students with a computer science background. May be taken multiple times, provided that the specific topics are different. (Varies)

711. Computer Science Capstone. Credit 3 hours. Prerequisite: Graduate standing or permission of the Department Head. To provide exposure to a specific area within Computer and Network Security, semester-long projects are designed allowing students to gain real-world experiences at a level appropriate to graduate study. Projects must focus on the area of computer and network security and require the application of sound project management principles in order to be developed on time, on budget, and on specification. This course takes students through the nine knowledge areas of modern project management and the utilization of project management principles in both traditional and agile environments. (Varies)

770. Thesis. Credit 1-6 hours. Prerequisite: Graduate standing or permission of the Department Head. The student must enroll in the thesis course each semester the thesis is in progress. The thesis is graded Pass/Fail. A formal treatise presenting the results of study submitted in partial fulfillment of the requirements for the applicable degree. The process requires one-on-one interaction between the candidate and professor with more limited interaction between and among the candidate and other members of the committee. (Varies)

Construction Technology (CTEC)

101. Construction Industry Systems. Credit 3 hours. A study of construction systems providing an understanding of how construction impacts life, socially and professionally. Industry fundamentals through analysis of architectural and engineering plans, specifications, and documents used in the planning, bidding, pre-construction, construction, and closeout phases of a typical construction project. (Fall, Spring)

111. Construction Graphics. Credit 3 hours. An introduction to construction graphics the reading of blueprints; covering types of construction, specifications, site work, structural steel construction, reinforced concrete construction, mechanical and electrical systems, and finish construction. (Varies)

121. Construction Materials. Credit 3 hours. Prerequisite: CTEC 111. An introduction to construction principles, materials, and methods in the construction industry, graphics covering site work, concrete, masonry, metals, wood, plastic, doors and windows, and finishes. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Fall)

171. Survey Principles. Credit 3 hours. Prerequisites: CTEC 111 and IT 111. Theories and principles of traditional and state-of-the-art techniques in surveying as applied to the construction industry. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Spring)

201. Project Management. Credit 3 hours. Prerequisite: CTEC 101. An introduction to project management: covering human relations, labor law and relations, problem solving and decision making, construction planning, project scheduling, and quality control. (Varies)

202. Project Supervision. Credit 3 hours. Prerequisite: CTEC 121. An introduction to project supervision: covering orientation to the job, construction documents and documentation, cost awareness and control, resource control, and safety. (Varies)

203. Computer Planning and Scheduling. Credit 3 hours. Prerequisites: Credit for or enrollment in CTEC 202 and 271. Analysis and application of scheduling techniques. The use of critical path method (CPM), program evaluation and review (PERT), and PRIMAVERA. (Spring)

271. Construction Estimating I. Credit 3 hours. Prerequisite: CTEC 121. An introduction to residential construction estimating: covering construction estimating, productivity records, cost accounting, project owner's estimate, pre-construction design estimates, detailed construction estimate, quantity surveying, how to determine direct cost for the project, and integrating estimating with project planning and control. (Spring)

Counseling (COUN)

600. Research Methods and Designs. Credit 3 hours. Prerequisite: Admission to the Counseling Program or permission of Department Head. Principles and foundations of designing and conducting research are examined. Major topics covered in the course include basic statistics, types of research, literature reviews, needs assessment, program evaluation, and legal and ethical considerations regarding research. Students are required to conceptualize, design, and complete a behavioral research project. (Fall, Spring)

601. Legal, Ethical, and Professional Issues. Credit 3 hours. Prerequisite: Admission to Counseling Program. Presents current legal, ethical, and professional information necessary for competent professional practice in the mental health field. The course includes an overview of the historical and current societal context of professional practice in counseling, marriage and family therapy, and related fields. The course will assist students in developing a work plan, referral guide, credential file, declaration statement, and curriculum vitae specific to their work setting and area of professional concentration. (Summer, Fall, Spring)

603. Counseling Theory. Credit 3 hours. Prerequisite: Admission to Counseling Program. Major theories and approaches to counseling are analyzed along with the essentials of counseling and therapeutic processes and the nature of the counseling relationship. Skill building through dyadic exercises and feedback is included. (Summer, Fall, Spring)

604. Group Process. Credit 3 hours. Prerequisites: COUN 601, 603, and 605. Major approaches to group dynamics and counseling, including theoretical assumptions and basic principles and techniques, are covered. A weekly lab component is required. (Fall, Spring)

605. Pre-Practicum/Counseling Techniques. Credit 3 hours. Prerequisite: Admission to Counseling Program. Counseling experience in the university counseling laboratory. Aspects of the counseling process/relationship and specific techniques of individual counseling are stressed. (Summer, Fall, Spring)

607. Career Development/Information Services. Credit 3 hours. Prerequisite: Admission to the counselor education program or permission of the Department Head. An introduction to the theories of career development and the processes by which occupational/educational and personal/social information may be integrated for career/life planning. (Summer, Spring)

608. Human Growth & Development. Credit 3 hours. Prerequisite: Permission of the Department Head. Study of the emotional, physical, social, and intellectual factors of development across the lifespan. (Summer, Fall)

609. Assessment in Counseling. Credit 3 hours. Prerequisites: COUN 600, 601, 603, and 605. An introduction to major intellectual, psychological, achievement, interest, and sociometric assessment goals and techniques available for the study of the individual. (Fall, Spring)

610. Introduction to Diagnosis and Treatment of Psychopathology. Credit 3 hours. Prerequisites: COUN 600, 601, 603, 605, and 609. This course provides students with basic skills for evaluating behaviors, writing of diagnostic reports, and planning intervention strategies. Students will examine specific disorders and the utilization of various methods for identifying and treating these disorders. (Summer, Fall)

611. School Counseling & Consulting. Credit 3 hours. Prerequisites: COUN 601, 603, 604, and 605. This course will focus on the role of the school counselor as well as the philosophy and practical application of counseling theory and techniques with school-age populations. The student will develop a specific counseling program that will address the needs of a diverse student, staff and community population in which the school counselor is expected to function. (Fall)

613. Clinical Mental Health Consultation & Staffing. Credit 3 hours. Prerequisites: COUN 601, 603, and 605. Primary theories of consultation with emphasis on conflict management, delivery of mental health services and therapeutic intervention with varied client populations. (Fall)

623. Advanced School Counseling. Credit 3 hours. Prerequisite: COUN 611. This course will provide students with an in-depth examination of the roles and functions school counselors assume as school leaders, student advocates, system change agents, personal/social counselors, consultants, and collaborators. The application of counseling theories, as well as prevention and intervention programs, in school settings is also presented. (Summer)

625. Cross-cultural Issues. Credit 3 hours. Prerequisites: COUN 601, 603, and 605. This course is designed to help counselors maximize their effectiveness in today's pluralistic society by understanding: value systems and ways of life of culturally diverse groups; similarities and differences of various cultural groups; dynamics of multicultural interaction and communication; and processes of cultural transmissions in the "global village." (Spring, Summer)

627. Introduction to Play Therapy. Credit 3 hours. Prerequisites: COUN 601, 603, 605, and 608. This course is designed to provide students with basic information related to play therapy. The primary goal of this course is to introduce students to interventions and strategies that focus on various theoretical orientations and play therapy techniques for use in counseling children and families. Students will have the opportunity to receive supervised experience as they use various strategies in class and assignments. (Fall, Spring)

629. Advanced Play Therapy. Credit 3 hours. Prerequisite: COUN 627. This course is designed for those students who have had previous training in basic play therapy and who desire to enhance their understanding and refine their skills in play therapy. Advanced interventions and strategies will focus on aspects related to various theoretical orientations and creative approaches to working with children and adolescents. Students will have the opportunity to receive supervised experience as they practice and observe play therapy techniques. (Fall, Spring)

642. Crisis Intervention and Grief Counseling. Credit 3 hours. Prerequisites: COUN 601, COUN, 603, and COUN 605. This course will encompass the influence of crises, disasters, and events in individuals' lives that cause stress-induced trauma. The response to crisis and trauma by emergency management personnel and the impact on individuals, families, and communities will be examined. Suicide assessment, intervention and prevention strategies will be addressed. Students will also explore the concept of grief. (Summer, Fall)

670. Special Topics in Counselor Education. Credit 3 hours. Prerequisite: Admission to the counselor education program or permission of the Department Head. May be repeated for up to 6 hours credit. Permission of Instructor. A review of pertinent current research and literature related to specific selected topics within counselor education. Each student will select a particular area of interest for extensive research and discussion in class will focus on the selected area. (Varies)

680. School Counseling Practicum. Credit 3 hours. Prerequisites: COUN 604, 607, 608, 609, 610, and 611. This course is designed to guide students in their first field-based experience in pre-K-12 school. This site-based experience requires the completion of a minimum of 40 hours in a school setting, in which components of the Comprehensive School Counseling Program (CSCP) will be implemented. This practicum is graded Pass (P) Fail (F). (Fall, Spring)

683. Clinical Mental Health Practicum. Credit 3 hours. Prerequisites: COUN 604, 607, 608, 609, and 610. Supervised experience in counseling with applications of principles, techniques, and strategies acquired in previous course work. The class will focus upon skill acquisition and demonstration of competencies. This practicum is graded Pass (P) Fail (F). (Fall, Spring)

685. Independent Study in Counseling. Credit 3 hours. Prerequisites: COUN 600 and advanced standing in the counseling program, or permission of the Department Head. Examination and in-depth study, research, and evaluation of contemporary problems in counseling. (Varies)

690. School Counseling Internship. Credit 3 hours. Prerequisite: COUN 680. Supervised on-the-job experience in a school setting emphasizing competencies in: individual counseling, group counseling, and educational, vocational, and personal testing. Students complete 600 clock hours over the course of their final two semesters and must register for 3 hours each semester for a total of 6 credit hours. This internship is graded Pass/Fail. (Fall, Spring)

693. Clinical Mental Health Counseling Internship. Credit 3 hours. Prerequisite: COUN 683. Supervised experience in a clinical mental health setting emphasizing competencies in individual counseling, groups, assessment, diagnosis, and treatment. Students must complete 600 clock hours over the course of their final two semesters, and must register for 3 hours each semester for a total of 6 credit hours. This internship is graded Pass (P) Fail (F). (Summer, Fall, Spring)

770. Counseling Thesis. Credit 1-6 hours each semester, with 6 hours needed for graduation. The student must enroll in the thesis course each semester the thesis is in progress. The thesis is graded Pass-Fail. Prerequisite: Completion of the Counselor Education program or permission of the Department Head. Original research project designed, implemented and summarized by the student under the direct supervision of counseling faculty. (Varies)

Criminal Justice (CJ)

101. Introduction to Criminal Justice. [LCCN: CCRJ 1013, Introduction to Criminal Justice]. Credit 3 hours. The criminal justice system. Study of the historical development of criminal justice. Overview of the functions and responsibilities of law enforcement, the judiciary and corrections. (Summer, Fall, Spring)

201. Criminal Law. [LCCN: CCRJ 2213, Criminal Law]. Credit 3 hours. Prerequisite: CJ 101 or consent of the Department Head. A general approach to laws relating to crimes and offenses and the punishment of their violation. (Summer, Fall, Spring)

202. The American Judicial Process. Credit 3 hours. Prerequisite: CJ 101 or consent of the Department Head. An overview and analysis of the legal transactions involved in the accusation, arrest, adjudication, and disposition of criminal offenders. (Summer, Fall, Spring)

204. Contemporary Law Enforcement. [LCCN: CCRJ 2313, Introduction to Policing]. Credit 3 hours. Prerequisite: CJ 101 or consent of the Department Head. An examination and discussion of selected topics dealing with contemporary problems affecting law enforcement. (Summer, Fall, Spring)

205. The Corrections Process. [LCCN: CCRJ 2013, Introduction to Corrections]. Credit 3 hours. Prerequisite: CJ 101 or consent of the Department Head. The systematic study of all the official ways in which society reacts to persons who have been convicted of committing criminal acts, including persons handled by the juvenile courts. (Summer, Fall, Spring)

206. Comparative Criminal Justice Systems. Credit 3 hours. Prerequisite: CJ 101 or consent of the Department Head. A study and comparison of the world's major justice systems. (Varies)

207. Psychology of Criminal Justice. Credit 3 hours. Prerequisites: CJ 101 and PSYC 101, or consent of the Department Head. Also offered as Psychology 205. Applications of psychology to the criminal justice system. Topics will include: theories of violence, eyewitness testimony, jury selection and procedures, expert testimony, victims, and prisons. Credit cannot be given for both Criminal Justice 207 and Psychology 205. (Varies)

213. International Human Trafficking. Credit 3 hours. Prerequisites: CJ 101, 201, 202, 204, and 205 or permission of Department Head. This course examines how national and international laws prohibiting human trafficking are created, interpreted, and applied. (Spring)

214. Juvenile Justice. [LCCN: CCRJ 2413, Juvenile Justice]. Credit 3 hours. Prerequisites: CJ 101, 201, 202, 204, and 205, or consent of Department Head. This course explores the legal mechanisms that have evolved to control delinquent behavior. Specific attention is devoted to the juvenile court system, law enforcement, custodial and treatment institutions, and community treatment. (Spring)

296 [336]. Deviance and Social Control. [LCCN: CCRJ 2513, Deviance]. Credit 3 hours. Prerequisites: CJ 101, 201, 202, 204, and 205, or consent of Department Head. This course introduces students to non-normative behavior and its social construction. Theories of deviance and institutional responses to deviant behavior are also addressed. (Summer, Fall, Spring)

302. Criminal Investigation. Credit 3 hours. Prerequisites: CJ 101, 201, 202, 204, and 205 or permission of the Department Head. Fundamentals of investigation; duties and responsibilities of the detective; interrogation techniques; search; techniques of protecting the crime scene; collection and preservation of evidence; modus operandi system; scientific aids and other sources of information; court preparation and case follow-up. (Spring)

303. Criminal Justice Administration. Credit 3 hours. Prerequisites: CJ 101, 201, 202, 204, and 205 or permission of the Department Head. This course focuses on the analysis of problems, procedures, organization, and functions of all the criminal justice components. (Fall)

304. Victimology. Credit 3 hours. Prerequisite: Prerequisites: CJ 101, 201, 202, 204, and 205 or permission of the Department Head. This course examines the criminal process from the perspective of the victim. The probability and effects of victimization will be discussed; the effectiveness of victim support programs will be analyzed. (Varies)

305. Homeland Security. Credit 3 hours. Prerequisites: CJ 101, 201, 202, 204, and 205 or consent of the Department Head. An examination of homeland security focusing on the post-September 11, 2001 period including theories, agency missions, and laws and regulations governing the homeland security enterprise. We will explore threat scenarios, existing countermeasures and the underlying reasons for constructing an extensive homeland security system. (Varies)

310. Community Corrections. Credit 3 hours. Prerequisites: CJ 101, 201, 202, 204, and 205 or permission of the Department Head. A survey of the history, development, current status of probation, parole, and related forms of community-based corrections with emphasis on supervision and treatment of criminal offenders. (Varies)

313. Private and Public Sector Security. Credit 3 hours. Prerequisites: Completion of CJ 101, 201, 202, 204, and 205 or consent of Department Head. This course provides an overview of the vulnerability of business, industrial and government sectors to criminal infiltration and compromise from both internal and external sources, with special emphasis on threats to cyber-security, and protection of physical assets and employees/agents. (Varies)

333. Crime in America. Credit 3 hours. Prerequisites: CJ 101, 201, 202, 204, and 205 or permission of the Department Head. A study of the types of crime and criminal offenders peculiar to the American culture. This course emphasizes the nature of conventional crime as well as the growth and development of contemporary work-place crime. (Varies)

343. Law and Society. Credit 3 hours. Prerequisites: CJ 101, 201, 202, 204, and 205 or permission of the Department Head. The course examines the social, economic, and political conditions under which laws are created, interpreted, and enforced; the social organization of law; and the legal profession. (Spring)

353. Criminal Justice Ethics. Credit 3 hours. Prerequisites: CJ 101, 201, 202, 204, and 205 or permission of the Department Head. An overview of philosophical, theoretical, and practical considerations bearing on the moral conduct of participants in the criminal justice process, including police, court, and correctional personnel. (Varies)

363. Drugs, Crime and Social Policy. Credit 3 hours. Prerequisites: CJ 101, 202, 202, 204, and 205 or permission of Department Head. This course focuses on the study of sociological and social psychological explanations of drug using behaviors and of the legal and medical control of drugs. Topics include changes in the legal status of drugs, cross-cultural and historical variations in the control of drugs, and social epidemiology of drug use in contemporary society. (Fall)

400/500. Independent Study. Credit 1-3 hours. Prerequisite: Consent of Department Head. Student works with an instructor on a one-to-one basis and prepares a research report on an appropriate topic. May be repeated in one to three-hour credits for a total of six hours. New topics are investigated in each repeat. (Varies)

405/505. Criminal Justice and the U.S. Constitution. Credit 3 hours. Prerequisites: Completion of CJ 101, 201, 202, 204, and 205 or consent of Department Head. An investigation and analysis of basic constitutional problems involving criminal justice procedures with an emphasis on landmark U.S. Supreme Court decisions. Credit cannot be given for both CJ 405/505 and POLI 405/505. (Fall)

408. Serial and Mass Murder. Credit 3 hours. Prerequisites: CJ 101, 201, 202, 204, and 205 or permission of Department Head. This course examines serial and mass murder, including an in-depth examination into the typical offenders, victim selection, criminal justice system response, and the theoretical explanations that provide an understanding of these offences. (Fall)

411. Transnational Crime and Terrorism. Credit 3 hours. Prerequisites: CJ 101, 201, 202, 204, and 205 and junior/senior standing, or consent of department head. This course provides an overview of threats to internal security including organized criminal enterprises, and state and non-state terror activities. (Fall)

412/512. Criminology. Credit 3 hours. Prerequisites: Completion of CJ 101, 201, 202, 204, 205, and 336 or permission of Department Head. Also offered as SOC 412/512. A study of the incidence, nature, factors influencing, and social treatment of crime. May not be used for credit with SOC 412/512. (Summer, Fall, Spring)

415/515. Health, Justice, and Criminology. Credit 3 hours. Prerequisites: CJ 101, 201, 202, 204, and 205 or consent of Department Head. This course investigates the nexus of health, crime, and the criminal justice system and how to improve effectiveness in the areas of crime prevention, clinical intervention, and policy. (Varies)

418. White-Collar Crime. Credit 3 hours. Prerequisites: CJ 101, 201, 202, 204, and 205 or permission of Department Head. This course provides an overview of the nature and causes of the various types of white-collar crime, and of private and public strategies that might be employed to control it. (Fall)

420/520. Crime and the Media. Credit 3 hours. Prerequisites: CJ 101, 201, 202, 204, and 205 or permission of Department Head. This course takes a social constructionist approach in examining the depiction of crime in the media and the effects these depictions have on public perception, fear of crime and the creation of public policy. (Spring)

432/532. Crime Mapping and Analysis. Credit 3 hours. Prerequisites: CJ 101, 201, 202, 204, 205, SOC 305 and 310 or permission of Department Head. This course exposes students to the uses of geographic information systems in policing and crime analysis. Students use real crime and policing data to identify hot spots, predict crime patterns and empirically test criminological theories. (Fall)

440/540. Juvenile Delinquency. Credit 3 hours. Prerequisites: Completion of CJ 101, 201, 202, 204, 205, and 336 or permission of Department Head. Also offered as SOC 440/540. A scientific study of the nature, extent and causes of delinquency. Methods of prevention, treatment, and correction will be analyzed. Designed especially for teachers, social workers, police and correctional workers. May not be used for credit with SOC 440/540. (Summer, Fall, Spring)

444. Internship in Criminal Justice. Credit 3 hours. Prerequisites: Consent of the instructor and Department Head; an adjusted GPA of 3.0 or higher; and completion of 90 or more credit hours toward the degree including all core courses. Provides upper level students the opportunity to perform as participant observers in established criminal justice agencies at the local, state, and federal levels. (Varies)

495/595. Special Topics Seminar. Credit 3 hours. Prerequisites: Completion of CJ 101, 201, 202, 204, and 205 or consent of Department Head. An in-depth study of selected topics in Criminal Justice that are not covered in existing courses. May be repeated for a total of six hours credit. (Varies)

698. Special Topics in Criminal Justice. Credit 3 hours. Selected topics in areas not available in existing courses. May be new or unique issues or contemporary criminological topics relevant to various social issues. May be repeated for credit when different topics are studied. (Varies)

Cultural Resource Management (CRMP)

411. Historic Preservation. Credit 3 hours. Basic techniques and procedures in historic preservation. (Varies)

431. Arts Administration of Non-Profit Organizations. Credit 3 hours. Prerequisite: Junior Standing or permission of the Department Head. This course will explore the management and organizational structure of non-profit organizations including museums, performing arts organizations, and historic and commemorative sites. (Varies)

491. Field Training. Credit 3 hours. Prerequisite: Senior standing and permission of program coordinator. Should be taken concurrently with CRMP 492. Field placement in a cultural agency or organization under the direct supervision of a professional staff member. A weekly seminar will be conducted in conjunction with the placement. (Summer, Fall, Spring)

492. Field Training. Credit 3 hours. Prerequisite: Senior standing and permission of program coordinator. Should be taken concurrently with CRMP 491. Field placement in a cultural agency or organization under the direct supervision of a professional staff member. A weekly seminar will be conducted in conjunction with the placement. (Summer, Fall, Spring)

Dance (DNC)

100. Introduction to Dance. [LCCN: CDNC 1013, Dance Appreciation]. Credit 3 hours. A non-technical course open to all interested persons. A study of the art and language of dance. Through lecture, observations, and discussions, this course is designed to develop appreciation, awareness and insight of dance as an art form and as a movement point of view. Opportunities provided to attend concerts and demonstrations. (Summer, Fall, Spring)

113. Introduction to Movement Studies. Credit 2 hours. A technical course open to all interested persons. A study of the art and language of movement as a personal point of view. Through lecture, various movement techniques, choreography, improvisation, observations, and discussions, this course is designed to develop an experiential approach to the appreciation, awareness, creation, and performance of dance as an art form. Opportunities provided to attend concerts and demonstrations. (Fall)

135. Contemporary Dance I. Credit 2 hours. An introduction to basic principles of Contemporary Dance technique with an emphasis on the development of the body as an instrument of expression. May be repeated once for credit. (Fall/ Spring)

155. Contemporary Ballet I. Credit 2 hours. An Introduction to basic physical and intellectual principles of Ballet technique and contemporary vocabulary with an emphasis on the development of the body as an instrument of artistic expression, communication, and dance as an art form. May be repeated once for credit. (Fall/ Spring)

162. Theatre Dance. Credit 1 hour. An introduction to dramatic movement design and dance steps used in musical theatre choreography. Three hours per week. (Varies)

200. Dance for the Community. Credit 3 hours. This course is designed to provide students with (1) knowledge of dance and movement activities that meet the needs and characteristics of special community groups and (2) practical application in working directly with these groups. (Varies)

235. Contemporary Dance II. Credit 2 hours. The study of intermediate physical and intellectual principles of Contemporary Dance technique with an emphasis on the development of the body as an instrument of artistic expression, communication, and as an art form. May be repeated once for credit. (Fall/ Spring)

255. Contemporary Ballet II. Credit 2 hours. The study of intermediate physical and intellectual principles of Ballet technique and contemporary vocabulary with an emphasis on the development of the body as an instrument of artistic expression, communication, and dance as an art form. May be repeated once for credit. (Fall/ Spring)

300. Dance Performance Project. Credit 1 hour. Prerequisite: Permission of Department Head. This ensemble course emphasizes the difference between displaying movement and communicating it to an audience. The building of concentration, awareness of stylistic differences, and the establishment of professional behavior are developed in the rehearsal and performance processes. Rehearsals and performances in a theatre setting provide experiences in stage terminology and production techniques. Audition required for possible class enrollment. May be repeated for a maximum of 8 credits. Three hours per week. A laboratory fee is required for this course. (Fall, Spring)

301. Introduction to InterARTS Performance. Credit 3 hours. A variable content course that will engage visual and performance arts as overlapping endeavors in the creation of art. The course will investigate the relationships among the arts with the aim of generating work that blurs boundaries between the visual arts and performance. May be repeated for a total of 9 hours as topics vary. (Varies)

302. History and Survey of Dance. Credit 3 hours. Historical development of dance as an art form, spectacle, and entertainment from ancient societies to the present. (Varies)

305. Dance Anatomy Movement Lab. Credit 3 hours. Study of scientific and somatic principles affecting the anatomical structure of the human body by way of movement application. Hands-on experiential movement exercises will be explored using body/mind alignment, placement, posture, and the practice of teaching movement technique and choreography for dance. (Fall)

308. Site Specific Dance. Credit 2 hours. The creation and performance of dance design exclusively for selected sites. Students will study the physical layout, features and history of sites for the purpose of creating unique movement vocabulary. May be repeated once for credit. (Varies)

309. Partnering and Improvisation. Credit 2 hours. Exploration of ensemble and partnering work through spontaneous movement problem-solving. The course is designed to evoke the student's creative individuality. May be repeated once for credit. (Varies)

335. Contemporary Dance III. Credit 2 hours. The study of advanced physical and intellectual principles of Contemporary Dance technique with an emphasis on the development of the body as an instrument of artistic expression, communication, and dance as an art form. May be repeated once for credit. (Fall/ Spring)

350. Special Topics in Dance. Credit 1-3 hours. A variable content course in subjects of special interest in dance. The course content will change from semester to semester. Credit hours earned will be either one or three depending on topic and course requirements for that subject. May be repeated for up to twelve (12) hours of credit. (Varies)

355. Contemporary Ballet III. Credit 2 hours. The study of advanced physical and intellectual principles of Ballet technique and contemporary vocabulary with an emphasis on the development of the body as an instrument of artistic expression, communication, and dance as an art form. May be repeated once for credit. (Fall/ Spring)

372. Choreography. Credit 3 hours. Theory and practice of fundamentals of dance composition. May be repeated once for credit. (Spring)

373. Dance Production and Arts Administration. Credit 3 hours. This course assists dancers and other artists in learning how to produce and promote their original work as well as exploring business careers in dance and the arts. Students develop concept packets that exhibit organization of the production elements of concert planning, timeline, administration, budget, costume selection, dance lighting, props, scenery, program make-up, and other promotional materials as well as a business plan for each artist's goals. (Spring)

405. Dance Studio Management. Credit 3 hours. Prerequisite: DNC 372. A thorough study on how to develop and run a performing arts studio. Course includes how to develop an artistic overview of the studio's mission aligned with proposals for studio design and equipment; class selection, schedule, calendar, and studio policies; business and budget plans; and promotion and public relations ideas. (Varies)

432. Directed Study in Dance Techniques. Credit 2 hours. Advanced training in the appropriate dance technique. Content varies. May be repeated once for credit. (Fall/ Spring)

435. Contemporary Dance IV. Credit 2 hours. The continued study of Contemporary Dance technique with additional emphasis on performance through improvisation, partnering, and composition. May be repeated once for credit. (Fall/ Spring)

452. Directed Study in Choreography. Credit 2 hours. Advanced training in dance choreography. Content varies. May be repeated once for credit. (Spring)

455. Contemporary Ballet IV (Pointe). Credit 2 hours. The study of advanced Ballet techniques and vocabulary with an emphasis on both contemporary and traditional pointe methods in relationship to performance. May be repeated once for credit. (Fall/ Spring)

460/560. Contemporary Dance Workshop. Credit 3 hours. This performance-based course explores the relationship of contemporary movement, improvisation, and choreography and the various ways in which they are artistically crafted. This workshop culminates with a student performance. One hour of lecture and three hours of lab. May be repeated once for credit. (Varies)

472. Advanced Choreography. Credit 3 hours. Prerequisite: DNC 372. Advanced theory and practice of dance composition. May be repeated once for credit. (Varies)

491/591. Independent Study in Choreographic Design. Credit 3 hours. Prerequisites: DNC 372 and DNC 230 or DNC 330 and Junior or Senior standing. The organization and presentation of an original dance piece including planning, developing, selection of theme, music, costume, staging, lighting public performance of final work and written thesis. (Fall, Spring)

495. Senior Performance. Credit 3 hours. Prerequisites: DNC 372 and Senior standing. Presentation of a public senior dance concert encompassing a collection of work. Student must direct auditions, rehearsals, choreographic process, and presentation of work. (Fall, Spring)

Design Drafter Technology (DDT)

113. Architectural Drafting. Credit 3 hours. Prerequisite: IT 111. Principles and practices of architectural drawing, terminology, and construction through residential planning and design, including floor plans, elevations, sectional details and plat plans. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Fall, Spring)

114. Technical Illustration. Credit 3 hours. Prerequisites: IT 111 and 215. The transmission of engineering drawings into three-dimensional drawings using principles and techniques of axonometric, perspective, and schematic drawing. Includes lettering, reproduction methods, color rendering, air brush techniques and various mechanical aids. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Varies)

211. Piping Drafting. Credit 3 hours. Prerequisites: IT 112 and 264. Piping design and drafting fundamentals as used in process industries such as refineries and petrochemical plants. The study, use and drafting of pipes, fittings, flanges, valves, equipment and structural systems using the latest industry-standard software. Students will use industry standards to create schematic, plan, elevation, isometric, spool, and 3-D drawings of various process piping components/systems. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Fall)

212. Parametric Modeling of Machine Parts/Assemblies. Credit 3 hours. Prerequisite: IT 111. Feature based parametric modeling of simple and complex machine parts, sub-assemblies, and assemblies. Fully documenting design projects according to industry standards, including video presentations, animations, project documentation, change orders, file management for design projects, reverse engineering and 3D printing. Two hours of lecture and two hours of laboratory per week. A Laboratory fee is required for this course. (Spring)

215. Light Commercial Building Drafting. Credit 3 hours. Prerequisites: IT 111 and DDT 113. Analysis and solution of basic problems in the design and construction of small commercial properties using a variety of materials and methods of construction. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Varies)

216. Civil Drafting Technology. Credit 3 hours. Prerequisite: IT 111. Basic concepts and techniques of civil technology, including leveling; longitude and latitude; map scales; symbols, directions; legal descriptions; plot plans, contours; profiles and highway cut and fill. Students will use Computer-Aided Design (CAD) software to complete projects relating to interpretation of survey data, profiles and cross sections, land subdivision, site and grading plans, and basic earthwork calculations. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Varies)

218. Special Topics in Drafting. Credit 3 hours. Prerequisites: A 2.0 adjusted major average, Sophomore standing and 15 semester hours of drafting or permission of the Department Head. A course designed to provide the student with an opportunity to gain greater specialization in a specific area or to develop skills in areas otherwise not covered in the curriculum. May be repeated for a maximum of six credit hours. (Varies)

311. Process Piping/Plant Design. Credit 3 hours. Prerequisite: DDT 211. The general concepts and principles of process plant layout and design, including plant layout specifications, equipment and component arrangement, and basic stress analysis using 3-D parametric plant design software. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Fall)

312. Advanced Machine Design Drafting. Credit 3 hours. Prerequisite: IT 111 or ET 111. Feature based parametric modeling of complex machine parts, sub-assemblies, and assemblies. Fully documenting design projects according to ANSI industry standards. Development of various design aspects including: video presentations, animations, project documentation, change orders, file management for design projects, reverse engineering and 3D printing. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Spring)

316. Advanced Computer-Aided Drafting and Design. Credit 3 hours. Prerequisite: IT 215 or ET 111. An advanced study of the terminology, concept and theory of solid model development and subsequent rapid prototyping. Includes an in-depth coverage of 3-D modeling, the production of these models through rapid prototyping technologies, and their relationship to traditional manufacturing techniques. Two hours of lecture and two hours of laboratory per week. Credit cannot be given for both IT 216 and DDT 316. A laboratory fee is required for this course. (Fall)

411. Industrial Design. Credit 3 hours. Prerequisites: IT 112, 215 and 242. A study of design principals as applied to product design, machine tool design and rapid prototyping. The use of graphic techniques for the interpretation and solution of design problems. Design for manufacturability with the use of concurrent engineering tools, CAD. Two hours of lecture and two hours of laboratory per week. Credit cannot be given for both IT 311 and DDT 411. A laboratory fee is required for this course. (Spring)

415. Fundamentals of MicroStation and GIS. Credit 3 hours. Prerequisite: DDT 216. A study of the concepts, tools, and features found in the MicroStation drafting environment and the evolution and basic operation of GIS. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Varies)

Early Childhood Education (ECE)

106. Service Learning for Early Childhood Education. Credit 3 hours. Participation in a service-learning program in an early childhood education setting. Emphasis is placed on weekly observations and interactions with young children and families, future teacher meetings, and reflection. The service-learning site must be approved by instructor. Field experience required. (Summer, Fall, Spring)

108. Developmentally Appropriate Practices in Early Childhood Education. Credit 1 hour. Readings, video demonstrations, participation in class discussions, and in-class demonstrations prepare early childhood education majors for working with children in structured settings. This course provides students with the purpose and value of Early Childhood Education. Topics include developmental domains, Developmentally Appropriate Practices, and awareness of the role educators play in Early Childhood Education. (Fall, Spring)

300. Curriculum and Instruction in Early Childhood Education (Pre-Kindergarten and Kindergarten). Credit 3 hours. Prerequisites: Full SARTE status, EDUC 307, and ECE 314. Must be taken concurrently with ECE 311 and 312 and EDUC 320 and 322. This course uses principles and methods of understanding and working with pre-kindergarten and kindergarten children to develop curriculum, plan instruction, and implement practices in the pre-kindergarten and kindergarten classroom settings. These standards must reflect current knowledge and shared beliefs in what constitutes high-quality, developmentally appropriate childhood education in the context within which services are delivered. Competency-based clinical practice required. (Fall, Spring)

304. [EPSY 304]. The Psychology of Early Childhood: Conception through Age Eight. Credit 3 hours. Prerequisites: Sophomore standing, 2.75 GPA, a grade of C or better in ENGL 102, or permission of the Department Head. Course will discuss major developmental theories as they relate to physical, psychosocial, and cognitive domains. Extensive applications for those who will teach and work with young children. Competency-based clinical practice required. (Summer, Fall, Spring)

311. Introduction to Developmental Assessment of Young Children. Credit 3 hours. Prerequisites: Full SARTE status, EDUC 307, and ECE 314. Must be taken concurrently with ECE 300 and 312 and EDUC 320 and 322. The course is designed to provide experiences to increase awareness of and knowledge about a variety of assessment procedures appropriate for use with children birth through eight years of age. Advantages and limitations of assessment techniques will be noted. Considerations used in the interpretation of findings and in making referrals will be discussed. This course provides opportunities to work with assessing children preschool through age eight years old and to develop prescriptive activity plans. Competency-based clinical practice required. (Fall, Spring)

312. Practice in Early Childhood Education (Pre-Kindergarten and Kindergarten). Credit 3 hours. Prerequisites: Full SARTE status, EDUC 307, and ECE 314. Must be taken concurrently with ECE 311 and EDUC 320 and 322. This course provides advanced practice that includes observation, participation, and teaching in the early childhood setting (specifically Pre-Kindergarten and Kindergarten). Emphasis is on program and curriculum planning including assessment for children in early childhood education. Competency-based clinical practice required. (Fall, Spring)

314. [EPSY 314]. Classroom Management for Beginning Teachers in PK-3. Credit 3 hours. Prerequisite: Full SARTE Status. A detailed investigation of behavioral and humanistic approaches in PK-3 classroom management and motivation. Included are topics such as preventing classroom disruptions, how and when to intervene when they occur, working with parents, and working with students in an inclusive environment. Competency-based clinical practice required. (Summer, Fall, Spring)

316. Language Arts and Literacy Methods for Early Childhood. Credit 6 hours. Prerequisites: ECE 300, 311, 312, EDUC 309, and Full SARTE status. Must be taken concurrently with ECE 318. Grades 1-3 language arts and literacy integrated course and practice with an emphasis on curriculum, knowledge, skills, dispositions, methods, and materials in the early grades, while working with and teaching children in the school environment. Competency-based clinical practice required. (Fall, Spring)

318. Teaching Science and Social Studies in Early Childhood (Grades 1-3). Prerequisites: ECE 300, 311, 312, EDUC 320, 322, 309, and Full SARTE status. Must be taken concurrently with ECE 316. Grades 1-3 science and social studies integrated course and practice with an

emphasis on curriculum, knowledge, skills, dispositions, methods, and materials in the primary grades. This is in conjunction with working with children in the school environment. Competency-based clinical practice required. (Fall, Spring)

400. Curriculum and Instruction in Early Childhood Education (Preschool and Kindergarten). Credit 6 hours. Prerequisites: EDUC 320, EDUC 323, Full SARTE status, and concurrent enrollment in ECE 411 and ECE 420. Development of curriculum and instructional practices in the preschool and kindergarten settings; principles and methods of understanding and working with preschool children. Field experience required. (Fall, Spring)

411. Introduction to Developmental Assessment of Young Children. Credit three hours. Prerequisites: EDUC 320, EDUC 323, Full SARTE status, and concurrent enrollment in ECE 400 and ECE 420. Experiences to increase awareness and knowledge about a variety of assessment procedures appropriate for use with children birth through eight years of age. Advantages and limitations of assessment techniques, interpretation of findings and referral procedures will be addressed. This course provides opportunities to work with assessing preschool through age eight children and to develop prescriptive plans. Field experience required. (Fall, Spring)

420. Practicum in Early Childhood Education (Preschool and Kindergarten). Credit 3 hours. Prerequisites: EDUC 320, EDUC 323, Full SARTE status, and concurrent enrollment in ECE 400 and ECE 411. This course is an advanced practicum that includes observation, participation, and teaching in the early childhood setting (specifically preschool and kindergarten). Emphasis is on program planning including assessment for children in early childhood education. Field experience required. (Fall, Spring)

422. Integrated Curriculum and Practicum in Early Childhood Education (Primary Grades 1-3). Credit 9 hours. Prerequisites: ECE 400, ECE 411, ECE 420, MUS 291, Full SARTE status, and concurrent enrollment in SPED 495. An integrated curriculum block (reading, language arts, sciences, social studies, visual arts, music, & physical education) as related to the needs of the children in the primary grades 1-3. Knowledge, skills, and dispositions in these curricular areas will be explored and refined with a primary emphasis focused on working with children in the school environment. Field experience required. (Fall, Spring)

427. Student Teaching II: Early Childhood Education (PK-3). Credit 9 hours. Prerequisites: See Requirements for Teaching Residency section in the Catalog. Student Teaching II is the second semester of a full year residency for student teaching, and is all day, all week following the assigned school district calendar. Student teaching experiences include observation, participation in school activities, management of classroom and student behaviors, daily lesson planning, instruction, and assessment under the supervision of an assigned mentor teacher from a partner school. Student teachers must receive a final grade of "Pass" (P) in order to graduate. (Fall, Spring)

448. Apprenticeship I in Early Childhood Education. Credit 9 hours. Prerequisites: Full SARTE status, successful completion of Introductory Portfolio, MUS 291, ECE 400, ECE 411, ECE 420, passing score on the Content Praxis II, minimum 2.5 GPA required with a 3.0 GPA preferred to make application, and permission of the Department Head and school district. This apprenticeship option provides the Early Childhood Education major with an assigned placement selected and approved by the University in partnership with a cooperating school/district. The content of this apprenticeship encompasses materials and methods including best practices and innovative teaching strategies in the teacher candidate's major field of certification that is engaged through on-the-job training in the school environment. Lesson planning, alternative assessment, classroom management, and education technology are topics addressed in the apprenticeship. Must be taken concurrently with SPED 495. Teacher candidates will earn nine hours of credit for a minimum of 500 hours of approved work experience that follows the school district calendar. Candidates must apply with written application, interview and be selected as an apprentice teacher. (Varies)

601. Advanced Child Development and Learning. Credit 3 hours. This course is an intensive study of child development (birth – 8 years) and the implications for children's learning. (Fall, Spring)

602. Assessment in Early Childhood Education. Credit 3 hours. An advanced-level course that features the theory, administration, and interpretation of instrumentation to assess family characteristics, and social/emotional, cognitive, motor, language, and sensory abilities of young children with particular emphasis on criterion referenced and developmentally based tests. (Varies)

603. Theory and Curriculum in Early Childhood Education. Credit 3 hours. The course focus will be on theory and curriculum appropriate for grades Pre K-3. Emphasis will be placed upon the early childhood educator as a reflective professional who makes informed decisions to best meet the needs of young children. (Varies)

630. Integrated Curricular Practices in Early Childhood Education. Credit 3 hours. Prerequisite: EPSY 605 or ECE 601. Principles and methods for developing the integrated curriculum in early childhood education that promote learning and growth in each of the following domains: aesthetic, cognitive, emotional, language, physical, and social. (Varies)

632. Practicum in Early Childhood Education. Credit 3 hours. An advanced practicum course designed to give practice in teaching, appropriate for Pre K-3. Experiences are provided for observation, teaching, and evaluation of young children. The candidate must apply to the Director of Student Teaching one semester in advance in order to enroll for this course. (Varies)

Earth and Space Science (ESSC & ESSL)

101. Earth and Space Science I. [LCCN: CGEO 1103, Physical Geology]. Credit 3 hours. An overview of geology and physical oceanography concepts. (Summer, Fall, Spring)

102. Earth and Space Science II. [LCCN: CAST 1113, Astronomy/Stars & Galaxies]. Credit 3 hours. An overview of meteorology, stellar systems, and stellar mechanics. (Summer, Fall, Spring)

103. Earth and Space Science Laboratory I. [LCCN: CGEO 1101, Physical Geology Lab]. Credit 1 hour. Prerequisite: Registration for or prior credit for Earth and Space Science 101. A series of activities to aid students in their understanding of geological formations and processes. Two hours of laboratory per week. (Summer, Fall, Spring)

104. Earth and Space Science Laboratory II. Credit 1 hour. Prerequisite: Prior credit for Earth and Space Science 102. A series of activities to aid students in their understanding of meteorology and celestial mechanics. Two hours of laboratory a week. (Summer, Fall, Spring)

Economics (ECON)

101. Economics of Current Issues. Credit 3 hours. An examination of important current social issues from an economics perspective. Topics to be examined include poverty, discrimination, health care, social security, education and politics, as well as environmental and legal issues, with a focus on the contribution of economics to potential solutions. Not open to students who have previously earned credit for ECON 201 or 202 or to Juniors and Seniors majoring in the College of Business. (Varies)

102. Elements of Economics. [LCCN: CECN 2113, Economic Principles]. Credit 3 hours. A course to give non-business students a comprehensive introduction to economic principles and problems. Attention given to problems of inflation, depression, markets, prices, profits, wages, and government finance. Not open to students who have previously earned credit for ECON 201 or 202 or to Juniors and Seniors majoring in the College of Business. (Fall, Spring)

201. Principles of Economics (Macroeconomics). [LCCN: CECN 2213, Macroeconomics]. Credit 3 hours. The nature of economics, economic concepts and institutions, monetary theory, national income theory, financing of business, population problems and economic stability. Credit will not be given for both ECON 201 and 102. (Summer, Fall, Spring)

202. Principles of Economics (Microeconomics). [LCCN: CECN 2223, Microeconomics]. Credit 3 hours. The theories of production, determination of price, distribution of income, problems of industrial relations, monopolies, comparative economics systems. Credit will not be given for both ECON 202 and 102. (Summer, Fall, Spring)

211. Economics of Consumption. Credit 3 hours. A study of consumer buying practices, management of personal and family finances, spending and saving, problems of consumer protection. (Varies)

212. Agricultural Economics. Credit 3 hours. A study of economic principles and practices as applied to agriculture; importance of agriculture in American life; economic, social, and political factors that influence rural institutions; records and accounts. (Varies)

301. Introduction to Labor Economics. Credit 3 hours. Prerequisites: ECON 201 and 202 and Junior standing, or ECON 102 and Junior standing. The development of present-day labor organizations, their aims and methods; primary issues in union and nonunion management relationships, such as wages, hours, substandard workers, seniority, and union shop. (Varies)

305. Urban and Regional Economics. Credit 3 hours. Prerequisites: ECON 201 and 202 and Junior standing, or ECON 102 and Junior standing. A brief description of the historical development of cities; location and spatial organization of economic activity; regional growth patterns and land use; analysis of particular problems such as transportation, housing, poverty, environment, and the urban public sector. Emphasis will be on both theory and policy. (Varies)

312. Health Care Economics. Credit 3 hours. Prerequisites: ECON 201 and 202 and Junior standing. An analysis of the demand for and supply of health care services, health insurance, managed competition, Medicare, Medicaid, cost containment, national health care policy, the role of technology, training and practice of nurses and physicians, and comparative health care systems. (Varies)

328. Environmental & Resource Economics. Credit 3 hours. Prerequisites: ECON 201 and 202 and Junior standing, or ECON 102 and Junior standing. The study of theory and tools of environmental and resource economics, ozone depletion and global warming, acid deposition, exhaustible resources including energy, minerals, materials and waste, renewable resources including fisheries, temperate forests, tropical forests, biodiversity and habitat, and water resources, government regulations and enforcement, and other topics such as clean technology, toxics in the ecosystem, the environment and economic growth in other countries, and prospects for the future. (Varies)

333. Introduction to Money and Banking. [LCCN: CECN 3113, Money, Banking & the Economy (upper Level)]. Credit 3 hours. Prerequisites: ECON 201 and 202 and Junior standing, or ECON 102 and Junior standing. Nature and functions of money; banking history; commercial banking; Federal Reserve System and its instruments of monetary policy; an introduction to financial markets, monetary theory and international monetary relationships. (Summer, Fall, Spring)

345. Economics of Industrial Organization and Public Policy. Credit 3 hours. Prerequisites: ECON 201 and 202 and Junior standing, or ECON 102 and Junior standing. A survey of market structures and performance and the role of antitrust policy in the manufacturing sector of the economy. Emphasis is placed on methods and techniques used in measuring market structures and performance, and on antitrust policy with regard to the control of market structures, price fixing agreements, and other restrictions on manufacturing firms' conduct. Public regulation is considered both in theory and in practice. (Varies)

362. Public Finance. Credit 3 hours. Prerequisites: ECON 201 and 202 and Junior standing, or ECON 102 and Junior standing. The development and growth of the public economy as part of the national economy; use of governmental expenditures and revenues; public effects of spending public funds and of government borrowing and debt payment; critique of fiscal policies and practices to achieve economic stability. (Varies)

375. Business Economics I. Credit 3 hours. Prerequisite: ECON 201 and 202. This course uses economic and financial tools to analyze data and address common decisions faced by business managers, policymakers, and researchers. Topics may include operations decisions, risk and uncertainty, capital investment outlays, and diversity. Emphasis is placed on using common office software to describe and summarize data, identify patterns and trends, and to create statistical measures of cause-and-effect relationships. (Varies)

391. Business Internship. Variable credit 1-3 hours. Prerequisites: Junior Standing, 2.5 Overall GPA, and permission of the Department Head. The Business Internship provides students with the opportunity to earn course credit while gaining experience in work assignments approved by the University and Department. Students will earn 1 credit hour for each 100 hours of approved work experience. May be repeated for up to three credit hours. Only Business Administration majors can receive credit for the Business Internship. All grades are assigned on a Pass/Fail basis (Summer, Spring/ Fall).

392. Business Internship II. Variable credit 1-3 hours. Prerequisites: Junior standing, 2.5 Overall GPA, and permission of the Department Head. A continuation of ECON 391. In order to receive credit for ECON 392, the work assignment must be different than that of ECON 391. Students will earn 1 credit hour for each 100 hours of approved work experiences. May be repeated for up to three hours credit. Only Business Administration majors can receive credit for the Business Internship. All grades are assigned on a Pass/ fail basis. (Summer, Fall, Spring).

401. Macroeconomics for Managers. Credit 3 hours. Prerequisites: ECON 201 and 202 and Junior standing, or ECON 102 and Junior standing. The development of aggregative economic analysis and its application to national income theory, the level of employment and economic growth. Attention is given to the dynamic aspects of income and employment fluctuations and the adoption and application of economic policy. (Varies)

402. Managerial Economics. Credit 3 hours. Prerequisites: ECON 201 and 202 and Junior standing, or ECON 102 and Junior standing. The theory of consumer behavior in determining demand. The theory of the firm including production, costs, and supply relationships. Analysis of product and factor markets under conditions of perfect and imperfect competition. (Summer, Fall, Spring)

410. History of Economic Thought. Credit 3 hours. Prerequisites: ECON 201 and 202 and Junior standing, or ECON 102 and Junior standing. A survey of the development of economic thought from about 1500 A. D. to the present, a critical description of the various schools of thought and the contributions of leading economic writers. (Varies)

412. Comparative Economic Systems. Credit 3 hours. Prerequisites: ECON 201 and 202 and Junior standing, or ECON 102 and Junior standing. An analysis of the theories and practices of modern economic systems including Capitalism, Socialism, Communism, and Fascism. (Varies)

413. Applied Economic Analysis. Credit 3 hours. Prerequisites: ECON 102 and Junior standing, or ECON 201 and 202 and Junior standing or permission of Department Head. An examination of economic issues through independent research leading to the completion of a written paper and oral presentation. (Varies)

421. International Economics. Credit 3 hours. Prerequisites: ECON 201 and 202 and Junior standing, or ECON 102 and Junior standing. Principles of foreign trade. An examination of the monetary and real aspects of trade; including foreign exchange rates, balance of payments problems, and the theories concerning the reasons for trade. (Varies)

430. Economics Study Abroad. Credit 3 hours. Prerequisite: Junior standing. This course is designed to introduce students to the economic systems and institutions of other countries through the Business Study Abroad program. Students will experience, first-hand, the principles and practices of functioning in an international environment. (Summer)

435. Energy Economics, Markets, and Policy. Credit 3 hours. Prerequisites: ECON 201 and 202 and Junior standing or ECON 102 and Junior standing. Survey seminar course in energy issues. Topics will include the function of energy markets, their impact on the macroeconomy and business decision making, alternative energy options, environmental impacts of energy sources, and government policy effects on energy markets and the economy. (Varies)

441. Current Economic Issues. Credit 3 hours. Prerequisites: ECON 201 and 202 and Junior standing. A variable content course that covers selected unique topics relevant to the economy. The content may change from semester to semester and will be announced in advance. (Varies)

450/550. Applications of the Internet in Business and Economic Analysis. Credit 3 hours. Prerequisites: MGMT 210 or CMPS 110, ECON 201 and ECON 202, or ECON 102 and Junior standing. Use of the Internet to study business and economic subjects and issues such as production, consumption, economic conditions and indicators, federal government policies, job market, population characteristics, international business and economic development, and other relevant subjects. (Varies)

460. Econometrics. Credit 3 hours. Prerequisites: ECON 201 and 202, MGMT 210 or CMPS 110, MATH 241 or OMIS 200, and Senior standing. Introduction to model-building and statistical inferences to measure and test business and economic theories as well as to solve these problems. Emphasis will be placed on linear modeling, least squares estimation, linear programming and curvi-linear optimization. (Varies)

475. Business Economics II. Credit 3 hours. Prerequisite: ECON 375 or permission of the Department Head. This course is designed to introduce the application of economic reasoning and decision-making to common business problems. Emphasis is placed on designing innovative models for solving problems using common software packages. The course encourages students to develop critical thinking skills when approaching complex business decisions. (Varies)

613. Managerial Economics. Credit 3 hours. Prerequisites: ECON 201, 202, and Graduate standing. A study of management problems from an economic point of view. Includes analyses of demand, forecasting, cost and price relationships, price decisions, risk and uncertainty, and capital investment. (Summer, Fall, Spring)

630. Economics Study Abroad. Credit 3 hours. Prerequisite: Graduate standing. This course provides graduate students an in-depth look at the economic systems and institutions of other countries through the Business Study Abroad program. Students will experience, first-hand, the principles and practices of functioning in an international environment. Designed primarily for students in the MBA program. (Summer)

641. Seminar in Contemporary Economic Problems. Credit 3 hours. Prerequisites: ECON 201 and 202 and Graduate standing. An analysis of the causes and consequence of current economic problems including unemployment, budget deficits, inflation, merchandise trade deficits, and other leading issues of the day. Alternative approaches to alleviate these problems will be discussed and evaluated. (Varies)

695. Special Topics in Economics. Credit 3 hours. Prerequisite: Graduate standing. A seminar course focusing on selected issues in economics. (Varies)

697. Economic Analysis and Public Policy. Credit 3 hours. Prerequisites: ECON 201 and ECON 202 or consent of the Department Head. This course applies economic theory such as pricing, market structures, public goods, externalities, cost and benefit analysis, optimization, utility maximization, voter preferences, and others to examine selected public policy issues such as government finance, health care, social security, welfare, income distribution, regulation and deregulation, urban problems, investment in human capital, and other related subjects. (Varies)

699. Advanced Econometrics and Math Economics. Credit 3 hours. Prerequisites: Math 163, MGMT 261, and consent of the Department Head. A study of time series, the ADF unit root test, Johansen co integration test, vector error correction model, VAR, GARCH, optimization with constraints, and other related subjects. (Varies)

Education (EDUC)

Students wishing to enroll in professional courses beyond EDUC 204 must be admitted to the professional program in Teacher Education, have special permission from the Dean of the College of Education, or be regularly enrolled in a teacher education program at the graduate level. See Selective Admission and Retention in Teacher Education Policies and Procedures - College of Education.

101. Education for Teacher Aides. Credit 3 hours. A course developed for teacher aides including an understanding of children, preparation of teacher materials, preparation of room before and after classes, working with teachers, working with children, etc. (Varies)

103. Methods and Materials for Teacher Aides. Credit 3 hours. A program developed primarily to prepare teacher aides for activity within the classroom. Content will center around methods, techniques, and duties of the teacher aide with special emphasis on construction and use of materials beneficial to the teacher aide. (Varies)

200. The Language Arts in Early Childhood Education. Credit 3 hours. Course is designed for and limited to paraprofessionals. A study of current practices in teaching language arts in an early childhood education setting. Emphasis is placed on the practical application of various teaching methods. Cannot be used for credit in the Elementary Education degree program. (Varies)

201. Introduction to Education. Credit 1 hour. Prerequisites: Sophomore standing (30 hours), a 2.5 cumulative or degree GPA, a grade of C or better in ENGL 102 and prior credit or concurrent enrollment in EDUC 211. An introductory course to education and the profession of teaching. Special emphasis is placed on the guidance and screening of applicants into the professional program. Pre-student teaching professional laboratory experiences begin in this course. (Varies)

202. Introduction to Education: School and Society. Credit 3 hours. Prerequisites: Sophomore standing (30 hours), 2.75 cumulative or degree GPA, a grade of B or higher in ENGL 102 or ENGL 102H, or permission of Department Head. An introductory course to education and the profession of teaching. This course is designed to review factors which have influenced the development of education such as major social, political, religious, and intellectual movements; philosophical theories and systems; research and practice in education psychology; and behavioral and cognitive theories of learning. Competency based clinical practice required. (Summer, Fall, Spring)

203. Foundations of Education. Credit 2 hours. Prerequisites: Sophomore standing (30 hours), a 2.5 cumulative or degree GPA, a grade of C or better in ENGL 102, and prior credit or concurrent enrollment in EDUC 212 or its equivalent. An introductory course to the profession of teaching. Special emphasis is placed on the guidance and screening of applicants into the professional program. This course reviews factors that have influenced the development of education. Field experiences are required in this course. (Summer, Fall, Spring)

204. Seminar for the Prospective Resident Assistant. Credit 3 hours. Prerequisites: 2.0 minimum cumulative GPA. Course engages the theoretical and practical knowledge needed for the resident assistant position at Southeastern through both lecture and practicum work with current resident assistant trainer. Emphasis will be placed on the understanding of student and community development, leadership, communication and diversity theories. (Fall, Spring)

205. Advancing Diversity, Equity, and Inclusion Practices. Credit 1-3 hours. Topics include promoting increased understanding and awareness of the importance of diversity, equity, and inclusion in schools, our communities, and the overall workforce. Students will be introduced to a broad range of perspectives and deconstruct their own perspectives, experiences, and potential biases. This course focuses on cultivating

self-awareness that increases and individual's ability to problem solve and to effectively navigate the needs of a changing workforce. (Summer, Fall, Spring)

210. Teacher Certification Prep. Credit 1 hour. Prerequisite: Enrollment in a program leading to teacher certification or permission of the department head. This course assists students preparing for state-mandated certification requirements that are also required for entry into professional education programs at Southeastern. Students participate in a learning community and use knowledge of content and pedagogical theory to deconstruct and analyze their practice exam score (s) to create and implement an individualized study plan based on their data. With the permission of the department head, may be repeated for up to 3 hours credit. (Fall/Spring)

211. Diversity in Education. Credit 2 hours. Prerequisites: Sophomore standing (30 Hours), 2.5 cumulative or degree GPA, and take concurrently with EDUC 201 or prior credit. This course focuses on historical and current topics and issues in education relevant to providing appropriate and equitable education experiences for diverse populations of students. Observations and service-learning experiences are required to acquaint candidates with the needs and abilities of all students, best pedagogical practices, and laws and policies governing education. One and a half-hour lecture and one-hour laboratory per week. (Varies)

212. Diversity in the Classroom. Credit 1 hour. Prerequisites: Sophomore standing (30 hours), a 2.5 cumulative or degree GPA, a grade of C or better in ENGL 102, and prior credit or concurrent enrollment in EDUC 203 or its equivalent. An introduction to the topics and issues in education relevant to providing appropriate and equitable educational experiences for diverse populations of students. Field experiences are required in this course. (Summer, Fall, Spring)

220. Introduction to Substitute Teaching. Credit 3 hours. Focuses on social and legal factors related to PK-12 teaching, including school safety, ethics, legal aspects, and the roles and responsibilities of substitute teachers. (Summer, Fall, Spring)

221. Teaching Strategies for Substitute Teachers. Credit 3 hours. Planning, adapting, and implementing effective instructional practices and formatively assessing student performance in K-12 settings with diverse populations. (Summer, Fall, Spring)

222. Classroom Management for Substitute Teachers. Credit 3 hours. Instructional and classroom management strategies to optimize student learning and maximize the effectiveness of substitute teachers. (Summer, Fall, Spring)

304. The Teaching of Reading in the Elementary School. Credit 3 hours. Prerequisite: Full SARTE status. A study of the reading process as a fundamental aspect of the elementary school curriculum. Special attention will be given to the basic reading skills needed by emergent and mature readers. The newest techniques, methods, and materials will be appraised through study, observations, and demonstrations in actual classrooms. Clinical practice required. (Summer, Fall, Spring)

307. Instructional Planning and Assessment. Credit 3 hours. Prerequisite: Full SARTE status. This course provides pre-service teachers with the principles and techniques necessary to develop sound instructional lesson plans and assessments. Emphasis is on understanding the roles planning and assessment have in daily classroom practice. Course topics include developing standards-aligned instructional objectives, lesson plans, test items, performance based and alternative assessment techniques, and classroom evaluations. Students learn to analyze classroom assessment data and interpret standardized test information, including Louisiana school and district performance scores. Ethical issues related to assessment are discussed. Education majors only. (Summer, Fall, Spring)

308. Teaching Reading in the Middle School. Credit 3 hours. Prerequisite: Full SARTE status. This course is a study of the reading process as a fundamental aspect of integrated upper elementary and middle school curriculum. Special attention will be given to the basic reading skills needed by emergent and mature readers. The newest techniques, methods, and materials will be appraised through study, observations, and demonstrations in actual classrooms. Competency based clinical practice required. (Fall, Spring)

309. Integrating Music into the Early Childhood and Elementary School Classroom. Credit 3 hours. A study of how music can be integrated into classroom instruction in the early childhood and elementary grades. Planning and production of materials that allow for musical integration across the curriculum will be an integral part of this course. Students will also be given opportunities throughout the semester to build and enhance their own personal musicianship skills. Clinical practice required. (Summer, Fall, Spring)

313. Elementary Music Methods. Credit 3 hours. Prerequisites: EDUC 201 or 203, EDUC 211 or 212, EPSY 301, MUS 303, MUS 304 and Full SARTE status. Music curriculum for the elementary school. Includes study of current methods and materials, planning for music instruction, and presentation of music lessons to elementary school children. (Spring)

315. [EPSY 315] Classroom Management and Motivation for Beginning Teachers. Credit 3 hours. Prerequisite: Full SARTE Status. This course provides detailed investigation of behavioral and humanistic approaches to classroom management and motivation in the classroom. Included are topics such as classroom procedures and rules, consequences, individual and group motivation and rewards, preventive and supportive discipline, parent involvement, and classroom arrangement, set up and how these can influence student behavior. Students will also become well versed in working with students with disabilities, students from poverty and students from diverse backgrounds as well as students who speak English as their second language. Clinical practice required. (Summer, Fall, Spring)

316. Classroom Management for Secondary Teachers. Credit 3 hours. Prerequisite: Full SARTE status. A detailed investigation of behavioral and humanistic approaches to classroom management and motivation in the middle school and secondary classroom. Included are topics such as preventative, supportive, and corrective discipline techniques, parent teacher conferencing, and behavior modification. Clinical practice required. (Summer, Fall, Spring)

319. Foundations of Inquiry Teaching Strategies. Credit 3 hours. Prerequisites: Full SARTE status. This course includes the theoretical pedagogical foundations and current issues and perspectives of teaching using inquiry-based teaching strategies. It includes practice within middle school certification areas of articulating what students need to understand rather than be able to do, investigation of productive and unproductive beliefs and practices for teaching content, an introduction to inquiry-based constructivist teaching, and technology enhanced instruction. Clinical practice required. (Fall, Spring)

320. Foundations of PK-5 Mathematics Education. Credit 3 hours. Prerequisites: Full SARTE status, EDUC 307, and EDUC 315 or ECE 314. Early Childhood majors take concurrently with ECE 300, ECE 311, ECE 312, and EDUC 322; Elementary 1-5 majors take concurrently with EDUC 322 and LSED 401. This course includes the theoretical pedagogical foundations and current issues and perspectives of teaching early childhood and elementary mathematics with equity to diverse populations. This course, which provides a framework for the teaching of mathematics, includes practice articulating what students need to understand rather than be able to do in mathematics, investigation of productive and unproductive beliefs and practices in math, an introduction to inquiry-based constructivist teaching, and technology enhanced instruction. Clinical practice required. (Fall, Spring)

322. Diagnostic and Prescriptive Reading. Credit 3 hours. Prerequisites: Full SARTE status EDUC 307 and EDUC 315 or ECE 314. Early Childhood majors take concurrently with ECE 300, ECE 311, ECE 312, and EDUC 320; Elementary 1-5 majors take concurrently with EDUC 320 and EDUC 332. This course is designed to equip the student with knowledge of and skills in reading instruction for individual learners. Emphasis will be placed on the diagnosis of the learner's needs in reading and prescription of appropriate activities for advancement. Clinical practice required. (Fall, Spring)

323. Curriculum and Instruction in Grades PK-3. Credit 6 hours. Prerequisites: ECE 106, EDUC 304, EDUC 307, EDUC 315, MATH 177, MATH 277, an approved Introductory Portfolio, and Full SARTE status. This course includes the development of teaching competencies of mathematics and reading at the PK-3 grade levels. Primary emphasis is focused on developing the teaching skills and competencies of future

lower elementary and early childhood teachers with respect to topics found in these curricula areas. A key component of the course is Competency-based clinical practice with students in grades PK-3 settings. The needs of special populations as well as the integration of technology into instruction will be incorporated into all areas of the curriculum. Competency-based clinical practice required. Concurrent enrollment in EDUC 320 and prior credit or concurrent enrollment in LSED 401. Education Majors only. (Fall, Spring)

324. Dyslexia - Struggling Readers and Writers. Credit 3 hours. Prerequisites: Full SARTE status, "C" or higher in EDUC 322 or ECE 311. Emphasis will be placed upon the specific needs of struggling readers and writers who have characteristics of learning disabilities such as dyslexia, dysgraphia, oral and written language difficulties (OWL), etc. It will also address problems in mathematics due to poor reading/writing and/or dyscalculia and special populations who struggle in reading and writing such as English Language Learners (ELLs). Research-based, classroom interventions (e.g., multisensory instruction) and scientifically-based, specialized programs will be emphasized. (Fall, Spring)

326. Curriculum and Instruction in Grades 1-5. Credit 6 hours. Prerequisites: EDUC 304, EDUC 307, EDUC 315, MATH 177, MATH 277, an approved Introductory Portfolio, and Full SARTE status. This course includes the development of teaching competencies of mathematics and reading at the 1-5 grade levels. Primary emphasis is focused on developing the teaching skills and competencies of future elementary school teachers with respect to topics found in these curricular areas. A key component of the course is field experience with students in grades 1-5 settings. The needs of special populations as well as the integration of technology into instruction will be incorporated into all areas of the curriculum. Competency based clinical practice required. Concurrent enrollment in EDUC 320 and 322, and prior credit or concurrent enrollment in LSED 401 depending on the curriculum. Education majors only. (Fall, Spring)

327. Teaching Science and Social Studies in Elementary School. Credit 6 hours. Prerequisites: Full SARTE status, EDUC 307 and EDUC 315. Must be taken concurrently with EDUC 333. Best practices for instruction in science and social studies for grades 1-5. Topics include planning for inquiry-based teaching, planning appropriate assessment and classroom strategies for science and social studies content, planning for children's developmental readiness for concepts and process skills, use of resources and tools in each discipline, and developing reflective teaching practices. Clinical practice required. (Fall, Spring)

328. Curriculum and Instruction in Grades 4-8. Credit 6 hours. Prerequisites: EDUC 308, EDUC 307, EDUC 315, MATH 177, MATH 277, prior credit or concurrent enrollment in LSED 402, an approved Introductory Portfolio, and Full SARTE status. This course includes the development of teaching competencies of mathematics and reading at the 4-8 grade levels. Primary emphasis is focused on developing the teaching skills and competencies of future middle school teachers with respect to topics found in these curricula areas. A key component of the course is field experience with students in grades 4-8 settings. The needs of special populations as well as the integration of technology into instruction will be incorporated into all areas of the curriculum. Concurrent enrollment in EDUC 320, and prior credit or concurrent enrollment in LSED 402 depending on the curriculum. Field experience required. Education majors only. (Fall, Spring)

332. Current Topics in Technology for Elementary, Middle and Secondary Education. Credit 1 hour. Prerequisites: Full SARTE status, EDUC 307, EDUC 315, and prior credit for or concurrent enrollment in EDUC 322. An overview of current topics and latest trends of technology in both the elementary and secondary education classroom. This course may be repeated as topics vary for a maximum of nine credit hours. (Fall, Spring)

333. Elementary Curriculum and Instruction in Language Arts and Literacy. Credit 6 hours. Prerequisites: EDUC 322, Full SARTE status, EDUC 307, and EDUC 315. Must be taken concurrently with EDUC 327. This course includes the development of teaching competencies of language arts and literacy in grades 1-5. Teaching theories and practices for language arts and literacy will be explored through the use of research, observation, and hands-on activities and presentations. The needs of special populations as well as the integration of technology into instruction will be incorporated Clinical practice required. (Fall, Spring)

404/530. Kindergarten Education. Credit 3 hours. Prerequisites: EDUC 202 and EPSY 301. Development of the nursery, kindergarten, and primary schools; principles and methods of understanding and working with the preschool child; two hours per week of observation and participation in kindergarten. (Varies)

405/531. Kindergarten Education. Credit 3 hours. Prerequisites: EDUC 202 and EPSY 301. A continuation of Education 404/530. (Varies)

406. Historical and Philosophical Foundations of Education. Credit 3 hours. Prerequisite: Junior standing. A course designed to review major social, political, religious, and intellectual movements and philosophical theories and systems which have influenced the development of education. The material will be arranged chronologically and treated thematically. The contributions of leaders associated with each movement and philosophy will also be stressed. (Varies)

407/533. Tests and Measurements. Credit 3 hours. Prerequisite: Full SARTE status. Focus of the course is instructional alignment in which the objectives a teacher intends to teach match the lesson activities and are checked through appropriate assessments. Construction of lesson plans and teacher made assessments and the administration and interpretation of standardized tests and the Louisiana school district performance scoring are emphasized in this course. Clinical practice required. Education majors only. (Summer, Fall, Spring)

410. Elementary Curriculum and Instruction. Credit 10 hours. Prerequisites: EDUC 321, EPSY 301, and MUS 291. The content of this block includes: reading, language arts, sciences, social studies, and music, as related to the needs of the child. Teaching strategies in the curricula areas will be explored and refined through working with children in a school environment. Primary emphasis of this block is focused on the future teacher's performance in working with children. Evaluation techniques are reviewed and applied in the experiences gained in this block. KIN 331 must be taken concurrently. Five hours lecture and eight hours laboratory per week. (Varies)

415. Curriculum and Instruction in the Elementary School. Credit 9 hours. Prerequisites: Full SARTE status, Introductory Portfolio, MUS 291, EDUC 320, EDUC 322, and EDUC 326. The content of this block includes: reading, language arts, science, social studies, and music, as related to the needs of the child. Teaching strategies in the curricular areas will be explored and refined through working with children in a school environment. Primary emphasis of this block is focused on the future teacher's performance in working with children. Field experience required. SPED 495 must be taken concurrently. Evaluation techniques are viewed and applied in the experiences gained in this block. Education majors only. (Fall, Spring)

416/516. Methods for Teaching English as a Second Language. Credit 3 hours. This course will incorporate different methodology for teaching English as a Second Language (ESL) and academic content with exploration and development of lessons appropriate for students who are limited English proficient (LEP). This course will include methodologies and activities to make the English language and academic content comprehensible to students. This course will be for certified teachers and candidates enrolled in a teacher education program. (Fall, Spring)

425. Elementary and Mild/Moderate Impairments Professional Semester. Credit 12 hours. Prerequisites: See Requirements for Student Teaching section in the catalog. All-day, all-semester student teaching experiences including observation, participation and a minimum of 180 actual clock hours of teaching (with a substantial portion of the 180 hours in a full day teaching) under the supervision of the assigned cooperating school teacher. Students will teach one half semester in the regular classroom setting and one-half semester in the mild/moderate classroom setting. Available on a pass/fail basis only. (Varies)

426. Elementary Professional Semester. Credit 12 hours. Prerequisites: See Requirements for Student Teaching section in the Catalog. All-day, all-semester student teaching experiences including observation, participation and a minimum of 180 actual clock hours of teaching (with a substantial portion of the 180 hours in a full day teaching) under the supervision of the assigned cooperating school teacher. Available on a pass/fail basis only. (Varies)

427. Student Teaching in the Elementary or Middle School. Credit 9 hours. Prerequisites: See Requirements for Student Teaching section in the Catalog. All day, all semester student teaching experiences, including observation, participation, and a minimum of 180 actual clock hours of teaching (with a substantial portion of the 180 hours in a full day teaching) under the supervision of the assigned cooperating school teacher. Available on a pass/fail basis only. (Fall, Spring)

428/528. Curriculum Design for Teaching English as a Second Language. Credit 3 hours. This course includes theory and procedures for the practical application of second language learning as well as the use of learning strategies. Also, this course is for the design of curriculum and assessment for teaching language and content to limited English proficient (LEP) students. Students who enroll in this course will be required to have exposure to LEP students to become familiar with their linguistic and cultural needs. This course is for certified teachers and candidates participating in a teacher education program. (Fall, Spring)

429. Practicum for Alternate Certification Program. Credit 3 hours. To be repeated for a total of six hours. A practicum designed to meet the requirements for the Alternate Post-Baccalaureate Certification Program. Students will enroll in this course for both semesters of the internship year. Approval of the Director of Performance Assessment is required. Available on a pass/fail basis only. (Fall, Spring)

430. Practicum in Teaching. Credit 3 hours. Prerequisites: Louisiana Teaching Certificate for either elementary or secondary level; three years of successful teaching experience; approval of the Office of Student Teaching. Available at the secondary level for teachers previously certified on the elementary level, and at the elementary level for teachers previously certified at the secondary level. A field-based experience-centered course designed to acquaint the teacher with concepts and objectives, introduction to methods and procedures, psychological principles, and identification and application of evaluation techniques appropriate to the teaching-learning process at the selected level. Available on a pass/fail basis only. (Varies)

431. Practicum in Nursery School. Credit 3 hours. Prerequisites: EDUC 410 or 415, FCS 321 and 460. Observation, participation, and teaching in the nursery school. Emphasis on program planning for pre-kindergarten children. The student must apply to the Director of Performance Assessment one semester in advance in order to enroll for this course. Mornings are the only times available for the practicum. (Varies)

432/586. Practicum in Kindergarten. Credit 3 hours. Prerequisites: EDUC 404/530, EDUC 410 or 415 and FCS 321. An advanced practicum course designed to give practice in teaching appropriate for the kindergarten level. Experiences are provided for observation, teaching, and evaluation of kindergarten children. Seminars are held for planning, evaluation, and discussion. The student must apply to the Director of Performance Assessment one semester in advance to enroll for this course. (Varies)

433/550. Practicum in Second Language Teaching. Credit 3 hours. Prerequisites: EPSY 413/513 and EDUC 413/534. Primary emphasis of this semester will be placed on teaching children in both their native language and a second language, under the guidance of a cooperating teacher. Practicum experience will include curriculum and instruction in the use of two languages. (Varies)

436. Student Teaching in Mild/Moderate Impairments. Credit 3 hours. Prerequisites: See Requirements for Student Teaching section in the catalog. Observation, participation, and student teaching in the mild/moderate classroom. A minimum of six hours per week for the semester in the public or nonpublic schools plus any additional conference time that may be necessary. (Varies)

437. Student Teaching in Mild/Moderate Impairments. Credit 6 hours. Prerequisites: See Requirements for Student Teaching section in the catalog. Observation, participation, and student teaching in the mild/moderate classroom. A minimum of twelve hours per week for the semester in the public or nonpublic schools plus any additional conference time that may be necessary. (Varies)

438. Student Teaching in Severe/Profound Impairments. Credit 3 hours. Prerequisites: See Requirements for Student Teaching section in the catalog. Observation, participation, and student teaching in the severe/profound classroom. A minimum of six hours per week for the semester in the public or nonpublic schools plus any additional conference time that may be necessary. (Varies)

439. Student Teaching in Severe/Profound Impairments. Credit 6 hours. Prerequisites: See Requirements for Student Teaching section in the catalog. Observation, participation, and student teaching in the severe/profound classroom. A minimum of twelve hours per week for the semester in the public or nonpublic schools plus any additional conference time that may be necessary. (Varies)

447/547. Current Issues in Elementary/Secondary Education. Credit 1-3 hours. Seminar to clarify trends, methods, and/or material and curriculum with practical organizational procedures for implementation. May be repeated for a maximum total of 6 hours. (Varies)

448. Apprenticeship I in Elementary or Secondary Education. Credit 9 hours. Prerequisites: Full SARTE status, successful completion of Introductory Portfolio, passing score on the Content Praxis II, Minimum 2.5 GPA required with a 3.0 GPA preferred to make application, and permission of the Department Head and school district. Also offered as MAT 662. This apprenticeship provides the Elementary, Middle School, and Secondary Education major or alternative certification candidate with an assigned placement selected and approved by the University in partnership with a cooperating school/district. The content of this apprenticeship encompasses materials and methods including best practices and innovative teaching strategies in the teacher candidate's major field of certification that is engaged through on-the-job training in the school environment. Lesson planning, alternative assessment, classroom management, and education technology are topics addressed in the apprenticeship. Must be taken concurrently with SPED 495 for Elementary and Middle School Education majors. Teacher candidates will earn nine hours of credit for a minimum of 500 hours of approved work experience that follows the school district calendar. Candidates must apply with written application, interview, and be selected as an apprentice teacher. (Varies)

449. Mathematics Curriculum and Instruction in the Elementary Classroom. Credit 3 hours. Prerequisites: Must be taken concurrently with EDUC 452 and 453. This course includes the development of teaching competencies of mathematics at the elementary grade levels. Primary emphasis is on developing the teaching skills and competencies of future elementary teachers with respect to mathematics. The needs of special populations as well as the integration of technology into instruction will be incorporated. (Fall, Spring)

450. Student Teaching II: Elementary and Mild/Moderate Disabilities. Credit 9 hours. Prerequisites: See Requirements for Teacher Residency Section in the catalog. Student Teaching II is the second semester of a full year residency for student teaching, and is all day, all week following the assigned school district calendar. Student teaching experiences include observation, participation in school activities, management of classroom and student behaviors, daily lesson planning, instruction, and assessment under the supervision of an assigned mentor teacher from a partner school. Student teachers must receive a final grade of "Pass" (P) in order to graduate. (Fall, Spring)

452. Elementary Curriculum and Instruction: Literacy. Credit 3 hours. Prerequisites: Prior credit for or concurrent enrollment in LSED 401 if it is in the degree plan. Must be taken concurrently with EDUC 449 and 453. This course includes the development of teaching competencies of reading at the elementary grade levels. Primary emphasis is on developing the teaching skills and competencies of future elementary school teachers with respect to topics found in the area of literacy. The needs of special populations as well as the integration of technology into instruction will be incorporated. (Fall, Spring)

453. Teaching Residency. Credit 6 hours. Prerequisites: See requirements for Teacher Residency Section in the catalog. Early Childhood Education candidates take concurrently with EDUC 456 and 457. Elementary Education candidates take concurrently with EDUC 449 and 452. Middle School Education candidates must have prior credit for EDUC 494 and take concurrently with 468 or 469 depending on concentration area. Secondary and K-12 Education candidates must take concurrently with senior content methods course. Teaching Residency is the first semester of a full year residency for competency based clinical practice. Teacher residents will be placed in schools according to their certification

programs. The teacher resident will spend at least 60% of the instructional time in partnering schools under the supervision of an assigned mentor teacher. Through co-teaching with the mentor teacher, the teacher resident will work on instructional planning and implementation, classroom management and increasing student engagement and achievement. Residents must receive a B or higher for the course to count towards their program completion. (Fall, Spring)

456. Curriculum and Instruction in Early Literacy. Credit 3 hours. Prerequisites: Must be taken concurrently with EDUC 453 and 457. This course includes the development of teaching competencies of future early childhood and lower elementary teachers with respect to topics in literacy. The needs of special populations as well as the integration of technology in instruction will be incorporated. (Fall, Spring)

457. Curriculum and Instruction in Early Childhood Mathematics. Credit 3 hours. Prerequisites: Must be taken concurrently with EDUC 453 and 456. This course includes the development of teaching competencies of mathematics of future PK-3 grade teachers. Primary emphasis is focused on developing the teaching skills and competencies of future early childhood and lower elementary teachers with respect to topics found in these curricular areas. The needs of special populations as well as the integration of technology into instruction will be incorporated into all areas of the curriculum. (Fall, Spring)

467/563. Reading Instruction in Adult Education. Credit 3 hours. A course dealing with the study of the diagnosis of adult reading problems and methods/materials utilized to teach basic reading skills to illiterate adults. (Varies)

468. Teaching Science and Mathematics in Middle School. Credit 3 hours. Prerequisite: Must be taken concurrently with EDUC 453. Best practices for instruction in science and mathematics for the middle school grades. Topics include planning for inquiry-based teaching, planning appropriate assessment and classroom strategies for science and mathematics content, planning for children's developmental readiness for concepts and process skills, use of resources and tools in each discipline, and developing reflective teaching practices. (Fall, Spring)

469. Teaching Reading and Social Studies in Middle School. Credit 3 hours. Prerequisites: Prior credit for or concurrent enrollment in LSED 402. Must be taken concurrently with EDUC 453. Middle School Education candidates with a focus in English take with ENGL 467. Middle School Education candidates with a focus in Social Studies take with HIST 323. This course includes the development of teaching competencies of reading and social studies in the middle school grade levels. The needs of special populations as well as the integration of technology into instruction will be incorporated. (Fall, Spring)

472. Content Literacy Strategies and Supports for Dyslexic and Other Diverse Students. Credit 3 hours. Prerequisites: Full SARTE status, "C" or higher in ESPY 301 or PSYC 204. A course designed to provide middle school and secondary school teachers with a knowledge of Dyslexic and Other Diverse Students through content literacy strategies; methods and materials that can be implemented with various cultural groups; and skills for developing the reading abilities of students. Special emphasis will be given to reading in the content areas and research-based strategies to support students in those content areas. Clinical practice required. Education majors only. (Summer, Fall, Spring)

475/566. Current Issues in Elementary/Secondary Education. Credit 1 hour. Seminar to clarify trends, methods and/or materials in curriculum with practical organizational procedures for implementation. May be repeated for a total of 2 hours credit, with no more than 1 credit hour in any one semester. (Varies)

484. Upper Elementary Curriculum and Instruction. Credit 6 hours. Prerequisite: Full SARTE status, Introductory Portfolio, EDUC 320 and EDUC 328. The content of this block includes the development of teaching competencies in science, social studies, and language arts.

Consideration of curriculum organization, behavioral and humanistic approaches to classroom management, methods and materials for meeting the needs of all learners at the upper elementary level; observation and application in grades 4-8. Concurrent enrollment in SPED 495. Field experience required. Education majors only. (Fall, Spring)

485. Special Methods in High School Subjects. Credit 3 hours. Prerequisite: Must be taken concurrently with EDUC 453. Emphasis will be placed on the materials and methods in the student's major field of certification. The focus of the course is on lesson planning, alternative assessment, classroom management, and educational technologies. (Fall, Spring)

486. Teaching Residency Capstone. Credit 9 hours. Prerequisites: A grade of B or higher in EDUC 453 (See Requirements for Teacher Residency section in the catalog). Teaching Residency Capstone is the final semester of a residency for competency based clinical practice and is all day, all week following the assigned school district calendar. Practice teaching experiences include observation, participation in school activities, management of classroom and student behaviors, daily lesson planning, instruction, and assessment under the supervision of an assigned mentor teacher from a partner school. Residents must receive a final grade of B or higher in order to graduate. (Fall, Spring)

487. Student Teaching in the Secondary Schools. Credit 12 hours. Prerequisites: See Requirements for Student Teaching section in this Catalog. All-day, all-semester student teaching experiences, including observation, participation, and a minimum of 180 actual clock hours of teaching (with a substantial portion of the 180 hours in full day teaching) under the supervision of the assigned cooperating school teacher. Available on a pass/fail basis only. (Varies)

488. Practicum: Field Experience in the Secondary Classroom. Credit 1 hour. Prerequisite: This course must be taken concurrently with EDUC 485. Full SARTE status, concurrent enrollment or prior credit for EDUC 407; EDUC 202, EPSY 311. The practicum provides experiences in classroom observations and supervised teaching, demonstration of classroom management techniques and utilization of educational technology in the secondary classroom (grades 7-12). (Varies)

490. Special Methods in High School Subjects. Credit 6 hours. Prerequisites: Full SARTE status and an approved Introductory Portfolio. This course must be taken prior to student teaching. Emphasis will be placed on the materials and methods in the student's major field of certification. Lesson planning, alternative assessment, classroom management, and educational technologies are topics covered in the course. Field experience component required. (Fall, Spring)

494. Methods in Middle School Subjects. Credit 6 hours. Prerequisites: Full SARTE status, EDUC 307 and EDUC 315. Emphasis is placed on materials and methods for teacher candidates in the grade levels for middle school certification. Topics include lesson planning, alternative assessment, classroom management, and educational technologies. (Fall, Spring)

499. Teacher Development Seminar. Credit 1-3 hours. Prerequisite: Permission of the Department Head. The support seminar must be taken based upon recommendation of the Office of Student Teaching when student teaching has not been successfully completed. This course addresses the relationships among three fundamental aspects of the educational process: the subject matter of the curriculum, the diverse capabilities of students, and the teacher's responsibilities to design and implement instruction. Emphasis will be placed on major issues facing teachers in establishing and maintaining a positive and productive learning environment, as well as the professional roles and responsibilities. (Varies)

516. Methods for Teaching English as a Secondary Language. Credit 3 hours. This course will incorporate different methodologies for teaching English as a Second Language (ESL) and academic content with exploration and development of lessons appropriate for students who are limited to English proficiency (LEP). The form of this course will include methodologies and activities to make the English language and academic content comprehensible to students. This course will be certified for teachers and candidates enrolled in a teacher education program. (Varies)

528. Curriculum Design for Teaching English as a Secondary Language. Credit 3 hours. This course includes theory and procedures for the practical application of second language learning as well as the use of learning strategies. Also, this course is for the design of curriculum and assessment for teaching language and content to limited English proficient (LEP) students. Students who enroll in this course will be required to

have exposure to LEP students to become familiar with their linguistic and cultural needs. This course is for certified teachers and candidates participating in a teacher education program. (Varies)

533. Test and Measurements. Credit 3 hours. Prerequisites: Full SARTE status. The focus of the course is instructional alignment in which the objectives a teacher intends to teach match the lesson activities and are checked through appropriate assessments. Construction of lesson plans and teacher-made assessments and the administration and interpretation of standardized tests and the Louisiana school and district performance scoring are emphasized in this course. Clinical practice is required. Education majors only. (Varies)

547. Current Issues in Elementary/Secondary Education. Credit 1-3 hours. Seminar to clarify trends, methods, and/or material and curriculum with practical organizational procedures for implementation. May be repeated for a maximum total of 6 hours. (Varies)

550. Practicum in Second Language Teaching. Credit 3 hours. Prerequisites: EPSY 413/513 and EDUC 413/534. The primary emphasis of this semester will be placed on teaching children in both their native language and a second language, under the guidance of a cooperating teacher. Practicum experience will include curriculum and instruction in the use of two languages. (Varies)

563. Read Instruction in Adult Education. Credit 3 hours. A course dealing with the study of the diagnosis of adult reading problems and methods/materials utilized to teach basic reading skills to illiterate adults. (Varies)

601. Educational Statistics and Research. Credit 3 hours. The study of basic statistical concepts. Students will be introduced to fundamental concepts and procedures in the scientific study of educational problems. Content will include the examination of principal research methods including action research, an analysis of research studies, and the application of research principles with emphasis on improvement in professional practice. (Varies)

605. Research Seminar in Gifted and Talented Education. Credit 3 hours. Prerequisite: EDUC 648. An in-depth study of research in the creative thinking and problem-solving curriculum development for gifted and talented students. Special emphasis will be placed on principles, methods, and evaluation of research as they relate specifically to the gifted and talented student. (Varies)

618. Counseling for the Gifted. Credit 3 hours. A study of the challenges of adjustment encountered by gifted and talented students and their families. Special emphasis placed on counseling and guidance techniques appropriate in facilitating personal and family adjustments. Experience component included. (Fall)

636. Mentoring Student Teachers. Credit 3 hours. Prerequisite: A valid Level 1 or Type C or higher teaching certificate, 2 years of successful teaching, and assignment of a student teacher to mentor. Designed for teachers who are interested in becoming state trained mentor teachers. Emphasis will be placed on the state-required mentor teacher training modules and mandated assessments. Additional information will focus on experiences that help student teachers in early childhood, elementary, middle, and secondary education, as well as special education and K-12 subject areas. (Varies)

645. Graduate Student Teaching/Clinical Practicum in Communicative Disorders in the Elementary and Secondary Schools. Credit 6 hours. Prerequisites: See Requirements for Student Teaching in this Catalog. Graduate standing and minimum 90 hours of previous school experience in a setting other than a public-school facility. All day, all semester clinical experiences, including observation, participation, I.E.P. and diagnostic report writing and parental counseling. One hundred twenty (120) hours student teaching will be conducted under the supervision of the assigned cooperating school therapist. Concurrent enrollment in Speech, Language, Hearing 625. (Varies)

646. Laboratory Practicum in Teaching the Gifted Child. Credit 3 hours. Prerequisites: EDUC 648 and 649 or permission of the Department Head. Lecture and supervised practicum with individuals and small groups. Includes informal assessment, curriculum planning, development and implementation, and counseling. (Spring)

647. Creativity in Gifted Education. Credit 3 hours. This course will explore the area of creativity, focus on relevant theories and research, and prepare teachers to nurture and develop creativity in their students. (Summer)

648. Characteristics of the Gifted Child. Credit 3 hours. An orientation of the student to the basic understanding of the gifted child with emphasis upon identification, characteristics, and implications for educational, social, physical, emotional, and psychological development. (Fall)

649. Methods and Materials in Education of the Gifted. Credit 3 hours. Prerequisite: EDUC 648. An examination of provisions currently available for gifted children with reference to the concepts of acceleration, grouping, concepts of curriculum enrichment, special schools and classes, as well as an exploration of research relative to the adaptation of newer techniques to meet their needs. (Spring)

650. Mathematics in the Elementary School. Credit 3 hours. A study of recent research findings concerning methods of teaching and the content of elementary school mathematics. Students will be expected to apply diagnosis and prescription techniques in order to individualize their teaching of mathematics. (Varies)

651. Social Studies in the Classroom. Credit 3 hours. A course designed to provide understanding of current best practices in teaching social studies and the importance of social studies to student development. Content, methods, materials, and general curricular implications will be considered. (Varies)

652. Science in the Elementary School. Credit 3 hours. A study of current approaches to teaching science in the elementary school. Special emphasis will be given to a various science studies being developed throughout the nation. (Varies)

653. Student Teaching in Early Intervention. Credit 9 hours. Prerequisites: See Requirements for Student Teaching section in this Catalog. Observation, participation, and student teaching in an early intervention setting. Available on a pass/fail basis only. (Varies)

654. Language Arts in the Classroom. Credit 3 hours. A course providing a review of current research and practices for teaching the language arts. Special emphasis is placed on teaching the writing process with appropriate strategies according to the developmental level of the students. (Varies)

655. Music in the Elementary School. Credit 3 hours. A study and application of current trends and materials in music education for the elementary school. Emphasis is placed on involving the child through singing, speech, movement, and playing instruments. (Varies)

656. Special Problems in the Elementary School. Credit 3 hours. Prerequisites: EDF 600 and 607, 615 or 616. Study of contemporary problems in elementary education. A review of pertinent research relating to these problems. Each student is expected to do intensive reading and reporting in areas deemed of particular interest and need, as identified by student and instructor. May be repeated for a total of six hours credit, with no more than three credit hours in any one semester. (Varies)

657. Reading in the Elementary School. Credit 3 hours. A course providing for extensive study of recent trends in materials and methods in reading in the elementary school, including significant research studies which relate to these. Specifically emphasized will be various learning styles, the discussion of specific methods and materials, and their cross-cultural applicability. (Fall, Spring)

658. Reading in the Secondary School. Credit 3 hours. A course providing for extensive study of recent trends in materials and methods of reading in the secondary school, including significant research studies which relate to these. Special materials will be considered for use and adaptation with various cultural groups. Specific methodology within the content area will be explored. (Fall, Spring)

659. Psychology of Reading. Credit 3 hours. Prerequisite: EDUC 657 for elementary majors or EDUC 658 for secondary majors. Provides teachers with an understanding of the psychological bases of the reading process—those underlying reading ability and disability. Applications of the findings and theories of the psychologist to classroom situations are studied through the use of actual case studies. (Varies)

660. Dimensions of Diversity for Education: Students, Families, Cultures, and Communities. Credit 3 hours. This is a core course for all students pursuing a master's degree in education. This course focuses on meeting the cultural, linguistic, and educational needs of diverse

learners in schools through differentiated instruction and assessment. It also focuses on positive partnerships that can be developed among schools, students, their families, and their communities to foster cross cultural interactions, cultural understanding, social and economic development, and academic achievement. Graduate students enrolled in this course will be required to participate in clinical practice required, including visits to culturally and/or linguistically different populations. (Summer, Fall, Spring)

661. Diagnostic and Prescriptive Reading. Credit 3 hours. Prerequisite: EDUC 657, EDUC 658, EDUC 677, EDUC 678, or SPED 663. This course will cover a variety of formal and informal reading assessments. Students will learn to administer them, to interpret them, and to use their results to plan and implement appropriate instructional sessions geared to children's diverse needs. Reflective and professional writing are key components of this course. (Spring)

662. Reading Research Seminar. Credit 3 hours. Prerequisites: EDF 600, EDUC 657 or EDUC 658 or equivalent, EDUC 659 and EDUC 661 or equivalent. Intensive investigation of current and/or classic research studies of recognized importance to the teacher of reading, with encouragement and guidance offered to the student pursuing action research in reading. (Varies)

664. Content Area Reading and Study Strategies. Credit 3 hours. A course designed to develop competencies in teaching strategies for content area subjects. Emphasis will be directed to teaching activities, specialized skills, and study strategies for learning substantive content through the reading of expository discourse and graphic representatives. Cross-cultural reading problems in the content areas and special methods for helping students overcome these problems will be discussed. (Summer)

665. Elementary Levels-Practicum in Reading. Credit 3 hours. Prerequisites: EDUC 657 and 661. An advanced laboratory course designed to give practice in developmental reading techniques appropriate to elementary levels. Experiences are provided in diagnosis, instructional planning, and evaluation of reading progress, using recognized practices presently available. (Summer)

666. Middle/Secondary Levels-Practicum in Reading. Credit 3 hours. Prerequisites: EDUC 658 and 661. An advanced laboratory course designed to give practice in the application of content area reading techniques at middle and secondary school levels. Experiences include diagnosis, instructional strategies and evaluation practices for determining reading progress. (Varies)

667. Readings in Secondary Education. Credit 3 hours. Prerequisite: EDF 600. An examination of current research and professional literature in secondary education. An in-depth semester project is to be developed by the student under the direction of the course instructor. (Varies)

668. The Junior High School. Credit 3 hours. The peculiar functions of the junior high school; its organization and place in the school system. (Varies)

669. Utilization of Audio-Visual Equipment. Credit 3 hours. Prerequisite: EPSY 301 or permission of the Department Head. A study of various media available for use in elementary and secondary schools, with special emphasis on new educational technology. Investigation and experimentation on multimedia approach for effective utilization of instructional materials. (Varies)

670. Media Production. Credit 3 hours. A study of methods and techniques of producing teaching materials. Students are taught production techniques and proper utilization of overhead transparencies, audio and video tapes, dry mounting and lamination and other materials which are useful in the elementary and secondary school classroom. Special emphasis is given to the correlation and fusion of Education Media in the instructional program. (Varies)

671. Instructional Television in the Schools. Credit 3 hours. An introduction to the various types of television usage which differentiate between commercial, educational, and instructional television. Lectures and laboratory experiences pertaining to the use of television in the classroom. Special techniques needed for teaching with television. Two hours lecture and two hours laboratory per week. (Varies)

672. Administration of Media Programs. Credit 3 hours. Prerequisites: EDUC 669 and EDUC 670. This course is designed to offer a survey of the general principles and practices in administering a media center at various levels-single building, system-wide, or college. Activities will be flexible and include practical problems, readings, and exploration of various areas in print and non-print materials. (Varies)

673. Independent Study. Credit 1-3 hours. Prerequisites: EDF 600 and permission of the Department Head. Student completes research study and report under direction of graduate instructor. The course may be repeated for a total of six hours, with no more than three credit hours in any one semester. A maximum of three hours of credit in Independent Study may be applied toward the Master of Education Degree. (Varies)

674. Readings in Education. Credit 3 hours. Prerequisites: EDF 600 and permission of the Department Head. Directed readings on selected topics in education. Area(s) of reading and study to be designated by instructor. Student may repeat the course for a total of six credit hours, with no more than three credit hours in any one semester. A maximum of three hours of credit in Readings may be applied toward the Master of Education degree. (Varies)

675. Special Topics in Elementary and Secondary Education. Credit 3 hours. An intensive examination of issues relevant to education and the schools. May be repeated as topics vary for a maximum of nine credit hours. (Varies)

677. Foundations of Early Literacy. Credit 3 hours. A practical course which focuses on developing a better understanding of how children learn to read and how to teach children to read by more closely observing student reading and writing behaviors; understanding more explicitly the reciprocity of reading and writing; learning how to "teach for strategies;" and exploring the reading process in order to foster independent readers and writers. A developmentally appropriate instructional literacy program based on current research, observation, and responsive teaching as a foundation for promoting literacy acquisition will be designed and implemented. (Fall, Spring)

678. Dyslexia and Related Disabilities in the Classroom. Credit 3 hours. A survey of theories, screening procedures, and teaching strategies to be utilized with students with dyslexia and related disabilities (e.g., dyslexia, dysgraphia, dyssomnia, etc.). Current research, specific characteristics, multisensory strategies, and management techniques will be discussed and applied. (Fall, Spring)

679. Perspectives and Practices for STEM Education. Credit 3 hours. This course will examine the curriculum, goals, methods, and materials for teaching the STEM (Science, Technology, Engineering, and Mathematics) curriculum in elementary and secondary schools. It will focus on methods for making these integrated subjects meaningful to students by promoting problem-based and project-based learning in a real-world context. Field components are required. (Varies)

688. Practicum in Elementary and Secondary Education. Credit 3 hours. Prerequisite: EDUC 693. Students will identify a specific area in which educational improvement is needed within an elementary or secondary educational setting. Students will develop a plan to facilitate improvement in the area of concern. Under the direction and supervision of a faculty member, students will implement the plan and evaluate its effectiveness at the end of the semester. (Varies)

690. Instructional Coaching in Schools. Credit 3 hours. Prerequisites: EDL 610 and EDL 612. A study of roles, responsibilities and practices of instructional coaches and mentors in schools are emphasized along with data-driven research-based instructional practices, differentiated instruction, and collaborating with school administrators and instructional personnel. Theories concerning adult learning, the social and psychological aspects of teacher career development are examined, along with the impact of school climate and culture on teacher collegiality. A clinical practice required. (Varies)

691. Curriculum Development in the Elementary School. Credit 3 hours. Study of the principles and procedures for validating educational objectives in the elementary school, selecting and structuring experiences, initiating and directing curricular change, and evaluating results of curricular planning. (Fall)

692. Curriculum and Instruction in the Secondary School. Credit 3 hours. A critical study of teaching techniques and strategies and reappraisal of the selection of experiences and content for the improvement of curriculum and teaching practices in the secondary school. Review and analysis of available reports of research in curriculum and instruction are emphasized. (Varies)

693. Leadership for Change. Credit 3 hours. Prerequisite: EDUC 601. This course is designed to provide advanced candidates with the knowledge and skills to become leaders for school improvement. Emphasis is placed on the practical applications of principles and procedures in the scientific study of educational problems. In this course, candidates will identify issues and develop a leadership portfolio. A location for clinical practice is required to provide context for developing leadership potential. (Fall, Spring)

694. Sociological Issues Impacting Today's Schools. Credit 3 hours. Societal issues that are having a major impact upon education will be addressed in this course. This course will help educators develop a cultural consciousness and assist them in developing multiple perspectives in school settings. The content of this course will provide the student with knowledge of prevailing factors that influence education and the curriculum in today's schools. (Varies)

695. Capstone Seminar. Credit 3 hours. Prerequisites: EDUC 601. This course is the second in a series of two research-based courses. Emphasis is placed on preparing educators with an advanced degree for the roles as teacher leaders and collaborators for change and improvement in districts and schools. Further, candidates will expand their knowledge of strategies that will prepare them to continue to be lifelong learners. The action research project requires access to a clinical practice site in which to frame and conduct research. As the capstone experience for the Master's of Education in Curriculum and Instruction, this course should be taken in the last Fall or Spring semester of program coursework. (Fall, Spring)

696. Curriculum Development for Middle School. Credit 3 hours. This course is a comprehensive examination of middle schools and the middle school movement. It covers history, philosophy, curriculum of middle schools, effective middle schools, organization, programs, and the essential characteristics of middle level learners. (Spring)

699. Global Partnerships for Fostering Cultural Pluralism. Credit 3 hours. A cultural partnership course offered as an enhancement to increase awareness, knowledge, understanding and appreciation of cultural pluralism. Learning experiences will address the multicultural and diversity needs of advanced candidates in teacher education. (Varies)

700. Internship for Teacher Leaders and Instructional Coaches. Credit 3 hours. Prerequisites: All concentration area courses. A supervised internship for teacher leaders and instructional coaches developed in collaboration with school districts. Students observe and participate in directing, guiding, and evaluating instructional processes and/or activities related to collaboration, school improvement, and change. Direct involvement with instructional personnel, school administrators and staff, parents, and community members is emphasized. (Varies)

706. Seminar in Reading. Credit 3 hours. Prerequisite: Advanced standing in the graduate program or permission of the Head of the Department. An intensive examination into the issues relative to the reading program. This course will be interdisciplinary in nature and will focus upon contributions of research, philosophy, history, and educational psychology as they apply to the resolution of major issues in reading. May be repeated for a total of six hours credit, with no more than three credit hours in any one semester. (Varies)

713. Independent Research Study. Credit 3 hours. Prerequisites: EDF 600 and advanced standing in the Specialist program. Examination and in-depth study, research, and evaluation of contemporary problems. (Varies)

714. Independent Research Study. Credit 3 hours. Prerequisites: EDF 600 and advanced standing in the Specialist program. Examination and in-depth study, research, and evaluation of contemporary problems. (Varies)

790. Specialist Thesis. Credit 1-6 hours each semester, with 6 hours needed for graduation. The student must enroll in the thesis course each semester the thesis is in progress. The thesis is graded Pass/Fail. (Varies)

Educational Foundations (EDF)

600. Application of Educational Research. Credit 3 hours. Prerequisites: EDL 635, EDL 722, and concurrent enrollment in EDL 723 or permission of Department Head. Principles and procedures in the scientific study of educational problems. Examination of principal research methods and application of research principles for educational leaders. (Varies)

607. Philosophy of Education. Credit 3 hours. A study of major philosophical systems and the educational theories associated with each system. (Varies)

615. History of Education. Credit 3 hours. The growth and development of education and educational institutions from prehistoric times to the seventeenth century. (Varies)

616. History of American Education. Credit 3 hours. The development of American education from the seventeenth to the twentieth century. (Varies)

620. Using Data for School Improvement. Credit 3 hours. This course is designed to assist education professionals with their use of data to guide decision making and planning. Topics focus on developing data analysis skills through a review of types of data and sources, strategies for analyzing and interpreting data, and methods for determining how these efforts can relate to school improvement. (Varies)

673. Independent Study. Credit 3 hours. Prerequisites: EDF 600 and permission of the Department Head. Student completes research study and report under direction of graduate instructor. The course may be repeated for a total of 6 hours, with no more than 3 credit hours in any one semester. A maximum of 3 hours of credit in Independent Study may be applied toward the Master of Education. (Varies)

674. Readings in Education. Credit 3 hours. Prerequisites: EDF 600 and permission of the Department Head. Directed readings on selected topics in education. Area(s) of reading and study to be designated by instructor. Student may repeat the course for a total of 6 credit hours, with no more than 3 credit hours in any one semester. A maximum of 3 hours of credit in Readings may be applied toward the Master of Education. (Varies)

701. Educational Statistics. Credit 3 hours. Prerequisite: EDF 600. Study of basic statistical concepts, both descriptive and inferential. Emphasis is placed on the use of these concepts in solving educational problems. (Varies)

713. Independent Research Study. Credit 3 hours. Prerequisites: EDF 600 and advanced standing. Examination and in-depth study, research, and evaluation of contemporary problems. The course may be repeated for a maximum of six hours of credit. (Varies)

800. Introduction to Doctoral Program and Research Design in Educational Leadership. Credit 3 hours. Prerequisite: EDF 600 or equivalent. The purpose of this course is to begin to prepare students to undertake a major research study, specifically the dissertation. Requirements and expectations of doctoral candidates, as well as technology that will be used for program delivery will be addressed. This course also presents and discusses quantitative and qualitative methodologies and processes used in applied research. (Varies)

801. Writing for Research in Educational Leadership. Credit 3 hours. Prerequisite: EDF 800. This course is designed to prepare the doctoral student for the conduct of scholarly inquiry and writing. Topics include refining writing style, avoiding plagiarism, adhering to APA style, conducting literature reviews, and critiquing. It is expected that students will have knowledge of and skills in the use of computer applications, research and statistics, and information literacy. (Varies)

802. Quantitative Methods in Educational Leadership. Credit 3 hours. Prerequisite: EDF 800. This course builds on the foundations of research and statistics and introduces advanced statistical techniques commonly used in educational research. Focus is on developing skills in parametric and non-parametric analyses through the use of statistical analysis software. (Varies)

803. Qualitative Methods in Educational Leadership. Credit 3 hours. Prerequisite: EDF 800. Students in this course will discuss future trends, issues and problems in academic educational systems, understanding and developing a qualitative research design. Their focus will be to identify potential problems and solutions and develop useful and relevant theory in qualitative research. (Varies)

804. Mixed Methods Research in Educational Leadership. Credit 3 hours. Prerequisites: EDF 800, EDF 802, and EDF 803 or permission of Department Head. A course that presents mixed methods research as a unique and separate research methodology integrating both the quantitative and the qualitative approaches. Candidates will be prepared to design, conduct, and critique mixed methods research. (Varies)

990. Doctoral Dissertation Seminar II. Credit 3 hours. Prerequisite: EDF 900. Students in this course will work on the collection of data and reporting on the analysis of the results of their study. This course may be repeated for a maximum of six hours of credit. This course will be graded Pass/Fail only. (Varies)

999. Doctoral Dissertation. Credit 3-9 hours. Prerequisite: Permission of Program Coordinator. The purpose of this course is to assist students through the dissertation process, including successful defense of prospectus and proposal, as well as defense and completion of final dissertation through submission and university approval. Course must be repeated until successful defense of the dissertation. This course will be graded on a Pass/Fail basis. (Summer, Fall, Spring)

Educational Leadership (EDL)

610. Research Methods for Educational Leaders. Credit 3 hours. Prerequisite: Concurrent enrollment in EDL 612. The course is designed for educational leaders to provide an introduction to concepts and issues in research methods and data analysis. Candidates will be required to collect, analyze, and present educational data. (Varies)

612. Seminar I: Fostering Vision and Leadership in Educational Environments. Credits 3 hours. Prerequisite: Concurrent enrollment in EDL 610. The course will cover organization theory. Principles of organizational development will be explored, and special attention will be given to the development of shared visions and goals, and the strategic planning required to achieve them. (Varies)

625. Organizational Management. Credit 3 hours. Prerequisites: EDL 702, EDL 721, and concurrent enrollment in EDL 642 or permission of Department Head. This course will cover the relationship among scheduling, resource allocation, shared decision-making, and technology to facilitate building management for effective school leadership. Field experiences required. (Varies)

626. Public School Administration. Credit 3 hours. The fundamental facts and procedures of school administration are emphasized. Theory and practice are fused in teaching the duties and responsibilities of administrative officials in the organization, administration, and supervision of a modern school system. Twenty hours of practicum experiences in the appropriate setting are required. (Varies)

627. Elementary School Principalship. Credit 3 hours. A study emphasizing the administrative roles and responsibilities of the elementary school principal. Emphasis is placed upon fusing theory and practice in elementary school administration. (Varies)

628. Secondary School Principalship. Credit 3 hours. Emphasis is placed upon the theory and practice of the roles and responsibilities of the modern secondary school principal. Special attention is given to administrative roles in staff relations, curriculum, instruction, discipline, community involvement, and fiscal management. (Varies)

635. Supervision of Instruction. Credit 3 hours. Prerequisites: EDL 625, EDL 642, and concurrent enrollment in EDL 722 or permission of Department Head. A study of the purposes, organization, and development of supervisory programs. Theory and practice of the principles, techniques, and procedures in the improvement of instruction at both the elementary and secondary school levels. Field experiences required. (Varies)

641. School Facilities Planning and Utilization. Credit 3 hours. A study of the duties and responsibilities of educational and non-educational personnel in the planning, construction and utilization of the school plant. (Varies)

642. School Personnel Administration. Credit 3 hours. Prerequisites: EDL 702, EDL 721, and concurrent enrollment in EDL 625 or permission of Department Head. Organization for personnel services; development of policy to govern selection, orientation, placement, remuneration, transfers, separation, and the development of morale among instructional and non-instructional personnel. Field experiences required. (Varies)

702. School-Community Relations. Credit 3 hours. Prerequisites: EDL 610, EDL 612, and concurrent enrollment in EDL 721 or permission of Department Head. Study of the public relations problems including reporting to parents and acquainting the community with the purposes, methods, accomplishments, and needs of the school. School-community activities that are initiated from within the school, those that are initiated from without the school, and those activities that are initiated jointly by the school and the community to improve relations are reviewed, analyzed and evaluated. Special emphasis is given to the importance of the role of the educational leader in school-community relations. Field experiences required. (Varies)

704. Supervision of Child Welfare and Attendance. Credit 3 hours. An outline of the responsibilities of the visiting teacher to include home and school visitation programs, an analysis of attendance and related problems, the promotion of home-school relationships, and maintenance of all necessary records. (Varies)

709. Practicum in Supervision. Credit 3 hours. Prerequisites: EDL 626 and 635; admittance to the program except for those already holding a master's degree and seeking add-on certification. A course designed to provide supervised practical experiences in supervision. Students observe and participate in direction, guiding, and evaluating the teaching-learning process and other aspects of supervisory activities. Attention is given to exploration and experimentation of different approaches to supervision. (Varies)

710. Public School Finance. Credit 3 hours. Study of the principles of taxation, local, state, and federal financing of public education and equalization of educational opportunity. Special emphasis given to the complete budget making process at the district level and a detailed study of school business management at the local school level. Sound accounting procedures reviewed and the student given experience in actual budget making and in setting up a sound business management program for a local school. (Varies)

721. School Law. Credit 3 hours. Prerequisites: EDL 610, EDL 612, and concurrent enrollment in EDL 702 or permission of Department Head. The course shall encompass an examination of the constitutional and legal bases of public education in the United States and Louisiana. Field experiences required. (Varies)

722. Curriculum Improvement. Credit 3 hours. Prerequisites: EDL 625, EDL 642, and concurrent enrollment in EDL 635 or permission of Department Head. A study of problems, trends, and procedures in curriculum improvement and development. Emphasis is given to educational leader's roles and responsibilities and innovations in curriculum improvement. Field experiences required. (Varies)

723. Leading Change in Educational Organizations. Credit 3 hours. Prerequisites: EDL 635, EDL 722, and concurrent enrollment in EDF 600 or permission of Department Head. This course is designed to provide leaders with an understanding of change facilitation in schools. Emphasis will be placed on theory-based change strategies to support school improvement initiatives. Field experiences required. (Varies)

725. Internship in Educational Leadership. Credit 3 hours. Prerequisites: EDF 600, EDL 723, and concurrent enrollment in ETEC 615 or permission of Department Head. Provides candidates opportunities to apply leadership knowledge and skills to demonstrate the capacity to promote the current and future success and well-being of each student and adult. Attention will be given to the experiential background of each candidate as opportunities are developed at the needed practicum level. (Varies)

730. Current Issues in Educational Leadership. Credit 3 hours. Prerequisite: Department Head Approval. An examination of recent and anticipated issues in education that affect school leadership and strategies for dealing with them. (Varies)

733. Advanced School Law. Credit 3 hours. Prerequisite: EDL 721 or the equivalent. An examination of recent court decisions and federal and state legislation affecting the educational leadership role in schools. (Varies)

810. Leadership Theory and Practice. Credit 3 hours. This course examines leadership as a primary force that provides purpose and direction, and shapes the quality and character of institutions. It presents a comprehensive examination of current research relating to effective educational leadership. Knowledge of past models of leadership is linked with an analysis of contemporary schools and with the skills required to assume the role and responsibilities of an administrator in restructured school environments. Course work is designed to serve as a basis for professional reflection toward the formulation of a personal theory of educational leadership. (Varies)

811. Management of Educational Organizations. Credit 3 hours. Prerequisite: EDL 810. This course is designed to examine the role of superintendents and central office directors in emerging social, economic, and political contexts that are changing the nature of schooling, altering how schools are viewed, and are transforming how they lead. A broad range of issues that are critical to the success of new superintendents and issues that can affect relationships and impact districts will be explored. Particular attention will be paid to issues of leadership in diverse organizations. (Varies)

812. Supervision in Educational Settings. Credit 3 hours. Prerequisite: EDL 810. This course examines advanced definitions and determinations of staffing needs, supervision, and management and coordination problems. Also addressed are policies for recruitment, selection, assignment, salary planning, scheduling, promotion, separation, grievances, reassignment, records, development programs, in-service training, evaluation, benefits and services. (Varies)

820. Legal Issues and Ethics in Educational Organizations. Credit 3 hours. Prerequisite: EDL 810. A study of federal and state constitutions, legislation, regulatory guidelines and court decisions related to the operation of educational organizations. Development of awareness and knowledge of legal parameters related to education. Students will be required to conduct legal research and apply and synthesize knowledge of case law and state and federal mandates in areas such as contractual requirements, church-state relationships, education of special needs students, students and parental rights, and tort liability. Ethics and morality in decision-making will also be examined. (Varies)

821. Politics and Community Relations. Credit 3 hours. Prerequisite: EDL 810. This course examines administrative factors of primary importance in developing community involvement in public schools. It emphasizes theory and skills related to school systems and individual communication. It uses social science theory and research to study the political context of educational policy making. (Varies)

822. Policy Development and Analysis. Credit 3 hours. Prerequisite: EDL 810. This course is designed for those who seek to increase their leadership potential through becoming familiar with important aspects of educational policy development, as it is used to accommodate the major social, economic, political, and behavioral aspects of an educational setting. The purpose of this course is to develop an understanding of the process by which decisions are made, and policy is formulated, analyzed, implemented, and evaluated. (Varies)

823. Fiduciary Management of Educational Organizations. Credit 3 hours. Prerequisite: EDL 810. This course examines the principles of taxation, local, state and federal financing of education and equalization of educational opportunity. Special emphasis is given to the complete budget making process at the district level and detailed study of business management at the local school level. Sound accounting procedures are reviewed. Additional topics include introduction to purchasing, transportation, food service operations and other business-related tasks and functions. (Varies)

824. Legal Issues in Special Education. Credit 3 hours. Prerequisite: EDL 810. This course will provide an in-depth study of the historical and legal foundations of disability law and its functionality within public schools. Information presented in this course is contextualized through various means including: understanding the unique educational needs of students who qualify for IDEA or Section 504 services, disability law and policy, and current research. From this course, students gain an understanding of the legal and ethical roles and responsibilities of an educational leader in meeting the unique needs of children with disabilities. (Varies)

830. Foundations of Curriculum Theory and Design. Credit 3 hours. This course examines curriculum theory with emphasis on the various approaches to curriculum design and development and other factors that impact curriculum. (Varies)

831. Critical Analysis of Current Research on Effective Educational Practice. Credit 3 hours. This course will focus on recent research on best practices of leadership for empowering teachers, creating communities of continuous learning, and increasing student achievement. The students will hone their critical thinking skills through analysis, synthesis and evaluation of research reporting. (Varies)

832. Educational Evaluation. Credit 3 hours. This course provides students with the research and evaluation skills required to implement various program evaluation models. It also provides the skills necessary for effectively using the standards of the National Joint Committee on Standards for Program Evaluation. (Varies)

834. College Teaching. Credit 3 hours. Prerequisite: EDL 810. This course provides an overview of teaching and learning in the college environment. The course focuses on understanding and addressing the needs of adult learners by investigating adult education theories, models for teaching and learning, and the design of college curricula. The course also differentiates teaching methods for undergraduate, master's, and doctoral student learning needs. (Varies)

840. Change Theory. Credit 3 hours. Prerequisite: EDL 810. This course examines the application of organizational development practices related to educational settings. It focuses on change theory and its implementation in schools. The course assists students in the understanding of change by utilizing some of the concepts of Kurt Lewin including field theory and action research. Course topics and instruction offer an examination of the fundamental concepts of change and behavioral analysis. (Varies)

841. Organizational Development for Learning Communities. Credit 3 hours. Prerequisite: EDL 810. This course is designed to focus on schools as learning communities, theories of leadership and organizational development, and strategies for creating communities of continuous learning. The course addresses current research on professional learning communities, collective responsibility, and teacher collaboration. (Varies)

842. Culture, Climate and Change Leadership. Credit 3 hours. Prerequisite: EDL 810. This course is designed to explore the concepts of continuously developing new knowledge about what is needed to initiate and sustain deep systemic changes in K-12 public education for improved learning for all students. It also examines sponsoring programs that strengthen the capacities of educational and change agents to implement systemic change and disseminate key concepts and ideas to diverse learning communities. (Varies)

851. Administration and Management in Higher Education. Credit 3 hours. Prerequisite: EDL 810. This course focuses on the effective administration of higher education institutions. Emphasis will be placed on planning, leadership, personnel administration, and facility planning. (Varies)

852. Student Affairs in Higher Education. Credit 3 hours. Prerequisite: EDL 810. This course examines the research and best practices on the development and management of services and education that enhance student success and growth in higher education. (Varies)

853. Governance and Legal Aspects of Higher Education. Credit 3 hours. Prerequisite: EDL 810. This course is designed to provide a basis of understanding for issues unique to the higher education settings. It intends to provide understanding of the organization dynamics of governance in higher education and the legal issues that guide the delivery of services to prepare leaders for this setting. (Varies)

857. Academic Affairs in Higher Education. Credit 3 hours. Prerequisite: EDL 810. Examination of issues relevant to university curriculum review, development, and new curricular initiatives; faculty hiring and promotion; support for faculty research and teaching; and the administration of all academic departments and programs in the modern university. (Varies)

858. Community College Administration. Credit 3 hours. Prerequisite: EDL 810. This course is designed to provide a basis of understanding for issues unique to the Community College. It intends to provide understanding for history, role, scope and mission of community and technical colleges. (Varies)

861. History and Philosophy of Higher Education. Credit 3 hours. Prerequisite: EDL 810. This course is a study of the history of higher education institutions to include an investigation of the philosophical belief systems that have driven and continue to drive higher education practice. (Varies)

862. Planning and Evaluation in Higher Education. Credit 3 hours. Prerequisite: EDL 810. This course provides a basis of understanding for planning and evaluation issues unique to higher education. (Varies)

871. Special Topics in Instructional Leadership. Credit 3 hours. This course provides an opportunity for an in-depth examination of selected topics in instructional leadership. Content may vary from semester to semester in an attempt to include topics of current interest and importance. The course may be repeated for a maximum of six hours of credit. (Varies)

875. Special Topics in Educational Leadership. Credit 3 hours. Prerequisite: EDL 810. This course provides an opportunity for an in-depth examination of selected topics in the leadership of educational organizations. Content may vary from semester to semester in an attempt to include topics of current interest and importance. The course may be repeated for a maximum of six hours of credit. (Varies)

880. Research Practicum. Credit 3 hours. Prerequisite: EDF 804. Practicum in quantitative and qualitative data collection techniques and procedures as well as data analyses and interpretations. The relationship among conceptual or theoretical frameworks, research questions, and instrumentation will be emphasized. (Varies)

897. Internship. Credit 3 hours. Prerequisite: EDL 810. The course is an internship that allows students to demonstrate their competence in an administrative position and to be involved actively in practice and administration. The course is designed to link in-class experiences with the world of professional work. Students, in collaboration with educational officials, will also select/identify a school improvement activity as part of the internship experience. Students are expected to complete a minimum of 150 clock hours of field experience, 50 of which are devoted to a school improvement project. (Varies)

899. Qualifying Paper. Credit 1 hour. Prerequisites: EDF 800 and 801. The student must enroll in this course each term until the successful defense of the Qualifying Paper by the student. The course is graded IP (In Progress) each term until the Qualifying Paper is completed at which time the course will be graded Pass/Fail. The course does not count as part of the 60-semester hour minimum program requirement. (Varies)

Educational Psychology (EPSY)

301. Educational Psychology of Children and Adolescents. [LCCN: CPSY 2613, Educational Psychology] Credit 3 hours. Prerequisites: Sophomore standing, 2.75 cumulative GPA, grade of C or better in ENGL 102, or permission of Department Head. An investigation of the cognitive, social, physical, and personality aspects of the child and adolescent as they apply to the teaching-learning process. Special attention will also be given to the characteristics and needs of exceptional children. Competency-based clinical practice required. (Summer, Fall, Spring)

303. Child Psychology. Credit 3 hours. Prerequisite: EDUC 202. An investigation of major forces in the cognitive, social, physical, and personality development of the child. (Varies)

311. Adolescent Psychology in the Classroom. Credit 3 hours. Prerequisites: EDUC 203, EDUC 212, and Provisional SARTE status. A study of physical, mental, social and personality development during adolescence as it applies in the classroom. The needs of special populations such as students with mild/moderate impairments will be considered. Field experience required. Education majors only. (Summer, Fall, Spring)

601. Cognitive and Linguistic Development in Children. Credit 3 hours. An examination of current knowledge regarding children's development of memory, language, and thought from infancy to adolescence. (Varies)

602. Adolescent Psychology. Credit 3 hours. The effects of physical, social, emotional, and personality development on the behavior and adjustment of the adolescent. (Spring)

603. Classroom Management and Motivation. Credit 3 hours. A detailed investigation of various models of classroom management and motivation. Included are such topics as behavior modification, assertive discipline, control theory, and the concept of the democratic classroom. (Fall, Spring)

605. The Psychological Foundations of Human Learning. Credit 3 hours. Investigation of the classic psychological principles of learning as well as contemporary theory and research. An overview of behavioral and cognitive learning processes is presented. (Varies)

606. Social and Personality Development in Children. Credit 3 hours. Exploration of the child's development of personality, self-concept, achievement motivation, moral judgment, and positive social values. (Varies)

614. Humanistic Psychology. Credit 3 hours. Prerequisite: EPSY 301 or 311 depending upon major field of certification or six hours in PSYC or EPSY. An advanced course covering the "third force," humanistic movement in psychology and education. Theories, research, applications and implications of such psychologists as Maslow, Rogers, Combs, May, Lecky, and Jourard. (Varies)

Educational Technology (ETEC)

305. Computer Applications in the School Setting. Credit 3 hours. Prerequisites: EDUC 202 or 201; and 211 or 203; and 212. Emphasis is placed on computer utilization in school setting. Topics include examinations of how schools use microcomputers to create a favorable microcomputer learning environment. Experiences in evaluating software and differentiating between computer managed instruction and computer assisted instruction will be provided.

306. Integrating Technology into the K-12 Classroom. Credit 2 hours. Prerequisites: EDUC 202 or 201; and 211 or 203; and 212. This course provides students with skills and knowledge necessary to be able to effectively and ethically infuse technology into the K-12 classroom. Students are required to successfully demonstrate their ability to effectively use productivity and pedagogically based software, and develop and use educationally appropriate Internet technology to enhance student learning.

310. Integrating Technology into the Secondary Computer Science Laboratory. Credit 3 hours. This course focuses on computer utilization in the computer lab setting. Students are familiarized with the laboratory environment and the basic operational system structures of hardware and software which facilitate learning in that environment. Topics include evaluation and selection methods for hardware and software for the laboratory as well as legal and ethical issues confronting laboratory teachers. The course will have a field component.

410. Secondary Computer Science Methods. Credit 3 hours. This course is an introduction to the methods, techniques, and concepts that will be useful in teaching students and other faculty in the computer laboratory setting. Students will apply human computer interface principles, pedagogical theory and professional practices in analyzing software, multimedia, and ubiquitous computing teaching practices. This course will have a field component.

411. Field Experiences in Implementing Technology into the Computer Science Classroom. Credit 3 hours. Prerequisite: ETEC 410. This course is a thirty-hour practicum in a secondary school. It is designed to explore questions of the nature, purpose and practices of computer science in the modern school curriculum. Students are expected to develop a rationale for teaching computer science in the secondary environment.

475/575. Special Topics in Educational Technology. Credit 3 hours. An intensive examination of issues relevant to educational technology and the learning process. As topics vary, the course may be repeated for a maximum of six hours' credit.

610. Integrating Computers into the Elementary and Secondary Classroom. Credit 3 hours. This course is designed primarily for experienced teachers and provides an overview of microcomputer applications. Emphasis is placed on providing a working knowledge of and hands-on experience with microcomputers. Topics include selecting and evaluating appropriate computer assisted instruction, relating learning theories to current educational uses of microcomputers, examining research on educational applications of microcomputers, surveying periodicals in the field, and individualizing instruction using computer managed instruction.

611. Administrative Applications of Microcomputers. Credit 3 hours. This course is designed primarily for school administrators and provides an overview of microcomputer applications in the school administrative environment. Emphasis is placed on providing a working knowledge of and hands-on experience with microcomputers. Topics include selection and evaluation of hardware and software, working with operating systems, networking and telecommunications techniques, system security, backup procedures, legal issues, adaptation of existing software, integrated software, and staff development.

615. Technology Studies for Educational Leaders. Credit 3 hours. Prerequisites: EDF 600, EDL 723, and concurrent enrollment in EDL 725 or permission of Department Head. Designed for educational leaders to provide an overview of microcomputer applications in the school-based administrative environment. Emphasis is placed on working knowledge and hands-on experience with computers and computer applications. The students will review hardware, software, networking and telecommunications, computer security, legal issues, and integration and support of educational technologies. Students will also prepare their electronic portfolio for defense. (Varies)

620. Infusion of Technology into Professional Practice. Credit 3 hours. This course provides candidates with current information on the latest developments in technology. The primary focus of the course is the infusion of technology into professional practice for the purpose of improving achievement and functioning across all related areas. Candidates will be required to engage in practicum work within a professional setting.

630. Technology Planning and Administration. Credit 3 hours. Prerequisite: ETEC 620. This course develops foundational skills for managing technology for teaching at the school site. These skills will include school-wide planning for the use of technology; logistics for technology implementation within the local site, facilities and resource management, funding and budgetary issues, technical policies and procedures and school connectivity planning.

635. Legal Issues in the Digital Age. Credit 3 hours. This topics-based course will acquaint students with the wide array of legal and ethical issues associated with the rapid growth of computer networks and the Internet as they apply to issues in Education. Among the topics covered will be freedom of expression, privacy, tort liability, copyright, intellectual property and web publishing. Students will become familiar with, and read, case law related to these issues.

641. Web mastering for K-12 Instructional Delivery. Credit 3 hours. Prerequisite: ETEC 620. This course is designed to develop expertise with the World-Wide-Web, including basic skills in the planning and development of an instructional Web site for support of teaching in the K-12 classroom. It requires intermediate computer expertise.

644. Design and Development of Instructional Software for the Elementary and Secondary School. Credit 3 hours. Prerequisite: ETEC 620 or permission of the Department Head upon demonstration of computer skills. This course is designed to assist teachers in using the techniques involved in planning and creating a computer-assisted instructional program in a discipline of their choice. Emphasis is placed on the importance of authoring languages and authoring systems in producing computer assisted instruction. Current learning theory as it pertains to authoring microcomputer CAI programs is examined. Students will create a program of microcomputer assisted instruction with appropriate documentation and student/teacher support materials.

645. Curricular Design and Development for Distance Learning. Credit 3 hours. Prerequisite: ETEC 620. This course introduces candidates to the use of technologies designed to allow instruction at a distance. Its focus is on the design and development of distance-delivered instruction from conception to implementation. Topics will include learner access, course content, application of learning theories and models of effective instruction at a distance. It includes hands-on experience with instructional technology tools.

646. Advanced Design of Instructional Software. Credit 3 hours. Prerequisites: ETEC 644, and 645. This course is designed to continue with concepts and skills developed in ETEC 644 and 645. Students will work with authoring languages and authoring systems to produce professional quality instructional software. Students will develop software employing educational design principles with appropriate documentation and student/teacher support.

650. Educational Telecommunications (Networking and the Internet). Credit 3 hours. Prerequisite: ETEC 644. This course will develop a fundamental understanding of the technical workings of networking technologies. Topics and exercises will include development and implementation of school networks and setup and maintenance of LAN and Internet servers. A hands-on course for developing and maintaining first-line support for educational telecommunications.

660. Technology Leadership for Change. Credit 3 hours. Prerequisite: ETEC 620. This course is designed to develop an understanding of technology management for teaching and learning within a professional learning environment. These skills will include organization-wide planning that incorporates instructional design, curriculum integration with standards, logistics of technology implementation with the local site, training and evaluation.

665. Design of Professional Development Programs for K-12 Technology. Credit 3 hours. Prerequisites: ETEC 644, and ETEC 645. This course is designed to prepare teachers in the development of leadership knowledge, and the attitudes and behaviors related to activities for guiding, directing and mentoring other teachers in the use of instructional technologies in classroom teaching.

680. Practicum for Technology Concentration. Credit 3 hours. Prerequisites: ETEC 644, 645, 650, 660 and 695. This course provides the student with experience with the application of technology facilitation and leadership skills and techniques in a community or school setting.

695. Evaluation of Instructional Technology Research. Credit 3 hours. Prerequisites: EDF 600 and ETEC 644. After taking this course the student will be able to discuss instructional research related to the implementation of technology-based instruction in the schools; develop knowledge of the curricular inquiry into research and organization of curricular designs for technology-based instruction in a variety of settings; evaluate research into technology-based instruction; apply the findings of instructional and curricular research to technology-based instruction in projects for implementation in educational settings.

810. Educational Technology Theory and Design. Credit 3 hours. This course provides a foundational understanding of educational/instructional technology and its relevance to computers, media, and instructional design. Students have opportunities to develop their skills in the use of computer hardware, peripherals and software applications, and to explore implementing and managing technology in instructional environments.

811. Overview of Current Educational Technology. Credit 3 hours. This course is designed to introduce students to educational technology research, from designing and conducting a research study to synthesizing and presenting the results in written and oral formats. It is expected that skills will be situated within the context of issues that are relevant to the field of educational technology leadership. Students will examine relevant literature, write out research questions, design instruments, and gather and analyze data.

812. Leadership in the Integration of Emerging Technologies. Credit 3 hours. This course is designed to provide an interactive, collaborative environment that fosters development of technology leaders with skill in the design and implementation of emerging technologies in the educational environment. Students will examine the integration of emerging technologies through field experiences, Web-based resources, video case studies, and in-class and listserv discussions.

English (ENGL)

100. Corequisite Composition. Credit 3 Hours. Prerequisite: Permission of the Department Head. A corequisite workshop to be taken concurrently with a writing intensive course (e.g., ENGL 101 or 102). Guided planning and revision of essays as assigned in the concurrent composition class. Instruction and practice in the fundamentals of functional grammar and basic composition: usage, diction, spelling, punctuation and mechanics, sentence structure, and paragraph writing. English ACT score of 16-17. Credit hours do not count toward graduation. The final course grade will be Pass (P) or Unsatisfactory (U).

101. Freshman Composition. [LCCN: CENL 1013, English Composition I]. Credit 3 hours. Prerequisite: English ACT score of 18 or above or an appropriate score on the Accuplacer exam or satisfactory completion of an appropriate developmental English course. Required of all students who do not qualify for ENGL 102 or 102H. Instruction and practice in the basic principles of expository writing: the paragraph and the whole composition, the methods of development, the thesis, the outline and organization, the structure and style. Instruction in functional grammar, sentence structure, diction and spelling, punctuation and mechanics, in direct relation to the student's writing. For placement in ENGL 101, see English Placement section in this Catalog. (Summer, Fall, Spring)

101H. Freshman Composition Honors. Credit 3 hours. Prerequisite: Minimum ACT Composite score of 24 or minimum ACT English score of 24. A variable content, writing intensive course engaging students with significant texts in literature and culture. Course themes range from the study of ancient to postmodern literary texts. (Summer, Fall, Spring)

102. Critical Reading and Writing. [LCCN: CENL 1023, English Composition II]. Credit 3 hours. Prerequisite: ENGL 101 or 101H or English ACT score of 29 or above. Development of skills in reading critically, analyzing models of good writing, and writing in response to a variety of texts, including imaginative literature. Writing the argumentative essay, the critical essay, the research paper, and the essay examination. For placement in ENGL 102, see English Placement section in this Catalog. (Summer, Fall, Spring)

102H. Critical Reading and Writing Honors. Credit 3 hours. Prerequisite: Minimum grade of "C" in ENGL 101H or demonstration of superior ability in ENGL 101 or credit for ENGL 101 plus a minimum ACT Composite score of 24 or a minimum ACT English score of 29. A variable content, writing intensive course, incorporating research and engaging students with significant texts in literature and culture. Course themes range from the study of ancient to postmodern literary texts. (Summer, Fall, Spring)

210H. Honors Studies in Literature. Credit 3 hours. Prerequisite: Minimum grade of "C" in ENGL 102H or combined minimum ACT English and ACT Composite score of 65 and an advanced standing examination (a composition examination administered and evaluated by the Department of English) or demonstration of superior ability in ENGL 102. A seminar focused on a particular topic, area, major author, text, or literary period. Course content varies by instructor and semester. Emphasis on the interpretive process, critical evaluation, and refinement of writing skills. May be repeated once if content is different for a total of six hours. For placement in ENGL 210H, see English Placement section in this catalog. (Varies)

229. Introduction to Gender and Sexuality in Literature. Credit 3 hours. Prerequisite: ENGL 102 or 102H. An introduction to key concepts in gender and sexuality studies and their applications to literature and cultural production. Particular emphasis on historically-situated, intersectional analysis of literature from a wide variety of gendered and sexual identities. For placement in ENGL 229, see English Placement section of this Catalog. (Summer, Fall, Spring).

230. World Literature. [LCCN: CENL 2203, World Literature I; CENL 2213, World Literature II; CENL 2223, Major World Writers]. Credit 3 hours. Prerequisite: ENGL 102 or 102H. A survey of world literatures and cultures, excluding the British Isles and the U.S., from classical times to the present. For placement in ENGL 230, see English Placement section of this Catalog. (Summer, Fall, Spring)

231. English Literature. [LCCN: CENL 2103, British Literature I; CENL 2113, British Literature II; CENL 2123, Major British Writers]. Credit 3 hours. Prerequisite: ENGL 102 or 102H. A course in the study of prose, drama, and poetry by major writers of English literature. Emphasis on the development of appreciation. For placement in ENGL 231, see English Placement section of this catalog. (Summer, Fall, Spring)

232. American Literature. [LCCN: CENL 2153, American Literature I; CENL 2163, American Literature II; CENL 2173, Major American Writers]. Credit 3 hours. Prerequisite: ENGL 102 or 102H. A course in the study of prose, drama, and poetry by major writers of American literature. Emphasis on the development of appreciation. For placement in ENGL 232, see English Placement section of this Catalog. (Summer, Fall, Spring)

233. Introduction to African American Literature. [LCCN: CENL 2403, Introduction to African American Literature]. Credit 3 hours. Prerequisite: 102 or 102H. A course in the study of prose, drama, and poetry by major writers of African American literature. Emphasis on the development of appreciation. For placement in ENGL 233, see English Placement section of this Catalogue. (Summer, Fall, Spring)

291H. Tragedy and Comedy. Credit 3 hours. Prerequisite: Minimum grade of "C" in ENGL 102 H or combined minimum ACT English and ACT Composite score of 65 and an advanced standing examination (a composition examination administered and evaluated by the Department of English) or demonstration of superior ability in ENGL 102. A study of representative works from the major periods of drama to understand the tragic and comic visions of life. Emphasis on the interpretive process, critical evaluation, and refinement of writing skills. For placement in ENGL 291H, see English Placement section in this catalog. (Varies)

292H. Modern Fiction. Credit 3 hours. Prerequisites: Minimum grade of "C" in ENGL 102H or combined minimum ACT English and ACT Composite score of 65 and an advanced standing examination (a composition examination administered and evaluated by the Department of English) or demonstration of superior ability in ENGL 102. A study of nineteenth- and twentieth-century novels and short stories. Emphasis on the interpretive process, critical evaluation, and refinement of writing skills. For placement in ENGL 292H, see English Placement section in this catalog. (Varies)

300. Introduction to Literary Analysis and Interpretation. Credit 3 hours. Prerequisite: ENGL 102 or 102H. An introductory course focusing on the major genres (prose fiction, poetry, drama), the basics of analysis and theory, research methods, and the writing skills crucial to the study of literature. This course is designed for students planning to major in English or a related discipline. (Fall, Spring)

301. British Literature I. Credit 3 hours. Prerequisite: ENGL 102 or 102H. Selected readings (some in translation) from Medieval and Renaissance, Restoration, and Enlightenment periods in the British Isles. (Fall, Spring)

303. British Literature II. Credit 3 hours. Prerequisite: ENGL 102 or 102H. Selected readings of major writers from the Romantics to the present in the British Isles. (Fall, Spring)

305. Practicum in English for Education Majors. Credit 1 hour. Prerequisite: ENGL 102 or 102H. A variable content practicum in English language arts for Education majors (Fall)

309. Introduction to Publishing Studies. Credit 3 hours. Prerequisite: ENGL 102 or 102H. An introduction to the field of print and digital publishing. Study and practice of editing, production, printing and posting online, and marketing processes involved with publishing newspapers, books, or serials. (Fall)

310. Literature of the African Diaspora. Credit 3 hours. Prerequisite: ENGL 102 or 102H. Credit 3 hours. A survey of African American writers and other writers from the African Diaspora. (Varies)

312. Advanced Grammar. Credit 3 hours. Prerequisite: ENGL 102 or 102H. Study of structural and functional grammars, modern syntax, morphology, and usage. Special attention to the applications of grammatical knowledge to writing, teaching, and the study of literature. (Fall, Spring)

315. Special Studies in English. Credit 3 hours. Prerequisite: ENGL 102 or 102H. A variable content course which treats subjects of special interest to students who are not studying English professionally. Recommended as an elective for those majoring in other disciplines and as an enrichment course for members of the community. The content will change from semester to semester and will be advertised in advance. Since the course is designed primarily as an elective for non-professionals, students majoring or minoring in English, or English Education may not use this course to satisfy the elective requirements for the major, though they may take it once as an elective course for the degree. For all others, the course may be repeated for a total of six hours credit. (Varies)

316. The Bible as Literature. Credit 3 hours. Prerequisite: ENGL 102 or 102H. A study of writing from the Hebrew and New Testaments from a literary perspective. Emphasis on genres, continuities of theme, narratology, typology, and modes of interpretation will underscore the role of the Bible in shaping the imagination of writers to the present time. (Varies)

317. Folklore and Oral Literature. Credit 3 hours. Prerequisite: ENGL 102 or 102H. Study of stories, poetry, song lyrics, and cultural performances created in local communities. (Varies)

321. Advanced Composition. Credit 3 hours. Prerequisite: ENGL 102 or 102H. Principles and practice in writing academic expository prose, personal essays, and narrative forms for different audiences and purposes. Special attention to logical and rhetorical analysis, invention, organization, revision, and style. For students in all disciplines. (Spring)

322. Introduction to Professional and Technical Writing. Credit 3 hours. Prerequisite: ENGL 102 or 102H. An introduction to the genres of writing used in the technical and professional workplace, including memos, letters, instructions, directions, proposals, résumés, and short reports. (Summer, Fall, Spring)

325. Introduction to Creative Writing. Credit 3 hours. Prerequisite: ENGL 102 or 102H or permission of the Department Head. This course explores writing and creativity for students working or interested in any genre. Students will learn about the trajectory of the writer's life, from beginnings, success and failure, as well as the ins and outs of the publishing industry. Students will research literary markets, work to develop an online presence, and practice good literary citizenship. In addition to practical assignments, students will generate new material and offer responses to peers in a workshop setting. (Fall)

351. Early World Literature. Credit 3 hours. Prerequisite: ENGL 102 or 102H. A study of world literatures and cultures, excluding the British Isles, through a reading of their Ancient, Medieval, and Renaissance texts in translation. (Fall)

352. Modern World Literature. Credit 3 hours. Prerequisite: ENGL 102 or 102H. A study of world literature in translation, excluding the U.S. and the British Isles, from the mid-seventeenth century to contemporary times. (Spring)

363. Form and Theory—Poetry. Credit 3 hours. Prerequisite: ENGL 102 or 102H or permission of the Department Head. This course examines and practices the forms, techniques, and theories of practice in contemporary poetry. Content will include analysis of poetic techniques, use of language and form, and variety of modes of delivery found in poetry being published currently. The course will also involve completion of writing exercises, limited workshoping of student work, and detailed analysis of assigned readings. (Varies)

364. Form and Theory—Fiction. Credit 3 hours. Prerequisite: ENGL 102 or 102H. A form and theory course that examines the various aspects of the craft of fiction, focusing on the writer's use of character, voice, structure, dialogue, and theme. (Varies)

365. Form and Theory—Drama. Credit 3 hours. Prerequisite: ENGL 102 or 102H. This course will examine forms, techniques, learning about a variety of delivery modes in writing for performance. Students will complete writing exercises, practice entry-level workshoping of their creative writing, and read and discuss published plays and screenplays. (Varies)

369. Living Writers. Credit 3 hours. Prerequisite: ENGL 102 or 102H. A survey of important living authors, including those connected to the Southeastern community. Class activities will include attending readings from visiting authors and sessions with writers-in-residence. (Varies)

370. Life Writing and Autobiography. [LCCN: CENL 2513, Creative Writing (Various Genres)]. Credit 3 hours. Prerequisite: ENGL 102 or 102H. An introductory course in life writing and autobiography. Intensive lectures on theory, principles and literary trends in the genre. Criticism of manuscripts through group meetings and individual conferences with instructor. (Varies)

371. Creative Writing: Poetry. [LCCN: CENL 2513, Creative Writing (Various Genres)]. Credit 3 hours. Prerequisite: ENGL 102 or 102H. An introductory course in writing poetry. Intensive lectures on poetical theory and technique. Criticism of manuscripts through group meetings and individual conferences with the instructor. (Fall, Spring)

372. Creative Writing: Fiction. [LCCN: CENL 2513, Creative Writing (Various Genres)]. Credit 3 hours. Prerequisite: ENGL 102 or 102H. An introductory course in writing fiction. Intensive lectures on theory and technique of fiction writing. Criticism of manuscripts through group meetings and individual conferences with the instructor. (Fall, Spring)

373. Film Criticism. Credit 3 hours. Prerequisite: ENGL 102 or 102H. A study of the basic elements of film appreciation with detailed analysis of specific films. This course is cross-listed as COMM 373 and may be taken only once for credit. A laboratory fee is required for this course. (Fall)

374. Literature and Film. Credit 3 hours. Prerequisite: ENGL 102 or 102H. A study of the relationship between film and literature, especially but not exclusively the short story and the novel. A laboratory fee is required for this course. (Spring)

380. Creative Writing: Drama. [LCCN: CENL 2513, Creative Writing (Various Genres)]. Credit 3 hours. Prerequisite: ENGL 102 or 102H. A course in drama composition featuring lecture and workshop sessions dealing with one-act plays. Discussion given to related topics such as full length plays and scriptwriting. Criticism of student manuscripts through group discussion and individual conference. (Varies)

392. Native American Literature. Credit 3 hours. Prerequisite: ENGL 102 or 102H. A study of Native American myths, legends, and contemporary texts. (Varies)

395. Early American Literature. Credit 3 hours. Prerequisite: ENGL 102 or 102H. The major writers and their works from the Colonial Period to 1860. (Fall, Spring)

396. American Literature Since 1860. Credit 3 hours. Prerequisite: ENGL 102 or 102H. Representative writers with attention to trends and innovations in American literature. (Fall, Spring)

413/508. The Development of the English Language. Credit 3 hours. Prerequisite: ENGL 102 or 102H. Junior standing or permission of the Department Head. Study of Modern English in historical perspective. (Fall)

414/524. Introduction to Linguistics. Credit 3 hours. Prerequisite: ENGL 102 or 102H (prior completion of ENGL 312 recommended). Junior standing or permission of the Department Head. Survey of major elements and schools of modern linguistics. Special attention to the applications of linguistic knowledge to writing, the teaching of first and second languages, and the study of literature. (Summer, Spring)

415/525. Special Topics in English. Credit 3 hours. Prerequisites: ENGL 210H, 230, 231, 232, 291H, 292H, 300, 301, 303, 310, 351, 352, 395, or 396; Junior standing or permission of the Department Head. A variable content course covering topics of special interest not similarly treated in existing courses. Intended primarily for English majors, but open to all students. May be repeated once for a total of six hours. (Varies)

426/526. The Adolescent Experience in Literature. Credit 3 hours. Prerequisites: ENGL 300 and at least one of the following: ENGL 210H, 230, 231, 232, 291H, 292H, 301, 303, 310, 351, 352, 395 or 396; Junior standing or permission of the Department Head. Emphasis on the thematic connections between adolescent literature and traditional literature from various literary perspectives. Particular focuses: aesthetic qualities, portrayal of adolescent developmental tasks, representation of adolescence in diverse cultural contexts, and application in middle and secondary English Classrooms. This course is recommended for English majors in the teacher licensure program. (Spring)

428/528. African American Literature Since 1900. Credit 3 hours. Prerequisites: ENGL 300 and at least one of the following: ENGL 210H, 230, 231, 232, 291H, 292H, 301, 303, 310, 351, 352, 395 or 396; Junior standing or permission of the Department Head. A study of African American literature since 1900 with special attention to critical and historical contexts. (Varies)

429/527. Gender Studies and Literature. Credit 3 hours. Prerequisites: ENGL 300 and at least one of the following: ENGL 210H, 230, 231, 232, 291H, 292H, 301, 303, 310, 351, 352, 395 or 396; Junior standing or permission of the Department Head. Representations of gender and sexuality in literature. Readings in identity construction and gender epistemology, as well as feminist philosophy and scholarship. (Varies)

430/530. Restoration and Eighteenth-Century British Literature. Credit 3 hours. Prerequisites: ENGL 300 and at least one of the following: ENGL 210H, 230, 231, 232, 291H, 292H, 301, 303, 310, 351, 352, 395 or 396; Junior standing or permission of the Department Head. Literature from 1660 to 1800; representative authors and their works. (Varies)

435/535. Shakespeare: Comedies and Romances. Credit 3 hours. Prerequisites: ENGL 300 and at least one of the following: ENGL 210H, 230, 231, 232, 291H, 292H, 301, 303, 310, 351, 352, 395 or 396; Junior standing or permission of the Department Head. A close reading of selected comedies and romances as drama, as literature, and as documents of Elizabethan culture. (Fall, Spring)

436/536. Shakespeare: Tragedies and Histories. Credit 3 hours. Prerequisites: ENGL 300 and at least one of the following: ENGL 210H, 230, 231, 232, 291H, 292H, 301, 303, 310, 351, 352, 395 or 396; Junior standing or permission of the Department Head. A close reading of selected tragedies and histories as drama, as literature, and as documents of Elizabethan culture. (Fall, Spring)

437/537. Major Periods in Drama. Credit 3 hours. Prerequisites: ENGL 300 and at least one of the following: ENGL 210H, 230, 231, 232, 291H, 292H, 301, 303, 310, 351, 352, 395 or 396; Junior standing or permission of the Department Head. Study of dramatic literature in one important period, such as Restoration/18th Century England, or contemporary Africa. A variable content course. May be repeated once if content is different. (Varies)

438/538. Interdisciplinary Approaches to Literature. Credit 3 hours. Prerequisites: ENGL 300 and at least one of the following: ENGL 210H, 230, 231, 232, 291H, 292H, 301, 303, 310, 351, 352, 395 or 396; Junior standing or permission of the Department Head. Introduction to interdisciplinary approaches through the study of selected texts. May be repeated once for credit if content is different. (Varies)

439/539. Louisiana Literature. Credit 3 hours. Prerequisites: ENGL 300 and at least one of the following: ENGL 210H, 230, 231, 232, 291H, 292H, 301, 303, 310, 351, 352, 395 or 396; Junior standing or permission of the Department Head. A survey of the best and most representative writers from Louisiana. (Varies)

446/517. Independent Study in English. Credit 3 hours. Prerequisites: ENGL 210H, 230, 231, 232, 291H, 292H, 300, 301, 303, 310, 351, 352, 395, or 396; Junior standing or permission of the Department Head. The course offers students an opportunity to engage in a creative, critical or reading project with an English professor of their choice. This course may be repeated for a total of six hours credit. (Varies)

447/518. Advanced Writing Workshop. Credit 3 hours. Prerequisite: ENGL 102 or 102H, Junior standing, or permission of the Department Head. For advanced undergraduate and new graduate students in all disciplines. Instruction, practice, and group-based support in planning, development, and completion of individualized writing projects. Possible individual emphases include such areas as academic research, creative nonfiction, professional/technical writing, theses, and writing for publication. (Varies)

448/548. Advanced Professional and Technical Writing. Credit 3 hours. Prerequisite: ENGL 322, Junior standing, or permission of the Department Head. Designed for students in all disciplines. A practical study of writing for professional audiences, with emphasis on the genres specific to professional and technical writing (feasibility studies, proposals, reports, and professional correspondence). Individualized instruction and a choice of writing topics. (Varies)

449/549. History of the Book. Credit 3 hours. Prerequisites: ENGL 102 or 102H and Junior standing or permission of the Department Head. Designed for students in all disciplines. A survey of the physical and cultural constructions of the book from tablet to World Wide Web; projects in analysis and creation of book design, both print and digital. (Varies)

455/555. Old English. Credit 3 hours. Prerequisites: ENGL 300 and at least one of the following: ENGL 210H, 230, 231, 232, 291H, 292H, 301, 303, 310, 351, 352, 395 or 396; Junior standing or permission of the Department Head. Study of the Old English language, with selected readings from the literature of the period. (Varies)

456/556. Medieval England. Credit 3 hours. Prerequisites: ENGL 300 and at least one of the following: ENGL 210H, 230, 231, 232, 291H, 292H, 301, 303, 310, 351, 352, 395 or 396; Junior standing or permission of the Department Head. Literature in the British Isles from the early Anglo-Saxon period to 1485. (Varies)

457/557. Early Modern Non-Dramatic Literature. Credit 3 hours. Prerequisites: ENGL 300 and at least one of the following: ENGL 210H, 230, 231, 232, 291H, 292H, 301, 303, 310, 351, 352, 395 or 396; Junior standing or permission of the Department Head. Non-dramatic English literature from 1485 to 1660; representative authors and their works. (Varies)

458/558. Major British Authors. Credit 3 hours. Prerequisites: ENGL 300 and at least one of the following: ENGL 210H, 230, 231, 232, 291H, 292H, 301, 303, 310, 351, 352, 395 or 396; Junior standing or permission of the Department Head. A study of selected authors, singly or in small related groups, from 1660 to the present. A variable content course. May be repeated if content is different. (Varies)

459/559. Nineteenth Century British Literature. Credit 3 hours. Prerequisites: ENGL 300 and at least one of the following: ENGL 210H, 230, 231, 232, 291H, 292H, 301, 303, 310, 351, 352, 395 or 396; Junior standing or permission of the Department Head. Literature from the romantic movement in the late 18th Century to the turn of the century; representative authors and their works. (Varies)

465/565. Literary Criticism. Credit 3 hours. Prerequisites: ENGL 300 and at least one of the following: ENGL 210H, 230, 231, 232, 291H, 292H, 301, 303, 310, 351, 352, 395 or 396; Junior standing or permission of the Department Head. An examination of the development of critical theories from classical times to the present, with an emphasis on the reading of the major texts; a study of the trends in twentieth century criticism and examples of their application. (Varies)

467/567. The Teaching of Writing. Credit 3 hours. Prerequisite: ENGL 321 and Junior standing or permission of the Department Head. For prospective and returning teachers. Theory and methods for teaching writing. Emphasis on students' own writing development through hands-on creation of original teaching materials. competency-based clinical practice required. (Fall only)

468/564. The Teaching of Literature. Credit 3 hours. Prerequisites: English 300 and at least one of the following: ENGL 210H, 230, 231, 232, 291H, 292H, 301, 303, 310, 351, 352, 395, or 396. Senior standing or permission of the Department Head. This course prepares English Education majors to become effective teachers of literature at the secondary level. Students will explore the methods and literary texts vital to a secondary school curriculum in Language Arts. Students will also develop teaching materials appropriate for use in the high school classroom. (Fall)

471/522. Chaucer. Credit 3 hours. Prerequisites: ENGL 300 and at least one of the following: ENGL 210H, 230, 231, 232, 291H, 292H, 301, 303, 310, 351, 352, 395 or 396; Junior standing or permission of the Department Head. Readings from Chaucer's major works, chiefly *The Canterbury Tales*. (Varies)

472/523. Milton. Credit 3 hours. Prerequisites: Prerequisites: ENGL 300 and at least one of the following: ENGL 210H, 230, 231, 232, 291H, 292H, 301, 303, 310, 351, 352, 395 or 396; Junior standing or permission of the Department Head. Critical study of Milton's major poetry and selections from the prose works. Emphasis on *Paradise Lost*. Consideration of religious and intellectual milieu. (Varies)

475/575. Contemporary Criticism. Prerequisites: ENGL 300 and at least one of the following: ENGL 210H, 230, 231, 232, 291H, 292H, 301, 303, 310, 351, 352, 395 or 396; Junior standing or permission of the Department Head. Preparation for advanced study in English, including bibliographic and critical skills. Instruction in bibliography centers on basic literary research resources and methods, and instruction in literary criticism centers on contemporary theoretical methods. Successful completion of the course will give students preliminary grounding in the theoretical discourse and research methods for the field of literary studies. (Varies)

476/576. The Rhetorical Tradition. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A survey of key texts from the rhetorical tradition, from Plato to Derrida. An examination of the relevance of this tradition to students' needs as writers (including professional/technical and creative writers), as teachers of writing, and as students of literature and modes of public discourse. (Varies)

477/577. Foundations in Language and Literacy. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. Introduces students to the scholarship, research methods, instructional practices, and professional opportunities in the related disciplines of grammar and linguistics (including the teaching of English to speakers of other languages, or TESOL), composition and rhetoric, and literacy studies. Successful completion of the course will give students preliminary grounding in these areas needed to pursue graduate course work in the Language and Literacy concentration and to pursue meaningful careers in the disciplines following graduation. (Varies)

478/578. Topics in Publishing Studies. Credit 3 hours. Prerequisites: 102 or 102H and Junior standing or permission of the Department Head. A variable content course covering topics of special interest in Publishing Studies not similarly treated in existing courses. Intended primarily for students in the Publishing Studies minor or in the Graduate Concentration in Publishing Studies, but open to all students. May be repeated once for a total of six hours. (Varies)

482/582. Intermediate Poetry Workshop. Credit 3 hours. Prerequisite: ENGL 371 or permission of the Department Head. Writing of poetry of literary quality and intermediate study of poetry theory and technique with emphasized study of contemporary poetry. Intensive discussion of student manuscripts in group meetings and in conferences with instructor. May be repeated once for credit. (Varies)

483/583. Intermediate Fiction Workshop. Credit 3 hours. Prerequisite: ENGL 372 or permission of the Department Head. Writing of fiction of literary quality and intermediate study of technique and theory of fiction writing with emphasized study of contemporary fiction. Intensive discussion of student manuscripts in group meetings and in conferences with instructor. May be repeated once for credit. (Varies)

484/584. Topics in Creative Writing. Credit 3 hours. Prerequisites: ENGL 370, 371, or 372 depending on corresponding genre of special topic, Junior standing or permission of Department Head. A variable genre creative writing course emphasizing writing of literary quality in a specific genre such as poetry, fiction, drama, or new and hybrid forms. Intermediate study of technique and theory as appropriate to the genre. Intensive discussion of student manuscripts in group meetings and in conferences with instructor. May be repeated once for credit. (Varies)

485/585. Foundations in Professional Writing and Publishing Studies. Credit 3 hours. Prerequisite: Junior standing, ENGL 322, or permission of the Department Head. Designed to introduce students to the theoretical issues, bibliographic skills and essential software fundamental of advanced study of Professional Writing and Publishing Studies. Direct experience with the production of both traditional and online materials; emphasis on digital print and Web resources. (Varies)

486/586. Document Production and Design. Credit 3 hours. Prerequisite: Junior standing, ENGL 322, or permission of the Department Head. Designed for students from all disciplines. A study of documents, both printed and electronic. Emphasis on visual rhetoric, desktop publishing, hypertext, web page authoring, and electronic presentations. Individualized instruction and assignments relevant to students' needs and interests. (Varies)

487/587. Major World Authors. Credit 3 hours. Prerequisites: ENGL 300 and at least one of the following: ENGL 210H, 230, 231, 232, 291H, 292H, 301, 303, 310, 351, 352, 395 or 396; Junior standing or permission of the Department Head. A study of selected authors, singly or in small related groups, from the ancient periods to the present. A variable content course. May be repeated if content is different. (Varies)

488/588. Modernism. Credit 3 hours. Prerequisites: ENGL 300 and at least one of the following: ENGL 210H, 230, 231, 232, 291H, 292H, 301, 303, 310, 351, 352, 395 or 396; Junior standing or permission of the Department Head. Representative writers from the 1890s to 1945 with attention to trends and innovations in the major literary genres. (Varies)

489/589. Postmodern and Contemporary Literature. Credit 3 hours. Prerequisites: ENGL 300 and at least one of the following: ENGL 210H, 230, 231, 232, 291H, 292H, 301, 303, 310, 351, 352, 395 or 396; Junior standing or permission of the Department Head. World, and/or American, and /or British literatures' representative writers from 1945 into the 21st Century with attention to trends and innovations in the major literary genres. A variable content course. May be repeated if content is different. (Varies)

490/590. Nineteenth Century American Literature. Credit 3 hours. Prerequisites: ENGL 300 and at least one of the following: ENGL 210H, 230, 231, 232, 291H, 292H, 301, 303, 310, 351, 352, 395 or 396; Junior standing or permission of the Department Head. A study of works organized to highlight the intellectual grounds of selected literary movements (e.g., transcendentalism, romance, realism), the aesthetic principles

of major genres (novel, poetry, essay), or the literary interactions of authors whose work led intellectual, cultural, and/or aesthetic innovation. (Varies)

491/591. Major American Authors. Credit 3 hours. Prerequisites: ENGL 300 and at least one of the following: ENGL 210H, 230, 231, 232, 291H, 292H, 301, 303, 310, 351, 352, 395 or 396; Junior standing or permission of the Department Head. Study of selected authors, singly or in small related groups, from the colonial period to the present. A variable content course. May be repeated if content is different. (Varies)

492/592. Introduction to Literary and Technical Editing. Credit 3 hours. Prerequisites: ENGL 102 or 102H and Junior standing or permission of the Department Head. This workshop class will acquaint students with current literary and technical editing and publishing practices, including online publishing. Students will practice editing texts to make the texts readable and conform to the norms of professional editing. Students will also have some chance to design, lay out, and produce small publications in print and online, utilizing professional software. (Varies)

493/593. Practicum in Humanities Print Publishing. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. Advanced application of editorial, design, and production skills to a major print humanities publishing project, such as a journal, magazine, chapbook, book, etc., from manuscript acquisition to printed product. Students develop design and advanced editing abilities along with professional facility with industry-standard publishing software. (Varies)

494/594. Publishing in Digital Humanities. Credit 3 hours. Prerequisites: ENGL 102 or 102H and junior standing or permission of Department Head. Designed for students in all disciplines. A workshop course in publishing digital texts, principally online. Theoretical readings on digital forms of the book; HTML, XML/TEI, and creation of digital texts using industry-standard web design software; analysis of emerging trends and platforms in digital publication. (Varies)

495/595. Internship. Credit 3 hours. Prerequisites: Junior standing and permission of Department Head. Supervised field experience in English with local, state, national, and international businesses, agencies, institutions (including colleges and universities), and organizations. This internship will allow students to utilize skills learned in the classroom and hone them in a modern workplace. Students will work with the internship supervisor to secure their own internships. All internship students will meet occasionally (either face to face or online) during the semester to examine issues associated with the experience. May be repeated for up to 6 hours. (Varies)

498/598. Writer's Studio. Credit 1-3 hours. Prerequisites: ENGL 325, 363, 364, 365, 370, 371, 372, or 380, or permission of the Department Head. In this course, students will study under a Writer-in-Residence, submitting creative manuscripts for professional critique and one-on-one and group consultation. The course will also include discussions on craft, publication, and current trends in the literary marketplace. (Varies)

499/599. Publishing Studies Workshop. Credit 3 hours. A service-learning course that creates teams of students drawn from the disciplines of Art, Communication, Computer Science, and English; these students complete complex projects for real-world clients from planning to implementation, using current software and a dedicated server. Student team roles will include print and web design, data coding, database and server management. Students will also read and respond to current discussions of workplace practices in publishing. One hour of lecture and three hours of lab weekly. A laboratory fee is required for this course. (Varies)

600. Studies in Medieval Literature. Credit 3 hours. In-depth study of selected works of medieval literature. A variable content-course. May be taken twice if content is different. (Varies)

601. Studies in Early Modern Literature. Credit 3 hours. In-depth study of selected works from the British Isles during the early modern period. A variable content course. May be taken twice if content is different. (Varies)

606. Studies in British Literature. Credit 3 hours. In-depth study of selected works of British literature excluding the medieval and early modern periods. A variable content course. May be taken twice if content is different. (Varies)

610. Studies in Performance. Credit 3 hours. In-depth study of selected works of drama, film, and/or related performance arts. A variable content course. May be taken twice if content is different. A laboratory fee is required for this course. (Varies)

617. Studies in World Literature. Credit 3 hours. In-depth study of selected works of world literature. A variable content course. May be taken twice if content is different. (Varies)

620. Studies in Language and Literacy. Credit 3 hours. A variable content course in composition, rhetoric, literacy studies, or linguistics. May be repeated if content is different. (Varies)

621. Studies in English Education. Credit 3 hours. In-depth study of issues in English Education. A variable content course. May be taken twice if content is different. (Varies)

630. Studies in American Literature. Credit 3 hours. A variable content course in American literature. Emphases may include literary movements, authors, genres, themes. May be taken twice if content is different. (Varies)

632. Modern Literary Criticism. Credit 3 hours. The methods used and the philosophies reflected in modern criticism; trends and issues in interpretation; reading and writing critical essays. Course may be repeated for credit once if content is different. (Varies)

645. Creative Writing Workshop. Credit 3 hours. Theories and methods of Creative Writing. Includes workshop discussion of student work. May be repeated once. (Varies)

646. Workshop in the Teaching of Writing. Credit 3 hours. A variable content course in the teaching of writing. Advanced work in composition theory, research, and practice, with emphasis on students' writing and on instructional applications. Permission required when offered as part of the Southeast Louisiana Writing Project. May be repeated for credit if content is different. (Varies)

648. Graduate Studies Seminar. Credit 3 hours. Intensive writing focused on promoting knowledge of the discipline of English studies, the various genres and forms of writing appropriate to Graduate Study in English, and training in advanced critical reading of literary scholarship and literary history. (Varies)

651. Studies in Professional Writing. Credit 3 hours. In-depth study of selected works and methods of Professional Writing. A variable content course. May be taken twice if content is different. (Varies)

652. Studies in Publishing. Credit 3 hours. In-depth study of selected topics in publishing. A variable-content course. May be taken twice if content is different. (Varies)

760. Internship Research. Credit 1-6 hours. Prerequisite: ENGL 595 or permission of Department Head. A portfolio and research course for students who have completed all other degree coursework and need to complete the comprehensive exam. This course is graded Pass/Fail. (Varies)

770. Thesis Research and Thesis. Credit 1-6 hours each semester, with 6 hours needed for graduation. The student must enroll in the thesis course each semester the thesis is in progress. The thesis is graded Pass-Fail. (Varies)

English for International Students (EGIS)

97. English Grammar and Conversation. Credit 3 hours. An intensive elementary-intermediate level English language course for students whose native language is not English. This course is designed to prepare students for entry into the required English sequence. The approach is communicative, involving grammar study, oral exercises, dialogues, and role playing. All four language skills (listening, speaking, reading, and writing) are developed. This course is not accepted for credit toward graduation. Students will be graded on the basis of Pass (P) or Unsatisfactory (U). A laboratory fee is required for this course. (Varies)

98. Reading. Credit 3 hours. This is a reading course designed to help develop comprehension skills in English, including identification, differentiation, and sequencing of main ideas, supporting ideas and details. Particular stress is given to imparting strategies that enable students to understand the overall meaning of an authentic text even when they are unfamiliar with some of the works and structures. An important goal for the students in the course is to transfer the reading skills they already have in their native language to reading in English. This course is not accepted for credit toward graduation, students will be graded on the basis of Pass (P) or Unsatisfactory (U). A laboratory fee is required for this course. (Varies)

107. Introduction to Academic Writing. Credit 3 hours. Prerequisite: A grade of P in EGIS 98 or permission of the Department Head. Designed to help non-native speakers improve writing skills. Concentrates on interdisciplinary writing practice and vocabulary study to prepare students for freshman composition, and other college courses. A laboratory fee is required for this course. (Varies)

108. Advanced Grammar and TOEFL Preparation. Credit 3 hours. Prerequisite: Completion of EGIS 107 or permission of the Department Head. Advanced grammar review and listening skills development for foreign graduate and undergraduate students who must pass the TOEFL. A laboratory fee is required for this course. (Varies)

Engineering Technology (ET)

100. Introduction to Engineering Technology. Credit 3 hours. Introduction to a broad range of engineering technology topics and fields, such as mechanical design, engineering materials, machining, computers and programming, data analysis and graphing, robotics, and communications. Discussion includes the roles, duties, responsibilities, professional ethics, professionalism, fundamental skills and knowledge required of engineering technologists. (Fall, Spring)

100H. Introduction to Engineering Technology Honors. Credit 3 hours. Prerequisite: Active status in the University Honors Program, or permission of the Department Head. Introduction to a broad range of engineering technology topics and fields, such as mechanical design, engineering materials, machining, computers and programming, data analysis and graphing, robotics, and communications. Discussion includes the roles, duties, responsibilities, professional ethics, professionalism, fundamental skills and knowledge required of engineering technologists. (Varies)

111. Engineering Graphics. Credit 3 hours. Topics covered include applied geometry, vectors, space, freehand sketching, orthographic projection, two-dimensional renderings with AUTOCAD, sectioning, dimensioning, and 3-D modeling body as well as assembling design using SolidWorks. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Fall, Spring)

132. Construction Materials and Methods. Credit 3 hours. A study of the behaviors and performance of building materials and assemblies, as well as construction standards and constraints. Emphasis is placed on the understanding of the advanced engineering aspects of specific materials and assemblies used in commercial and industrial structures. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Fall)

202. Computer Applications. Credit 3 hours. Prerequisite: MATH 162 or MATH 175. Introduction to the MATLAB programming environment including data types, graphics, functions, inputs/outputs, text processing, plotting functions, reading and writing data files, and case studies using MATLAB. (Summer, Fall, Spring)

205. Mathematical Methods for Engineering. Credit 3 hours. Prerequisite: MATH 200. A course on post-calculus mathematical techniques and methods specifically designed for engineering technologists. Topics include applied differential equations, matrices, determinants, statistics and probability. (Fall, Spring)

212. Introduction to Programming. Credit 3 hours. Prerequisite: MATH 162 or MATH 175. An introductory programming course in C. Topics include hardware/software and fundamentals of problem solving and algorithm development including data types, computation, simple input/output, selection and repetition, functions, and arrays. (Fall, Spring)

213. Electrical Circuits. Credit 3 hours. Prerequisite: MATH 175. A study of the fundamentals of electrical equipment and installations related to engineering technology. Topics include DC and AC power, electrical measurements, print reading, electrical wiring, application of network laws and theorems, nodal and mesh analysis for passive RLC circuits, transformers and polyphase circuits, illumination, heating, wiring codes and specifications. A laboratory fee is required for this course. (Fall, Spring)

214. Electrical Circuits II. Credit 3 hours. Prerequisite: ET 213. Sinusoidal steady state analysis, AC power analysis, three-phase circuits, Laplace transform and its application to circuit analysis, network functions, frequency response, magnetically coupled circuits and transformers. A laboratory fee is required for this course. (Spring)

215. Digital Computer Logic and Organization. Credit 3 hours. Prerequisite: ET 100. An introduction to computer organization and digital logic design. Provides an understanding of the basic hardware makeup of a computer and the basic concepts of its operation. The course includes Boolean algebra and binary arithmetic, basic building blocks of digital hardware, combinational and sequential circuits and their design methods using standard logic design chips, basic computer cycles, machine instructions, microprogramming, and I/O communication. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Fall)

221. Programming for Technologists. Credit 3 hours. Prerequisite: ET 212. An introduction to object-oriented computer programming, data structures, basic algorithms, and basic elements of software engineering. Program coding using a high-level language such as C++ or similar. (Spring)

225. Electronics I. Credit 3 hours. Prerequisite: ET 213. Introduction to electronics including characteristics and applications of diodes, transistors (BJT and FET), logic gates, digital and analog integrated circuits, operational amplifiers, and active circuits using op amps as well as concepts of power electronics including inverters and converters. Analysis and design of analog electronic circuits involving rectifiers, amplifiers, oscillators and other components will also be discussed. A laboratory fee is required for this course. (Fall)

226. Electronics II. Credit 3 hours. Prerequisite: ET 225. Review of semiconductors, diode theory and circuits, and BJT transistors. Introduction to transistor biasing, AC models, voltage amplifiers, CC and CB amplifiers, JFETs, Thyristors, differential amplifiers, operational amplifiers and circuits. A laboratory fee is required for this course. (Spring)

231. Surveying I. Credit 3 hours. Prerequisite: ET 100. Engineering principles and practices of surveying applied to instrumentation, computation, and construction site layout dealing with both commercial and residential construction. Two hours of lecture and two hours laboratory per week. A laboratory fee is required for this course. (Spring)

232. Surveying II. Credit 3 hours. Prerequisite: ET 231. Theory and supervised field practice in the layout of engineering and construction projects utilizing extensive surveying principles, applied science, mathematics, legal implications and computer applications. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Fall)

241. Introduction to Engineering Materials. Credit 3 hours. Prerequisite: MATH 162 or registration for or prior credit for MATH 175. An introduction to engineering materials with focus on mechanical behaviors of materials, material properties, industrial applications, limitation and selection of materials. Topics include atomic structure and bonds, stress and strain analysis, engineering structures, environmental consideration,

limitations and failures, and properties testing and measurement of materials. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Summer, Fall, Spring)

244. Construction Regulations, Contracts, and Specifications. Credit 3 hours. Prerequisite: ET 132. A study of codes and specifications required by municipality, counties/parishes, and states as well as construction contracts and professional ethics. Topics include contractual relationships amongst construction parties, types of agreements, worker's compensation, insurance, and ethics in construction. (Fall)

271. Engineering Statics. Credit 3 hours. Prerequisites: MATH 175 and PHYS 191. This course uses vector methods for the study of force, coupled and equivalent force systems, equilibrium of particles and rigid bodies, centroids, centers of gravity, moments of inertia, and virtual work. It includes analysis of simple structures such as trusses and beams and applications of dry friction models. A laboratory fee is required for this course. (Summer, Fall, Spring)

283. Manufacturing Processes. Credit 3 hours. Prerequisite: ET 241. This course serves as an introduction to a broad range of traditional and non-traditional manufacturing processes. Topics include casting and solidification processes, forming and shaping processes, material removal processes, joining processes, special processing and assembly technologies, engineering metrology and instrumentation, and other aspects of manufacturing. A laboratory fee is required for this course. (Spring)

305. Human Factors Engineering. Credit 3 hours. Prerequisite: Junior standing. This course provides the student with a basic knowledge of human factors design principles and the nature of human interaction with their environment. The course introduces cognitive engineering, ergonomics, system design, and the nature of human performance in the workplace. (Fall, Spring)

320. Microprocessors and Interfacing. Credit 3 hours. Prerequisite: CMPS 297 or ET 215. An introduction to principles of microprocessor and microcontroller operation, CPU, memory, buses and I/O interfaces. Topics include microcomputer-based system design, Windows programming, and interfacing. This course includes a design project. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Spring)

322. Programmable Logic Controllers. Credit 3 hours. Prerequisite: ET 215. This course provides a practical application of processes using variety of Programmable Logic Controllers that are commonly used in industry. It includes selecting and working with multiple modules while learning about ladder logic design and structured text programming. The class covers PLC expressions, operators, conditional statement and loops and their applications in mechanical and electrical systems. This course also includes PLC hardware connections, troubleshooting and the use of HMI. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Varies)

325. Digital Electronics. Credit 3 hours. Prerequisite: ET 225. Review of semiconductors and BJT transistors. Introduction to transistor biasing, small-signal AC models, voltage amplifiers, CC and CB amplifiers, JFETS, Thyristors, differential amplifiers, operational amplifiers, EPROM, and digital circuits and applications. A laboratory fee is required for this course. (Spring)

331. Commercial Construction Estimating I. Credit 3 hours. Prerequisite: ET 132. Fundamentals of construction estimating procedures, with analysis of light commercial construction prints and specifications to determine the quantity of materials, labor, equipment and overhead as well as profit as it relates to the bidding process. The use of traditional estimating practices and current computer software for the development of construction bids will also be discussed. (Spring)

332. Commercial Construction Estimating II. Credit 3 hours. Prerequisite: ET 331. An advanced study of heavy construction estimating for commercial, civil, and industrial construction projects. Includes advanced mathematics to solve conceptual problems that determine the unit price, labor cost, detailed estimating, overhead allocation, bidding strategies, and bid formula. Also includes use of latest estimating software for the development of construction bids for simulated projects. (Fall)

334. Reinforced Concrete Design. Credit 3 hours. Prerequisites: ET 132 and 271. Discussion about materials, constructability, and specifications related to reinforced concrete (RC) elements such as beams, girders, slabs, columns, and foundations in accordance with current ACI codes and standards. Topics include design and analysis of RC flexural members, shear resistance or RC and effect of combined compression and bending on RC columns. (Fall)

336. Steel Design. Credit 3 hours. Prerequisite: ET 132 and ET 271. The application of principles of strength of materials to the design and analysis of structural steel beams, columns, trusses and frames, as well as connection and base plates in accordance with current AISC specifications. The class also covers using finite element software to design simple steel structures. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Spring)

341. Electromagnetics. Credit 3 hours. Prerequisite: ET 214. Introductory course on electromagnetic. Topics covered: fundamental concepts and applications of Maxwell equations including static electric, magnetic fields, dielectric and ferromagnetic materials using Laplace's equation. A laboratory fee is required for this course. (Varies)

353. Total Quality Management. Credit 3 hours. Prerequisite: IT 407. This course provides students with an understanding of managing a total quality environment to improve quality, reduce costs and improve productivity. Emphasis is placed on the management, creation, organization, and evaluation of quality systems necessary to assure organizational and functional compliance with stated quality system requirements of national and international standards. (Varies)

355. Management of Technical Organizations. Credit 3 hours. Prerequisite: MATH 175. An introduction to industrial management principles. It covers topics in organizational, such as organizational strategy and conflict management; in technology management; such as technology transfer and new product development, and in human resources management, such as labor relations and legislation. (Varies)

357. Auto Identification and Data Capture. Credit 3 hours. Prerequisite: CMPS 173. This course provides the students with an understanding of different auto identification and data capture technologies and their applications in manufacturing and distribution industries. Topics include bar coding, radio frequency identification, magnetic stripe, voice data entry, radio data terminals, and optical character recognition. (Varies)

361. Solar Thermal Systems. Credit 3 hours. Prerequisites: PHYS 191 and MATH 200. An introduction to solar thermal systems and their applications. Topics include solar radiation, solar thermal materials, solar thermal collectors, solar energy storage, solar cooling, solar thermal power systems, solar thermal efficiency evaluation, and economics of solar thermal systems. (Spring)

362. Solar and Geothermal Systems. Credit 3 hours. Prerequisites: PHYS 191 and MATH 200. This course introduces fundamentals of solar thermal process, solar thermal collectors, solar energy storage, solar cooling, analysis and design of photovoltaic modules, battery, inverters, charge control method, grid integration, and economic impact of solar systems. Topics also include discussion of geothermal systems, the direct and indirect use of geothermal energy in heating and electricity generation, and solar thermal systems and their applications. (Fall)

363. Photovoltaics. Credit 3 hours. Prerequisite: ET 225 or permission of Department Head. An introduction to photovoltaic systems and their applications. Topics include fundamentals of solar radiation, design and construction of solar cells, and basics of semiconductor devices and circuits. The course will also discuss analysis and design of photovoltaic systems including photovoltaic modules, battery, inverters, charge control method, grid integration, and economic impact will also be discussed. (Spring)

365. Power Electronics. Credit 3 hours. Prerequisite: ET 225. An introduction to power electronic devices, circuits, and their applications. Topics include characteristics and analysis of power semiconductor devices, rectifier and switching power supply circuits, AC/DC, DC/AC converters, and computer modeling and simulation. (Varies)

371. Engineering Dynamics. Credit 3 hours. Prerequisite: ET 205 or permission of Department Head. This course uses vector methods for the study of two-dimensional as well as three-dimensional kinematics and kinetics of particles, systems of particles, and rigid bodies. Topics include equations of motion, conservation of energy and momentum, principles of linear impulse and momentum, work and energy methods. A laboratory fee is required for this course. (Spring)

375. Applied Thermodynamics. Credit 3 hours. Prerequisites: MATH 200 and PHYS 191. An introduction to the fundamentals of gas concepts, gas measuring devices, and calibration of measuring instruments. Topics also include vapor and gas cycles, ideal gas mixtures, reading of psychrometric charts, determining fuel combustion efficiency of steam generating systems such as boilers and measuring of analyzing humid air and steam conditions including heat content. Basic concepts of Rankine cycle as the basis for steam and heat engine operations will also be introduced. (Fall)

376. Applied Fluid Mechanics. Credit 3 hours. Prerequisite: ET 205. This course provides a comprehensive introduction to the basics of fluids and fluid mechanics as well as applications in engineering and science. Topics include fluid statics and dynamics, fluid energy and flow measuring devices, fluid components and systems. (Fall)

381. Strength of Materials. Credit 3 hours. Prerequisites: ET 241 and ET 271. This course covers advanced topics in analysis of engineering materials and design of mechanical systems. Main focus will be given to mechanical behavior and mechanics of engineering materials, including fracture and failure as well as strength analysis. A laboratory fee is required for this course. (Fall)

385. Mechanical Design. Credit 3 hours. Prerequisite: ET 381. This course covers kinematic analysis and design of mechanisms, analysis of machine elements in terms of mechanical behavior of materials, stress concentration, combined stresses, fracture, and fatigue. Traditional methods and Finite Element Modeling and Analysis (FEM/FEA) are used. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Spring)

386. Machines and Controls. Credit 3 hours. Prerequisites: ET 202 and 213. An introductory control and instrumentation course applied to machine control. Topics include electrical measurements and instrumentation, motors and generators and their control, feedback control systems, and programmable logic controllers. A laboratory fee is required for this course. (Fall)

390. Engineering Economics. Credit 3 hours. Prerequisite: Junior standing. This course provides basic economic knowledge for analyzing financial performance of engineering projects. It includes the study of design economics, time value of money, depreciation, taxes, capitalization and amortization, replacement analysis, and risk analysis techniques. (Varies)

400. Internship. Credit 3 hours. Prerequisites: Junior or Senior standing and permission of the Department Head. Student must be an integral part of an engineering project team in industry during the semester. Graded as Pass/Fail only. This course can be repeated but only 3 credit hours can count as a technical elective. (Summer, Fall, Spring)

409. Special Topics. Credit 3 hours. Prerequisite: Permission of Department Head. Organized class or individual instruction on topics that are appropriate for the Engineering Technology program. May be repeated when topics vary for a maximum of 6 credit hours. (Varies)

410. Signals and Systems. Credit 3 hours. Prerequisites: ET 202 and 205. This course covers signal and system analysis. Topics include analysis techniques for signals and systems in both time and frequency domain. It discusses the modeling, simulation and response of dynamic systems using Laplace transform methods and introduces the response parameters of first and 2nd order system responses. It also covers the time and frequency responses of dynamic systems and gives introduction to feedback control. (Fall)

421. Industrial Electrical Machinery and Controls. Prerequisites: ET 225. A study of Industrial Electrical Motors and their controls including the operating characteristics and applications of various AC and DC motors, motor drives using variable frequency and speed drives, electromagnetic controls, and trending industrial topics. (Varies)

422. Mechatronics Systems. Credit 3 hours. Prerequisite: ET 322. This course provides a comprehensive and practical approach to designing a Mechatronics system to solve the needs of an industrial process. This includes the proper selection of the mechanical motion and requirements, selection of the actuation elements, calculation of the power requirements, design of the drive circuitry and the control method, selection of the transducers, and selection of the PLC modules to run the process. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Varies)

425. Control and Automation. Credit 3 hours. Prerequisites: ET 202 and 205. This course covers control systems analysis and design. Topics include time and frequency domain modeling and response, actuators and sensors for controlling programmable logic controllers, design of compensators, and use MATLAB for control system analysis. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Fall, Spring)

431. Power Transmission and Distribution. Credit 3 hours. Prerequisite: ET 214 or permission of Department Head. This course introduces fundamental concepts and systems related to generation, transmission, and distribution of AC and DC electrical power. Modeling and analysis of polyphase circuits, generators, motors, and transmission lines will be discussed. (Fall)

433. Wind Turbines. Credit 3 hours. Prerequisites: MATH 200 and PHYS 191 or permission of Department Head. This course discusses fundamental concepts, technologies, applications, impacts, and economics of wind turbines. Topics include physical principles of wind energy conversion, wind blade and rotor aerodynamics, tower design, mechanical drive train, electrical and control systems, installation and maintenance, environmental issues, and costs of wind turbines. (Fall)

434. Geothermal Systems. Credit 3 hours. Prerequisite: Senior Standing. An overview of different types of geothermal systems. Topics include characteristics of geothermal systems, system components, geothermal resources and exploration, scope of geothermal projects, preliminary survey and well testing, direct use of geothermal heat and indirect use for electricity generation, and related legal aspects. (Varies)

435. Electrical Machines. Credit 3 hours. Prerequisite: ET 213. An introduction to electrical machines and their applications. Topics include fundamentals of electricity and magnetism, energy and power, transformers, AC and DC generators, AC and DC motors, and motor drives. (Varies)

436. Fluid Dynamics & Hydrodynamic Machinery. Credit 3 hours. Prerequisites: PHYS 191 and MATH 200. An introduction to hydrodynamic machines. Topics include fundamentals of fluid mechanics, momentum transfer and rotor dynamics, rotodynamic machines, and positive displacement machines such as turbines, pumps, fans, and compressors. (Varies)

441. Construction Planning and Scheduling. Credit 3 hours. Prerequisite: ET 332. An introduction to the methods and procedures used in planning and scheduling commercial construction projects. Topics include critical path methods (CPM), program evaluation and review techniques (PERT), and PRIMAVERA. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Spring)

442. Construction Inspection. Credit 3 hours. Prerequisite: ET 132. This course discusses construction inspection, functions, responsibilities, authority and technical requirements related to construction industry. (Spring)

443. Foundation and Soil Mechanics. Credit 3 hours. Prerequisites: ET 132 and ET 271. This course aims to give knowledge and understanding of basic soil properties, weight volume relationship, soil classification, flow of water through soils, soil compaction and bearing capacity. The course also covers the selection and methods of installation of foundations and other soil supported structures, including footings, piles, caissons, and retaining structures. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Spring)

445. Commercial Architecture. Credit 3 hours. Prerequisite: ET 132. Analysis and solution to basic problems in the design and construction of small commercial properties using a variety of materials and methods of construction. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Varies)

446. Construction Systems. Credit 3 hours. Prerequisite: ET 244. A study of the economic and functional application of construction equipment including the types of equipment, ownership and operational costs as well as equipment scheduling and selection. Design, installation, and operation of materials and equipment in the HVAC and plumbing systems for residential and commercial construction with also be discussed. (Varies)

448. Construction Hydraulics. Credit 3 hours. Prerequisites: PHYS 191 and MATH 200. A study of physical phenomena of hydraulics and hydraulic forces with application of fundamental laws and empirical formula. Pressures and forces on submerged areas, buoyancy, flow in a closed conduit, open channels, and fluid measurements will also be discussed. (Varies)

463. Cost Estimating. Credit 3 hours. Prerequisites: ET 390 and IT 406 or permission of Department Head. A study of the fundamentals of cost estimating for labor, materials, and overhead for products, projects, operations, and systems. The concepts of internal and external cost estimating, types of costs, ethics, budgets, and profits will also be discussed. (Varies)

465. Industrial Simulation and Modeling. Credit 3 hours. Prerequisite: IT 406. This course introduces computer simulation methods and techniques used for analysis of manufacturing and service operations encountered in manufacturing industries. Topics include industrial simulation software, data analysis, optimization and how to simulate a complex system. (Varies)

475. National Electrical Code. Credit 3 hours. Prerequisites: ET 214 and Senior standing. An introductory study of current electrical code requirements using NFPA 70 National Electrical Code. Topics include study of electrical safety requirements with emphasis on wiring designs and methods, over-current protection, selection of material and equipment for general use, and basic calculations. (Varies)

478. HVAC. Credit 3 hours. Prerequisites: PHYS 192 and ET 213. An introduction to HVAC (heating, ventilating, and air conditioning). Topics include heat transfer devices, AC motors and compressors, residential and commercial refrigeration and heating, heat load calculation, and HVAC system layout and control. (Spring)

480. Advanced Strength of Materials. Credit 3 hours. Prerequisites: ET 271 and ET 381. A study of advanced topics of stress/strain analysis using Finite Element Method (FEM) with application to machine design. Topics include mechanical behaviors of materials and structures subjected to various loading conditions, such as tension, compression, torsion, and flexure. Deflection of prismatic members, columns, and combined stresses will be discussed. (Varies)

484. Advanced Manufacturing Technologies. Credit 3 hours. Prerequisite: ET 283 or permission of Department Head. This course covers advanced and non-traditional manufacturing processes, such as the application of lasers and other modern methods in manufacturing processes, high speed machining technologies, advanced treatment of metal forming processes, and particulate material processing. Students are required to participate in research and development of a specific manufacturing area of particulate material processing. Students are required to participate in research and development of a specific manufacturing area of interest. (Varies)

488. Robotics and Automation. Credit 3 hours. ET 213 and Senior standing. An introduction to robotics and automation. Topics include manipulators and mobile robotics, actuators and sensors, industrial control systems, and robot and system integration. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Varies)

490. Seminar. Credit 1 hour. Prerequisite: ET 493. Discussion of social, ethical, and professional issues. Presentations and research on topics of current interest in engineering and technology. Grades assigned on a Pass/Fail basis only. (Fall, Spring)

492. Project Management. Credit 3 hours. Prerequisite: Junior standing. This course covers the principles of project management for technologists and the use of project management software. Topics include the concepts involved in review techniques, network modeling, and the critical path method. In addition, linear programming and network optimization models with application to solve project management problems will be discussed. (Summer, Fall, Spring)

493. Senior Design I. Credit 3 hours. Co-requisites: ET 492 and Senior standing. This course is the first part of the Capstone Design Project. It covers engineering ethics, teamwork and leadership, problem solving, oral and written technical communication, project management, and the integration of ET with real-world examples such as case studies in computer systems, robots, and mechatronics. All team projects are subject to instructor's approval. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Fall, Spring)

494. Senior Design II. Credit 3 hours. Prerequisites: ET 493 and Senior standing. This course is the second part of the Capstone Design Project. It builds on and extends the themes covered in ET 493, culminating in a written Capstone Design Project and an oral presentation to the ET faculty and students at the end of the semester. The capstone project can take a variety of forms, such as analytical, computational, design-based, or experimental. Social, ethical, and professional issues as well as research on topics of current interest in engineering and technology will also be discussed. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Fall, Spring)

620. Quality Management and Control. Credit 3 hours. Prerequisite: Approval of Department Head. Quality management (QM) is a comprehensive approach for leading and operating an organization, aimed at continually improving performance over the long term by focusing on customers while addressing the needs of stakeholders. The course focuses on various QM frameworks, concepts, and quality improvement tools, including TQM, Six Sigma, Lean and Lean Six Sigma, etc., that are necessary for implementing the quality culture that characterizes world-class organizations of the 21st century. (Varies)

Finance (FIN)

101. Financial Literacy. Credit 1 hour. Topics could include financial planning, time value of money, budgeting, cash management, managing credit, big-ticket items, insurance, retirement, and investing. Topics may vary based on student needs and trends. (Varies)

123. Personal Finance. [LCCN: CFIN 2113, Personal Finance]. Credit 3 hours. A study of the management of personal financial affairs, including budgeting, banking, insurance, installment financing, rent/purchase decisions, real estate, personal taxes, and lifetime financial planning. May be used as an elective. (Summer, Fall, Spring)

282. Personal Finance with Spreadsheet Applications. Credit 3 hours. A spreadsheet-based study of the management of personal financial affairs, including budgeting, the time value of money, investment analysis, the fundamentals of risk and return, banking, mortgage financing of real estate, cost of consumer credit alternatives and automobile financing, and lifetime financial planning. A laboratory fee is required for this course. (Varies)

381. Business Finance. [LCCN: CFIN 3113, Principles of Business Finance (Upper Level)]. Credit 3 hours. Prerequisites: ACCT 200 and Junior standing or permission of the Department Head. A study of organization of business firms, financial planning, funds from operation, short and intermediate loan capital, owners' equity, long-term debt, and business promotion and expansion. A laboratory fee is required for this course. (Summer, Fall, Spring)

382. Problems in Business Finance. Credit 3 hours. Prerequisite: FIN 381. A study of the tools and techniques used in corporate financial management. The analysis focuses on spreadsheet applications to asset valuation, risk and return assessment, financial statements, cost of capital and capital budgeting. (Varies)

383. Working Capital Management. Credit 3 hours. Prerequisite: FIN 381. A study of the analysis of financial theory and problems involving working capital. Topics include the management of cash, receivables, inventories, and short-term funding. (Varies)

384. Corporate Valuation and Risk Management. Credit 3 hours. Prerequisite: FIN 381. A study of the theory and techniques employed in conducting corporate valuation and the management of corporate risk. The focus of the analysis is spreadsheet applications to financial planning and forecasting, firm valuation using free cash flows and economic value added, risk management tools, and option pricing. (Fall, Spring)

391. Finance Internship. Credit 3 hours. Prerequisites: FIN 381, minimum 2.5 cumulative grade point average and permission of Department Head. Finance Internship provides a student with finance experience in an assignment selected and approved by the University with a cooperating business firm. Students will earn three semester hours of credit for 300 hours of approved work experience. Only finance majors can receive credit for the Finance Internship course. All grades are assigned on a Pass/Fail basis. (Summer, Fall, Spring)

392. Finance Internship. Credit 3 hours. Continuation of FIN 391. In order to obtain credit for FIN 392, the work assignment must be different from that of FIN 391. This course will be graded Pass/Fail only. (Summer, Fall, Spring)

401. Capital and Money Markets. Credit 3 hours. Prerequisite: FIN 381 or approval of the Department Head. This course is designed to provide the basic knowledge and tools required to analyze financial markets and their institutions. The primary objective is to provide students with adequate knowledge of the structures and practical operations of major financial markets and the underlying forces which unify them. (Fall)

410. Managerial Finance. Credit 3 hours. Prerequisites: Junior standing, ACCT 225, ECON 201, ECON 202 and FIN 381. The study of tools and techniques used in the formulation and implementation of financial policies, including analysis of financial needs, acquisition of financial resources, and allocation of funds to finance a business. Financial decision making involving applied economics, accounting, and statistics. (Not open to finance majors). (Spring)

447. Global Financial Management. Credit 3 hours. Prerequisite: FIN 381. The financial problems and opportunities that confront the management of international firms. Sources and instruments of international finance, import and export financial considerations, and the interrelationship of governmental and international agencies to the financial function of business will be emphasized. (Spring)

451/551. Investment Analysis. Credit 3 hours. Prerequisite: FIN 381. A study of the fundamental principles of business firms; major markets in the United States, and hypothetical portfolios developed using current data. A laboratory fee is required for this course. (Summer, Fall)

452. Portfolio Management. Credit 3 hours. Prerequisite: FIN 451. A study of financial investment alternatives and strategies in a portfolio context. Special emphasis is given to financial engineering techniques applied in the design and management of investment portfolios within the framework of specific risk-return objectives. Students will participate in managing the Heyward Gibbs Hill Scholarship Fund. (Spring)

495. Special Topics in Finance. Credit 3 hours. Prerequisite: FIN 381. A seminar course that covers selected current and unique topics of special interest in finance not covered in existing courses. A laboratory fee is required for this course. (Summer, Fall, Spring)

499. Seminar in Finance. Credit 3 hours. Prerequisites: FIN 384 and FIN 451 (FIN 499 and FIN 451 may be taken concurrently). A capstone seminar course with emphasis on the application of finance concepts to real world problems using case studies with heavy reliance on spreadsheet models and Bloomberg applications. (Fall, Spring)

650. Health Care Financial Management. Credit 3 hours. A course designed to introduce students to the concepts of basic managerial financial functions, such as budgeting, accrual accounting, and the responsibilities of financial management. (Varies)

653. Financial Policies I. Credit 3 hours. Prerequisites: FIN 381 and Graduate standing. The study of tools and techniques used in the formulation and implementation of financial policies. Specific emphasis is given to the analysis of financial statements, working capital management, valuation, capital budgeting, cost of capital, capital structure and leasing. A laboratory fee is required for this course. (Fall, Spring)

654. Financial Policies II. Credit 3 hours. Prerequisites: FIN 381 and Graduate standing. The study of tools and techniques used in the formulation and implementation of financial policies involving topics not covered in FIN 653. Specific emphasis is given to the analysis of risk management, dividend policy, the investment banking process, hybrid financing, bankruptcy and reorganization, mergers and divestitures, and multinational financial management. (Varies)

657. Financial Institutions Management. Credit 3 hours. Prerequisites: FIN 381 and Graduate standing. A case-oriented introduction to the mechanics, operation, and structure of the financial intermediary system. Emphasis is placed on developing an understanding of financial markets, monetary policy and the international financial arena. (Varies)

695. Special Topics in Finance. Credit 3 hours. Prerequisites: FIN 381 or permission of the Department Head and Graduate standing. A seminar course focusing on selected issues in finance. (Fall)

Foreign Language (FLAN)

100. Fundamentals of Latin and Greek for Science Majors. Credit 3 hours. An elective course designed to introduce students to the fundamentals of Latin and Greek as they are used in the biological sciences and medicine. This course will not be used to satisfy the foreign language requirement. (Varies)

306. Special Topics (FLAN for Professions). Credit 3 hours. This course is designed to provide non-foreign language-speaking students with necessary language skills to perform a particular job. This course differs from traditional foreign language courses in that it utilizes phonetic encoding to teach foreign language commands, questions, and phrases critical to a particular area of study (e.g. Business, Nursing, Law Enforcement). No prior knowledge of foreign language necessary. Cannot be used to fulfill any sequence of the foreign language requirement. This course may be taken for 1, 2, or 3 hours at any one time and can be repeated, if different topics are studied, for a maximum of 6 hours. (Varies)

370. Studies in Foreign Language Cinema. Credit 3 hours. Through a combination of lectures, screenings, readings, and discussions, this course aims to provide students with an appreciation of films from various countries and/or cultures from around the world. The course may cover various time periods, topics, and/or styles of film. Themes will be relevant cinematic studies in French, Spanish, German, Latin, or Italian as appropriate. Taught in English with a language option for minors. May be repeated as topics vary. (Varies)

400. Second Language Acquisition. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. An in-depth study of the theory behind how humans learn second languages. (Varies)

401/501. Foreign Language Methodology. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. This course examines second language acquisition theories and provides students with different methodologies for the instruction of foreign languages. Beginning with an overview of traditional and current foreign language teaching methods, the course focuses on current pedagogical trends. It presents a number of techniques designed to develop the students' skills pursuant to language and learning theories, learning objectives, and the role of teachers and students. Competency-based clinical practice required. (Varies)

402. Romance Linguistics. Credit 3 hours. Prerequisite: French or Spanish 319 or Latin 311 or equivalent. A comparative study of the Romance languages and their characteristics. (Varies)

404. Experiential Learning Development and Application. Credit 3 hours. Prerequisite: French, Spanish, Italian, German, or Latin 201 or permission of Department Head. This course focuses on second language skills applied to real-life situations. Emphasis will be placed on learning through experience or service in civic engagement projects such as translation and interpreter assistance for individuals, businesses, charity organizations, and health facilities in both university and community settings, teaching, tutoring, after-school partnerships with area schools, and study-abroad service-learning projects. Student participation and performance will be assessed through formal observation by faculty in both the classroom and the field and through evaluation of a final portfolio that will contain artifacts pertaining to the students' work in the classroom and in the field as well as narrative reflections on progress made. Education candidates complete a competency-based clinical practice for this course. Course may be taken twice for a total of six credit hours. (Varies)

405/505. Foreign Languages I. Credit 3 hours. Prerequisite: Junior standing or permission of Department Head. This course provides an introduction to the grammatical structures necessary for reading, writing, speaking, and listening in the target language. Special attention will be given to the study of culture. The course may be taken in French, Spanish, Italian, German, or Latin. The course may be repeated only in a different language. (Varies)

406/506. Foreign Languages II. Credit 3 hours. Prerequisite: FLAN 405/505 or permission of Department Head. This course provides a continuation of the study of the grammatical structures of the language necessary for reading, writing, speaking, and listening in the target language. Special attention will be given to the study of culture. The course may be taken in French, Spanish, Italian, German, or Latin. The course may be repeated only in a different language. (Varies)

407. Professional Aspects of Foreign Languages. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. An in-depth study of current trends in the job market, graduate schools, professional programs, and other areas of interest to foreign language majors and minors upon completion of their degree. Course may be repeated for credit as an elective as topic varies. (Varies)

441/541. Foreign Language Supervised Advanced Readings. Credit 3 hours. Prerequisites: a 300-level course in the language for which credit is to be given and consent of the Department Head. May be counted for credit in French, Italian, Latin, Spanish, and German. Reading of advanced literary works. Class meets once every two weeks for testing. (Varies)

442/542. Foreign Language Supervised Advanced Readings. Credit 3 hours. Prerequisites: a 300-level course in the language for which credit is to be given and consent of the Department Head. May be counted for credit in French, Italian, Latin, Spanish, and German. Reading of advanced literary works. Class meets once every two weeks for testing. (Varies)

498. Senior Capstone Project in Foreign Languages. Credit 1 hour. Prerequisites: A completed graduation application and 100 or more credit hours earned, or permission of Department Head. Students will create a professional portfolio detailing their most significant class work and their progress toward linguistic, literary, and cultural competency. Portfolios must be successfully presented to a faculty panel in order to obtain credit. The course is graded P/F. (Fall, Spring)

French (FREN)

101. Elementary French I. [LCCN: CFRN 1013, Elementary French I]. Credit 3 hours. The beginning course for students with no knowledge of French. All appropriate elements of basic language learning are utilized for the purpose of providing a foundation in the language and culture of the countries where French is spoken. Class work supplemented by aural-oral drill in the language laboratory. Offered as the first of four sequential courses (101, 102, 201, 202) designed to provide an overall desired proficiency. (Fall, Spring)

101H. Elementary French I for the Honors Student. Credit 3 hours. Prerequisite: Active status in the Honors Program. The beginning course for students with no prior knowledge of French. All appropriate elements of basic language learning are utilized for providing an enriched foundation in the language and culture of the countries where French is spoken. Class work is supplemented by aural-oral drill in the language laboratory. (Varies)

102. Elementary French II. [LCCN: CFRN 1023, Elementary French II]. Credit 3 hours. Prerequisite: FREN 101 or equivalent. Continuation of FREN 101. (Fall, Spring)

102H. Elementary French II for the Honors Student. Credit 3 hours. Prerequisites: Active status in the Honors Program and successful completion of French 101 or equivalent. The second course in the initial sequence of French classes. All appropriate elements of basic language learning are utilized for the purpose of providing an enriched foundation in the language and culture of the countries where French is spoken. Class work is supplemented by aural-oral drill in the language laboratory. (Varies)

201. Intermediate French I. [LCCN: CFRN 2013, Intermediate French I]. Credit 3 hours. Prerequisite: FREN 102 or equivalent. Completion and review of basic elements of grammar. Introduction of reading material of moderate difficulty. (Fall, Spring)

202. Intermediate French II. [LCCN: CFRN 2023, Intermediate French II]. Credit 3 hours. Prerequisite: FREN 201 or equivalent. A course with emphasis on proficiency in reading and continuation of grammar review. (Fall, Spring)

300. Introduction to Conversation in French. Credit 3 hours. Prerequisite: FREN 202 or equivalent. An introduction to the development of conversational skills in French. Course may be repeated once for credit for an elective. (Varies)

303. Enhanced Listening Comprehension and Oral Expression. Credit 3 hours. Prerequisites: FREN 202 or equivalent. Course designed to enhance listening comprehension and speaking skills in French after completing basic language sequence. (Varies)

304. Introduction to Grammar in French. Credit 3 hours. Prerequisite: FREN 202 or equivalent. An introduction to the study of certain grammatical structures in French. (Varies)

305. Introduction to Writing in French. Credit 3 hours. Prerequisites: FREN 202 or equivalent. An introduction to the study of writing in French. Students will focus on conventions of writing within various contexts such as blogs, professional emails, newsletters, websites, and social media. (Varies)

306. Introduction to Translation in French. Credit 3 hours. Prerequisite: FREN 202 or equivalent. An introduction to the theory and practice of translating documents between English and French. Students will focus on a variety of professional, public, and commonly used documents. (Varies)

307. Introduction to Interpretation in French. Credit 3 hours. Prerequisite: FREN 202 or equivalent. An introduction to the theory and practice of interpreting conversations between native English-speakers and native French-speakers. Course may be repeated once for credit as an elective. (Varies)

308. Pronunciation and Phonetics in French. Credit 3 hours. Prerequisite: FREN 202 or equivalent. A focus on the development of proper pronunciation in French. (Varies)

310. Advanced French Conversation. Credit 3 hours. Prerequisite: FREN 202 or equivalent. An intensive exploration of the process of conversation. Examines vocabulary development, pronunciation, fluency, and other related issues. Course may be repeated once for credit as an elective. (Varies)

311. Advanced French Grammar. Credit 3 hours. Prerequisite: FREN 202 or equivalent. Intensive study of grammar and syntax. Recommended for students who wish to improve their language skills. (Varies)

312. Advanced French Composition and Syntax. Credit 3 hours. Prerequisite: FREN 202 or equivalent. Descriptive and narrative compositions in French with emphasis on syntax and verb forms. Effective writing of letters and short reports will be stressed to develop business skills. Recommended for students who wish to improve their language skills. (Varies)

314. French Culture and Civilization. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. Geography, history, literature, art, music, educational system, economy, etc. of the French people. Recommended for students interested in the culture of France. This course cannot be used to fulfill the foreign language requirement. (Varies)

323. French for Specific Purposes. Credit 3 hours. Prerequisite: FREN 202 or permission of the Department Head. A study of French as a tool for performing a particular job. This course focuses on commands, questions, and phrases critical to particular area of focus (e.g., Business, Nursing, Law Enforcement). Content will vary. Course may be repeated as topic varies. (Varies)

324. Francophone Culture and Civilization. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A survey course of the geography, history, literature, art, music and general aspects of culture in the various French speaking countries throughout Africa, Asia and the Americas. A special component will be dedicated to Louisiana French studies. A required course for the minor in Francophone and Creole Studies. (Varies)

325. Literature of France. Credit 3 hours. Prerequisite: FREN 202 or equivalent. A survey of French literature. Develops reading and analytical skills in French and explores different theoretical approaches to the texts. (Varies)

326. Francophone Literature. Credit 3 hours. Prerequisite: FREN 202. This course is a survey of Francophone literature from the nineteenth century, when the concept of Francophone literature emerged, until today. It exposes students to different literary movements and styles in the Francophone world and explores varied theoretical approaches to the notion of text. (Varies)

327. French for Business and International Trade. Credit 3 hours. Prerequisite: FREN 102 or equivalent. The course will develop students' ability to use French to conduct business, and to understand the economic and financial environment of the Francophone world. Students will utilize the following language skills: speaking, listening comprehension, reading, writing, and translation/interpretation. (Varies)

370. Studies in French Cinema. Credit 3 hours. Taught in English, with a French language option for minors. Themes in French film from the Thirties. (Varies)

423. Special Topics in French and Francophone Studies. Credit 3 hours. Prerequisite: FREN 202. A special topics course that offers a detailed analysis of a particular genre, movement, author, or topic. May be repeated for credit as topics vary. (Varies)

General Biology (GBIO & BIOL)

106. Introduction to Biological Principles I. [LCCN: CBIO 1013, General Biology I]. Credit 3 hours. A survey of the fundamental principles and concepts of biology including biochemistry, cell biology, metabolism, photosynthesis, cell division, reproduction, genetics, molecular biology, development, evolution, and ecology. This would be the first course in a sequence which satisfies the General Education Sequence requirement in the Natural Sciences. Three hours of lecture per week. Persons majoring in Biology may not use this course to fulfill their major requirements. However, it may be used to fulfill an elective requirement and in calculating cumulative averages. (Summer, Fall, Spring)

107. Introduction to Biological Principles II. [LCCN: CBIO 1023, General Biology II]. Credit 3 hours. Prerequisite: GBIO 106 [111], or GBIO 151, or GBIO 151H or permission of the Department Head. A course which relates to the broad biological principles covered in GBIO 106 and GBIO 151 to specific groups of organisms. Emphasis will be placed on taxonomy, diversity, systems and architecture of these organisms. Three hours of lecture per week. Persons majoring in Biology may not use this course to fulfill their major requirements. However, it may be used to fulfill an elective requirement and in calculating cumulative averages. (Summer, Fall, Spring)

108. Human Reproductive Biology. Credit 3 hours. Structure, function, coordination and control of the human reproductive organ system. Human heredity, development, birth and sexual differentiation. Biological aspects of sexual abnormalities, and venereal diseases. No credit awarded towards Biology major. This course may not be used to satisfy the General Education sequence requirement in the natural sciences. (Varies)

151. General Biology I. [LCCN: CBIO 1033, General Biology I (Science Majors)]. Credit 3 hours. Prerequisite: Must be eligible to enroll in ENGL 101 and MATH 107. Non-biology majors must be eligible to enroll in ENGL101 and MATH 105, 107, or 161. Principles of biology from the cellular level including biochemistry, cell biology, metabolism, photosynthesis, molecular biology, and genetics. This course is designed for students planning to major in biology or related disciplines. Three hours lecture per week. (Summer, Fall, Spring)

151H. General Biology I Honors. Credit 3 hours. Prerequisites: Must be eligible to enroll in ENGL 101, and authorization by the Director of the Honors Program. Principles of biology from the cellular level including biochemistry, cell biology, metabolism, photosynthesis, molecular biology, and genetics. This course is designed for students planning to major in biology or related disciplines. Three hours lecture per week. (Fall, Spring)

152. General Biology Laboratory I. [LCCN: CBIO 1031, General Biology I Lab (Science Majors)]. Credit 1 hour. Prerequisites: Registration in or prior credit for GBIO 106 or GBIO 151 and all prerequisite courses must have a grade of "C" or better. Laboratory exercises for studying the principles of biology from the cellular level including biochemistry, cell biology, molecular biology, and genetics. Two hours of laboratory per week. A laboratory fee is required for this course. (Summer, Fall, Spring)

153. General Biology II. [LCCN: CBIO 1043, General Biology II (Science Majors)]. Credit 3 hours. Prerequisite: Completion of GBIO 151 with a "C" or better. A systematic study of the structure, function, evolution, ecology and relationships of organisms including viruses, bacteria, protists, fungi, plants, and animals. This course is designed for students planning to major in biology or related disciplines. Three hours lecture per week. (Summer, Fall, Spring)

153H. General Biology II Honors. Credit 3 hours. Prerequisites: Completion of GBIO 151H and authorization by the Director of the Honors Program. A systematic study of the structure, function, evolution, ecology and relationships of organisms including viruses, bacteria, protists, fungi, plants, and animals. This course is designed for students planning to major in biology or related disciplines. Three hours lecture per week. (Fall, Spring)

154. General Biology Laboratory II. [LCCN: CBIO 1041, General Biology II Lab (Science Majors)]. Credit 1 hour. Prerequisites: Registration in or prior credit for GBIO 107 or GBIO 153 and all prerequisite courses must have a grade of "C" or better. Laboratory exercises for systematically studying the structure, function, evolution, ecology, and relationships of organisms including protists, fungi, plants and animals. Two hours of laboratory per week. A laboratory fee is required for this course. (Summer, Fall, Spring)

155. General Biology Laboratory Simulation. Credit 1 hour. Prerequisites: Registration in or prior credit for GBIO 151, eligibility for the CALL program (RN to BSN in Nursing), and permission of the Department Head of Biological Sciences. A series of virtual/science kit laboratory experiments including but not limited to experimental design microscopes, cells/cell structure, cell membranes, enzymes/chemical reactions, mitosis, meiosis, and genetics. Students will relate topics learned in lectures to a virtual laboratory setting, use the scientific method to answer

questions relevant to biology, follow instructions to complete assigned experiments, and report the required results, perform relevant mathematical calculations required to complete the laboratory, use a spreadsheet to create graphs representing data obtained from the experiment, create electronic reports summarizing data and drawing required experimental conclusions as well as a video display of how they conducted the lab for the science kits. This course is exclusively for students in the CALL nursing program and may not be used to substitute for any Biology, Microbiology, or Zoology laboratory or lecture courses, nor can it be used to satisfy any prerequisites, co-requisites, or requirements for any of these courses. A laboratory fee is required for this course. (Summer, Fall, Spring)

200. Cell Biology. [LCCN: CBIO 2133, Cell Biology]. Credit 3 hours. Prerequisites: GBIO 151 and 153, MATH 161 or 175 or 200, and CHEM 121, all with a grade of "C" or better, or permission of the Department Head. A detail-oriented core course that allows students to: understand the basic biochemistry of cell structure, function, and metabolism; explore molecular mechanisms used by cells for survival, growth, proliferation, differentiation, and death; and highlight the roles of gene/protein expression/function, cell membranes, cell signaling, and energy transformations in these processes. Three hours of lecture per week. (Summer, Fall, Spring)

203. Selected Topics in Biology. Variable credit 1-4 hours. Prerequisite: Permission of the Department Head. Selected topics in biology that are new or unique and are not covered in existing courses. May be repeated more than once if different topics are studied up to a maximum of 4 credit hours. This course may not be used by biology majors as a concentration elective; it may be used as a general elective. (Fall)

241. The Profession of Biology or Getting What You Came For. Credit 1 hour. Prerequisites: Major in Biology and credits for GBIO 151, 153 and BIOL 152 and all prerequisite courses must have a grade of "C" or better. An Internet-based course designed to guide students in making appropriate and informed career plans in the biological sciences. Two hour of Internet learning per week. The course is graded pass/fail. (Summer, Fall, Spring)

281. Environmental Awareness. [LCCN: CEVS 1103, Environmental Science]. Credit 3 hours. Prerequisites: GBIO 153 and BIOL 154 or equivalent and all prerequisite courses must have a grade of "C" or better. A broad-spectrum study of the ecological problems of our society. Three hours of lecture per week. (Spring)

312. Genetics. [LCCN: CBIO 3523, Genetics (Upper Level)]. Credit 3 hours. Prerequisites: GBIO 200 or permission of the Department Head and all prerequisite courses must have a grade of "C" or better. Recommend: Completion of MATH 161 or 164 and 162 and one course of Organic Chemistry. A study of fundamental hereditary mechanisms and relationships. Emphasis is placed on nucleic acids and the molecular and cytological roles by which genes are distributed and expressed. (Summer, Fall, Spring)

314. Genetics Laboratory. [LCCN: CBIO 3521, Genetics Lab (Upper Level)]. Credit 2 hours. Prerequisite: Registration in or prior credit for GBIO 312. A series of experiments designed to illustrate the principles of genetics. Four hours of laboratory per week. A laboratory fee is required for this course. (Varies)

341. Professional Aspects of Biology. Credit 1 hour. Prerequisite: Major in Biology, Junior status or permission of Department Head. An introduction to learning in biological sciences beyond the usual classroom or laboratory setting. Specific sections may allow students to gain experience in conducting research in designated specialties or focus on aspects of the philosophy, ethics, and history of scientific research. May be repeated for up to two credits. Two hours of field learning per week. (Summer, Fall, Spring)

377. Applied Biostatistics. Credit 4 hours. Prerequisites: MATH 161 or consent of the Department Head and all prerequisite courses must have a grade of "C" or better. Basic concepts of biostatistics and sampling strategy; measures of central tendency and dispersion; Z, t, chi-square, and F distributions; test of hypothesis, error rates, and maximizing power; analysis of variance and regression. Strong emphasis on, and many examples of, field and laboratory oriented biological research problems. Three hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Fall, Spring)

395. General Ecology. [LCCN: CECO 4123, Principles of Ecology (Upper Level)]. Credit 3 hours. Prerequisites: GBIO 153, BIOL 154, or permission of the Department Head and all prerequisite courses must have a grade of "C" or better. Biology majors must additionally be concurrently registered in GBIO 397. The biology of ecosystems: energy, patterns of ecosystems, and populations, interspecies interactions, diversity and development. Three hours of lecture per week. (Fall, Spring)

397. General Ecology Laboratory. [LCCN: CECO 4121, Principles of Ecology Lab (Upper Level)]. Credit 2 hours. Prerequisite: Registration in or prior credit for GBIO 395. A series of activities and exercises designed to illustrate ecological concepts and to introduce students to ecology as a scientific discipline. The course will include class excursions to natural habitats both on and off campus. Four hours of laboratory per week. A laboratory fee is required for this course. (Fall, Spring)

404/504. Ecological Methods. Credit 3 hours. Prerequisites: GBIO 377 and GBIO 395, or permission of the Department Head and all prerequisite courses must have a grade of "C" or better. An introduction to exploratory and experimental ecology with an emphasis on experimental design, sampling strategy, ecological indices, population dynamics, and simulation modeling. Two hours of lecture and two hours of laboratory per week. (Varies)

405/505. Evolutionary Biology. [LCCN: CBIO 3643, Evolutionary Biology (Upper Level)] Credit 4 hours. Prerequisites: GBIO 312, or permission of the Department Head and all prerequisite courses must have a grade of "C" or better. Knowledge of evolutionary concepts is fundamental to the understanding of biology. The theory of evolution unifies all of the disparate disciplines included within the life sciences. Microevolution explores processes occurring at or below the level of species, including mechanisms of inheritance, reproductive isolation, and speciation. Macroevolutionary concepts operating above the species level include paleontology, biogeography, systematics, phylogeny, and an understanding of human origins. Four hours of lecture per week. (Summer, Fall, Spring)

406/506. Wetland Ecology. Credit 4 hours. Prerequisites: GBIO 153, BIOL 154, and Junior standing, or permission of the Department Head and all prerequisite courses must have a grade of "C" or better. A study of wetland ecosystems considering productivity and salinity variations with an emphasis on the interface of aquatic and terrestrial environments. Two hours of lecture and four hours of laboratory per week. A laboratory fee is required for this course. A laboratory fee is required for this course. (Odd Year Spring Semesters)

407/507. Forensic Biology. Credit 4 hours. Prerequisites: GBIO 151 and GBIO 153, or permission of the Department Head and all prerequisite courses must have a grade of "C" or better. An introduction to the use of biological information in civil and criminal investigations of deceased humans and wildlife. Topics will include basic principles of human decomposition, forensic anthropology, botany, entomology, odontology, and pathology. Laboratory component will include mock crime scene scenarios, emphasizing methods and procedures for recovery of crime scene evidence, forensic entomology, and decompositions rates. Three hours of lecture and three hours of laboratory per week. (Spring)

408/508. Biological Data Analysis. Credit 4 hours. Prerequisites: GBIO 153 and BIOL 154 with a grade of "C" or better. This course will focus on using computational methods and computer programs to acquire, clean and visualize biological data, and will include substantial hands-on segments working with real biological datasets. Topics covered will include: introductory programming, data analysis, and visualization for biological applications. No prior computing experience is required. Three hours of lecture and three hours of laboratory per week. A laboratory fee is required for this course. (Fall)

409. Internship. Credit 1-3 hours. Prerequisites: Junior/Senior standing and permission of the Department Head. This course is designed to give students practical experience working with professionals in their chosen field. The student is responsible for finding a sponsoring professor and a professional with whom to work. Students earn one credit for 3 hours internship per week averaged over the term, up to a maximum of 3

credits for 9 averaged hours per week. May be repeated more than once for up to a maximum of 3 credit hours. Means of evaluation is determined by the sponsoring professor and the professional. (Summer, Fall, Spring)

410/510. Introduction to Population Genetics. Credit 4 hours. Prerequisite: GBIO 312. This course explores the mechanics of evolution from the viewpoint of allelic frequencies. It begins with the basic theory of Hardy-Weinberg equilibrium and expands that theory to embrace linkage disequilibrium, selection in single-locus and multi locus systems, genetic drift, and the effects of mutation rates, population size, and migration on the genetic structure of populations. Exposure is given to classic ideas. (e.g., shifting balance theory and runaway sexual selection) and to applications of theory (e.g., breeding designs, conservation genetics). Three hours of lecture and three hours of laboratory per week. A laboratory fee is required for this course. (Varies)

411/511. Evolutionary Data Science. Credit 4 hours. Prerequisite: GBIO 405/505 Evolutionary Biology with a grade of C or better, or graduate student standing. This course is designed to teach students how to access and process data to build phylogenetic trees using statistical models of molecular and morphological evolution. These phylogenetic trees will be used to model how traits and organisms have evolved over time, and to assess model fit and adequacy. Visualizing phylogenetic trees and model solutions will also be discussed. Six hours of a mixture of lecture, hands-on computational exercise, and discussion of papers from the primary literature per week. (Spring)

412/512. Graduate School in Biology. Credit 1 hour. Prerequisites: Junior/Senior standing and GBIO 312 with a grade of C or better. This course is for upper-division undergraduates who may be interested in pursuing MS or PhD level education or current MS students interested in pursuing PhD study. The course discusses the types of possible future paths for these students, such as what types of careers there are in academia, what types of institutions hire MS or PhD-holding biologists, finding appropriate mechanisms for research funding, developing positive and proactive relationships with a supervisor, and supervising undergraduates in research. (Spring)

418/518. Community Ecology. Credit 4 hours. Prerequisites: GBIO 395 and all prerequisite courses must have a grade of C or better. The study of ecological communities and the interactions of species that co-occur in time and space. The course will include the history of ideas, important examples, methods for data analysis, and casual factors associated with communities. Other topics covered will include succession, ordination, classification, competition, predation and mutualism. Three hours of lecture and three hours of laboratory per week. (Varies)

434/534. Molecular Biology and Biotechnology. Credit 4 hours. Prerequisites: GBIO 312 and CHEM 122. This course provides an understanding of basic molecular biological principles and advances in biotechnology as applied in a variety of rapidly advancing areas including health, medical, agricultural, forensic, and environmental sciences. Students explore molecular and biochemical methodologies involving recombinant DNA and RNA-based technologies (e.g., miRNA and CRISPR), genomics and proteomics, immune technology, nanobiotechnology, transgenesis, gene therapy, cloning and stem cell technologies, biosensors, synthetic biology (biological machines), and how they are used in basic research, cancer/disease therapies, vaccine design, molecular diagnostics, tissue engineering, GMO crops, disease vector control, bio warfare, and more. Three hours of lecture and three hours of laboratory per week. A laboratory fee is required for this class. (Spring)

439/539. Introduction to Fresh Water and Estuarine Biology. Credit 4 hours. Prerequisites: GBIO 153 and BIOL 154 or equivalent and Junior standing or consent of the Department Head and all prerequisite courses must have a grade of C or better. A consideration of fresh water lakes and streams and estuaries as biological habitats and of the organisms which inhabit these environments. Attention will be given to limnology and the ecology of these areas. Two hours of lecture and one four-hour laboratory per week. A laboratory fee is required for this course. (Odd Year Fall Semesters)

441. Biology Seminar. [LCEN: CBIO 4561, Biology Seminar]. Credit 1 hour. Prerequisite: Senior standing in Biology. A review of important concepts and current events in biological sciences. May be repeated for maximum credit of two hours. Additional hours will not be counted towards student's major or in the cumulative GPA average. Meets two hours per week. (Summer, Fall, Spring)

442/542. Marine Biology. Credit 4 hours. Prerequisites: GBIO 153 and BIOL 154 or equivalent and Junior standing or consent of the Department Head and all prerequisite courses must have a grade of C or better. A consideration of the sea as a biological environment, of the organisms which inhabit the sea, and of the interrelationships existing between marine organisms and the physical, chemical, and biological aspects of their environments. Two hours of lecture and four hours of laboratory per week. A laboratory fee is required for this course. (Varies)

450. Research Problems. Credit 1-4 hours. Prerequisite: Junior standing in Biology. May be repeated more than once for up to a maximum of 4 credit hours. Additional hours will not be counted towards student's major or in the cumulative GPA average. A laboratory fee is required for this course. (Summer, Fall, Spring)

460. Research Problems II. Credit 1 – 4 hours. Prerequisites: GBIO 153 and BIOL 154 with a grade of C or better. May be repeated for a maximum of four credit hours. Cannot be used as credit for Concentration Electives for Biology degree requirements, but can be used for free electives credit. A laboratory fee is required for this course. (Summer, Fall, Spring)

481/581. Biogeography. Credit 3 hours. Prerequisites: GBIO 153, BIOL 154, and Junior standing or permission of the Department Head and all prerequisite courses must have a grade of C or better. Examines the distribution of organisms. A study of the patterns and processes of organism distribution from theoretical and empirical perspectives. Three hours of lecture per week. (Varies)

485/585. Conservation Biology. Credit 4 hours. Prerequisites: GBIO 153 and BIOL 154 and all prerequisite courses must have a grade of C or better. Recommended: GBIO 312 and 395. An examination of threats and disruptions to biological systems from the level of populations through ecosystems to global systems. Emphasis on basic principles of ecology, evolution, and genetics as they apply to conservation theory and practice. Consideration will also be given to social, economic, and political aspects of biodiversity conservation and the role of various governmental and non-governmental organizations and research institutions. Three hours of lecture and three hours of laboratory per week. A laboratory fee is required for this course. (Even Year Spring Semesters)

492/592. History of Biology. Credit 3 hours. Prerequisites: GBIO 153, BIOL 154, and Junior Standing, or permission of the Department Head and all prerequisite courses must have a grade of C or better. A general survey of the historical development theories of biological sciences from early man to the present. (Spring)

493/593. Special Topics in Biology. Credit 1-4 hours. Selected topics in Biology that are new or unique and are not covered in existing courses. This course may be repeated for credit if different topics are studied. (Varies)

498/598. Biological Science for Teachers. Credit 3 hours. Prerequisites: GBIO 151, GBIO 153, CHEM 121, and CHEM 122 and all prerequisite courses must have a grade of C or better. A capstone course designed for teacher candidates who will be teaching biology at the secondary level. Content includes current issues and research in science and pedagogy that focuses on the development, delivery and assessment of science knowledge in a secondary classroom based on national and state teaching standards. This course is used for the degree requirements in the Biology Education Concentration, but cannot be used for degree requirements in other concentrations in Biology. Six hours of lecture/laboratory per week, including competency-based clinical practice require for this course. A laboratory fee is required for this course. (Fall)

600. How to be a Biology Teaching Assistant. Credit 1 hour. Prerequisites: Acceptance into the Master of Science in Biological Sciences program and permission from the Department Head. A seminar course designed to prepare graduate students to be competent and effective Teaching Assistants and fellows in biology laboratories. Two hours of seminar and laboratory per week. May be repeated for a maximum credit of two hours. (Fall, Spring)

601. Professional Aspects of Biology. Credit 1 hour. Prerequisite: Admission to the MS degree program in Biological Sciences or permission of the Department Head. Readings, discussions and assignments designed to cover aspects of success in graduate school and a career in biology. Two hours of seminar per week. (Varies)

605. Ecotoxicology. Credit 4 hours. Prerequisites: Graduate student standing. Ecotoxicology is designed to develop an understanding of environmental toxins, the associated diversity of exposure mechanisms, as well as identify cellular, physiological, population and community-level effects of toxin exposure. Additional focus will emphasize endogenous detoxification mechanisms and the socio-economic relationships of environmental contamination and the regulatory decision-making process. Students will strengthen their ability to read and evaluate the scientific literature related to the discipline and gain operational exposure to toxicological techniques in a laboratory setting. Three hours of lecture and three hours of laboratory per week. A laboratory fee is required for this course. (Spring)

609. Estuarine Ecology. Credit 4 hours. A study of the estuary as an ecosystem with emphasis on the recent scientific literature on estuaries. Field studies on the Lake Maurepas/Lake Pontchartrain estuary. Two hours of lecture and four hours of laboratory per week. A laboratory fee is required for this course. (Varies)

610. Biostatistics. Credit 4 hours. Prerequisite: MATH 161 or permission of the Department Head. An introductory course in the concept of biostatistics and sampling strategy. Topics covered include measures of central tendency and dispersion; Z, t, chi-square, and F distributions; experimental design, partitioning of variance, test of hypotheses, and maximizing power; analysis of variance and regression. Emphasis on field and laboratory research problems. Three hours of lecture and two hours of laboratory per week. (Varies)

611. Advanced Biostatistics. Credit 4 hours. Prerequisite: GBIO 377 or 610 or permission of the Department Head. An advanced course in biostatistics that applies concepts, terminology, and notation from basic methods course(s) to advanced statistical techniques. Students will learn the major applications of experimental design, treatment arrangements analysis of covariance multiple regression, factor analysis, discriminant analysis, cluster analysis, and system modeling. Additional concepts will be developed such as blocking, covariables, nesting, pseudo replication, confounding, repeated measures, types of sums of squares, and optimization. Three hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Varies)

612. Limnological Methods. Credit 3 hours. Prerequisites: GBIO 153 and BIOL 154 or equivalent, and CHEM 122/124, permission of the Department Head. A course designed to acquaint the student with the methods and techniques for the collection and analysis of aquatic and microbiological samples. One hour of lecture and three hours of laboratory per week. A laboratory fee is required for this course. (Varies)

615. Systematics. Credit 3 hours. Prerequisite: Must be admitted to Master of Science Program, or permission of the Department Head. Studies in philosophy, theory, and methods employed in studying biodiversity. Phylogenetics is emphasized but alternatives are examined. Extensive computer time is required for the course. Three hours of lecture per week. (Varies)

616. Historical Ecology. Credit 3 hours. Prerequisite: Graduate standing in biological sciences or permission of the Department Head. Currently active behavioral and ecological processes and systems all have a historical component. The historical component obfuscates the study of these processes and systems. This course examines the problem of history in studying contemporary processes and shows how to identify history by several methods. Three hours of lecture per week. (Varies)

619. Applied Systematics. Prerequisite: Registration in or prior credit for GBIO 615 or permission of the Department Head. This course complements the content of GBIO 615 Systematics. Students will work with molecular and morphological data to infer phylogenetic trees using popular software packages. Students will also complete and present a project of their own design using course concepts. (Varies)

620. Environmental Management. Credit 3 hours. A course designed to provide students an overview of the issues and concepts associated with the business-economy/environmental interaction. The course will focus on the evolution of four themes, or four "shades of green" that contribute toward creating and sustaining competitive and strategic advantage. Credit cannot be received for both GBIO 620 and MGMT 620. (Fall)

652. Molecular Biology. Credit 4 hours. Prerequisites: One year of organic chemistry, GBIO 200 and 312. A study of recent techniques and findings in the field of molecular biology. Practical experience is emphasized. Three hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Varies)

655. Island Ecology. Credit 3 hours. A study of oceanic islands as natural laboratories for ecology and evolution. Topics will include the relationships of plants and animals with their environment on continental and volcanic islands and the biological characteristics of species that permit or constrain colonization of islands. Establishment, adaptation, speciation, and extinction on islands are examined. Also included will be a discussion of biogeographic principles and taxonomic patterns of island biota. Three hours lecture per week. (Varies)

660. Graduate Research Problems. Credit 1-2 hours per semester. Maximum credit two hours for thesis students. Additional hours will be graded on "Pass/Fail" basis and will not be counted toward student's major or in the cumulative GPA average. This course cannot be used for credit in the non-thesis option. A laboratory fee is required for this course. (Varies)

661. Non-Thesis Graduate Research Problems. Credit 1-4 hours. Research project for non-thesis graduate students. This course is required for all non-thesis graduate students. The course may be taken for variable credit in different semesters, but must be taken until the required four credits hours are earned. Requires prior approval of the Non-Thesis Research Agreement Form by the student's Graduate Faculty advisor and the Non-Thesis Committee. (Varies)

690. Special Topics in Biology. Credit variable, 2-4 hours. Selected topics in Biology that are new or unique and are not covered in existing courses. This course may be repeated for credit if different topics are studied. (Varies)

691. Graduate Seminar. Credit 1 hour. May be repeated for maximum credit of four hours. Additional hours will not be counted toward student's major or in the cumulative GPA average. One-two hours of seminar per week. (Varies)

770. Thesis. Credit 1-6 hours each semester, with 6 hours needed for graduation. The student must enroll in the thesis course each semester the thesis is in progress. The thesis is graded Pass-Fail. (Varies)

Gulf Coast Research Laboratory

Southeastern Louisiana University has an Affiliate Agreement with the University of Southern Mississippi for teaching marine sciences and related courses at the Gulf Coast Research Laboratory (GRCL) in Ocean Springs, Mississippi. Students wishing to take courses at GCRL must receive PRIOR approval from their Advisor and Department Head. Students apply, register, and take courses at GCRL and receive transfer credit at Southeastern as GBIO 493 or 593. GCRL offers room and board for an additional fee. All tuition fees, incidental fees, room and board, and any other charges or fees at GCRL are charged at the same rate as to Mississippi students (i.e., in-state rates). For more information on GCRL, visit <https://gcrl.usm.edu>.

Listed here are summer courses currently offered at GCRL – other courses not listed here may also be offered at any given summer.

NOTE: Registration in these courses requires PRIOR approval of the student's advisor and the Department Head.

SUMMER COURSES (with GCRL prefix-these courses transfer to Southeastern as GBIO 493 or 593)

COA 300	Oceanography	Credit 3 hours
COA 300L	Oceanography Lab	Credit 2 hours
COA 301	Marine Biology	Credit 3 hours
COA 301L	Marine Biology Lab	Credit 2 hours
COA 421/521	Marine Ichthyology	Credit 3 hours
COA 421L/521L	Marine Ichthyology Lab	Credit 2 hours
COA 428/528	Marine Invertebrate Zoology	Credit 3 hours
COA 428L/528L	Marine Invertebrate Zoology Lab	Credit 2 hours
COA 442/542	Elasmobranch (Shark) Biology	Credit 3 hours
COA 442L/542L	Elasmobranch (Shark) Biology Lab	Credit 2 hours
COA 443/543	Marine Mammals	Credit 3 hours
COA 443L/543L	Marine Mammals Lab	Credit 2 hours
COA 446/546	Marine Ecology	Credit 3 hours
COA 446L/546L	Marine Ecology Lab	Credit 2 hours
COA 490/590	Special Topics	Credit 1-6 hours
COA 492/592	Special Problems	Credit 2-6 hours

Louisiana Universities Marine Consortium

Southeastern Louisiana University is a member of the Louisiana Universities Marine Consortium (LUMCON) and offers courses at the LUMCON DeFelice Marine Center in Cocodrie, Louisiana. Students must first apply to LUMCON. Once accepted into the program, the student then registers for credit at Southeastern Louisiana University. Room and board expenses at LUMCON and applicable laboratory fees will be assessed. Go to <http://www.lumcon.edu> for more information.

NOTE: These courses are taken as GBIO 493/593 Special Topics in Biology and require PRIOR approval of the student's advisor and the Department Head.

SPRING COURSES

Changing Coastal Oceans Credit 3 hours Spring only
Taught via compressed video networking. Requires one weekend field trip to LUMCON Marine Center.

SUMMER COURSES

Marine Ecosystem Ecology	Credit 3 hours	Three weeks	Even years
Deep-Sea Biology	Credit 3 hours	Three weeks	Even years
Introduction to Marine Science	Credit 4 hours	Four weeks	Even years
Coral Reef Ecology	Credit 3 hours	Three weeks	Even years
Marine Field Ecology	Credit 4 hours	Four weeks	Even years
Coastal Field Geology	Credit 3 hours	Three weeks	Even years
Introduction to Marine Zoology	Credit 4 hours	Four weeks	Odd years
Marine Invertebrate Ecology	Credit 3 hours	Three weeks	Odd years
Wetland Vegetation	Credit 3 hours	Three weeks	Odd years
Marine Fish Ecology	Credit 3 hours	Three weeks	Odd years

These courses are taught by prior arrangement:

Topics in Marine Science	Credit 1-6 hours
Special Problems in Marine Science	Credit 1-6 hours

NOTE: These courses are taken as GBIO 690 Special Topics in Biology and require PRIOR approval of the student's advisor and the Department Head

SPRING COURSES

Changing Coastal Oceans Credit 3 hours Spring only
Taught via compressed video networking. Requires one weekend field trip to LUMCON Marine Center.

SUMMER COURSES

Marine Ecosystem Ecology	Credit 3 hours	Three weeks	Even years
Deep-Sea Biology	Credit 3 hours	Three weeks	Even years

These courses are taught by prior arrangement:

Topics in Marine Science	Credit 1-6 hours
Special Problems in Marine Science	Credit 1-6 hours

Environmental Health Sciences Partnership with Tulane University

Southeastern has established a partnership with Tulane University that allows qualified juniors or seniors at Southeastern to take graduate level courses in Environmental Health Sciences at Tulane University. The participating student may follow any of the concentrations in the Department of Biological Sciences curriculum; however, CHEM 251, Analytical Chemistry and CHEM 254, Quantitative Analysis Laboratory are required for those who enroll in the program. In addition, nine credit hours (3 of 4 courses) of Tulane Courses are required. Those courses can substitute for nine hours of upper-level Biology electives with the permission of the Department Head. Upon

successful completion of this course work and graduation, the student would be eligible for acceptance into the Master of Public Health Degree Program at Tulane University. Interested students should consult with the Department Head.

Student Eligibility and Admissions: Students must apply to and be accepted by both programs at the Tulane School of Public Health and Southeastern. These students must;

1. Apply in their junior year of undergraduate study to begin courses in their senior year
2. Have a major (or 60 credits) in the sciences, math, and/or engineering with 15 of these credits in upper level (junior/senior) courses by undergraduate graduation
3. Have a grade point average of at least 3.0
4. Be recommended by their advisor with approval of the Department Head
5. Submit three letters of recommendation with one of the letters from the applicant's advisor
6. Submit a written statement of career goals
7. Take the GRE in their senior year

Graduate Courses at Tulane (students must take 3 of 4)

ENHS 603 Survey of Environmental Health Credit 3 hours

ENHS 660 Principles of Toxicology Credit 3 hours

ENHS 651 Water of Quality Management Credit 3 hours

ENHS 762 Health Risk Assessment Credit 3 hours

General Business (GB)

208. Latin American Culture and Communication for Business. Credit 3 hours. This course is designed to provide business majors with skills necessary to communicate, navigate, and conduct business in Latin American nations. (Varies)

470. Independent Study. Credit 3 hours. Prerequisite: Junior standing. A course designed to provide students with the opportunity to explore any general business concentration area through a special project, assigned readings, or other types of work. Department Head of the designated faculty will approve the proposal of the independent study and monitor the student's progress. (Varies)

495. Special Topics in General Business. Credit 3 hours. Prerequisite: Junior Standing. This course is an approach to the examination of contemporary business issues. It provides students with the knowledge and skills necessary to navigate the global marketplace. Credit toward the degree will not be granted for both MGMT 420 and GB 495. (Varies)

695. Special Topics in Contemporary Business. Credit 3 hours. A course devoted to an investigation, analysis, and discussion of contemporary business trends, policies, and current issues. (Varies)

General Business Technology (GBBT)

234H. Business Communications. Credit 3 hours. Prerequisite: English 102. A study of fundamental business communications, business letters, and reports. (Varies)

351. Telecommunications in Business. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. Theory of electronic systems. Applications to networking capabilities of microcomputers. Issues related to telecommunications. (Varies)

495. Special Topics in Business Communication. Credit 3 hours. Prerequisite: GBBT 234 or permission of the Department Head. Investigation and presentation of current and relevant business communication issues which can affect achievement in the free enterprise system. (Varies)

618. Team Building in Business Communication. Credit 3 hours. Team development in context of business tasks, small group synergies, and communication processes. Course is applied rather than theoretical in nature and stresses techniques by which business people can motivate groups to behave as teams. Some attention to needs of not-for-profit organizations, virtual (electronic) groups, and cross-cultural diversity. (Varies)

635. International Business. Credit 3 hours. Prerequisite: Graduate standing. Dynamics of international business, including cultural analysis, foreign entry, globalization, and role of technology in multinational communication and logistics. Case studies and audiovisuals demonstrating economic and supervisory factors in business across cultural and national boundaries. (Varies)

651. Technology in Business Communication. Credit 3 hours. Prerequisite: MBA student or permission of instructor. Exploration of the capabilities of contemporary technological communication networks with emphasis on applications such as e-mail, academic research, discussion groups, marketing application, electronic presentations, and individual home-page construction. (Varies)

681. Administrative Communication Theory. Credit 3 hours. A study of administrative communication theory and practice as it relates to various types of organizations and their goals. Emphasis is directed toward improving communication skills of administrators in business, education, government, and other organized groups in reaching their purposes and goals. (Varies)

695. Special Topics in General Business. Credit 3 hours. Prerequisite: Graduate standing. A seminar course focusing on selected issues in general business. (Varies)

Geography (GEOG)

103. Introduction to Geography. Credit 3 hours. This course surveys the basic concepts of geography. Introduces the student to physical and cultural aspects of geography and describes the interaction of humans and their environment. (Summer, Fall, Spring)

126. Environmental Conservation and Geography. Credit 3 hours. This course explores the interactions between humanity and the environment that have led to current environmental problems. Topics to be explored include: biodiversity, global climate change, human population growth, and natural resource conservation. (Varies)

141. World Regional Geography I. Credit 3 hours. A study of the patterns of cultural characteristics and human and physical landscapes of the developed, industrial world regions. (Summer, Fall, Spring)

142. World Regional Geography II. Credit 3 hours. A study of the patterns of cultural characteristics and human and physical landscapes of the developing world regions. (Summer, Fall, Spring)

301. Geography of Europe. Credit 3 hours. Prerequisite: Sophomore standing or consent of the Department Head. A survey and analysis of the physical and cultural environments of the European continent. Emphasis on the physical landscape, climate, settlement patterns, culture, land use, urbanization, and economic development. (Varies)

305. Field Methods and Map Reading. Credit 3 hours. Prerequisite: GEOG 103 or consent of the Department Head. Techniques of geographic field research and the interpretation and analysis of maps. Students will use instruments such as compasses, transits, handheld GPS units, and clinometers to gather data. (Varies)

306. The Atmosphere. Credit 3 hours. Prerequisite: GEOG 103 or consent of Department Head. This course provides an examination of the processes and operations in the atmosphere, world climatic patterns, and classification of climates. (Varies)

309. Introduction to Physical Geography. Credit 3 hours. Prerequisite: GEOG 103 or consent of the Department Head. A survey of the earth-sun relationships, elements of weather and climate, climatic regions, landforms, vegetation, and soils of the earth. Emphasis will be placed on the interaction of humans with the physical landscape. (Varies)

322. Geography of Louisiana. Credit 3 hours. Prerequisite: Sophomore standing or consent of the Department Head. Examines the physical and cultural geography of Louisiana with an emphasis on the physical geographical elements and the geographical implications of the state's varied cultural heritage. (Summer, Fall, Spring)

326. Environmental Impact Assessment. Credit 3 hours. Prerequisite: GEOG 103 or consent of Department Head. The course examines and evaluates the impacts of large-scale projects on the quality of the environment. The legal requirements for the preparation of an environmental impact statement (EIS) as prescribed by the National Environmental Policy Act of 1969 will be addressed. (Varies)

343. Geographic Information Systems (GIS) 1. Credit 3 hours. Prerequisites: GEOG 103 and MATH 241 or consent of the Department Head. An introduction to the theory, principles, and capabilities of Geographic Information Systems. Extensive hands-on experience with the ArcGIS® software package. One-hour lecture and two hours lab. (Varies)

355. Cartography. Credit 3 hours. Prerequisite: GEOG 103 or consent of the Department Head. The course is designed to serve as a foundation for geographic analysis. The course will focus on the basic principles of cartography. Topics include projections, cartographic procedures, map symbolization, color use guidelines, and map typography. (Varies)

370. Remote Sensing and Aerial Photo Interpretation 1. Credit 3 hours. Prerequisites: GEOG 103 and MATH 241 or consent of the Department Head. An introduction to the fundamental principles and practices of aerial photography, remote sensing, photogrammetry, and photo interpretation. One-hour lecture and two hours lab per week. (Varies)

400/500. Independent Study. Credit 1-3 hours. Prerequisites: Consent of Department Head and Junior standing. Student works with an instructor on a one-to-one basis and prepares a research report on an appropriate topic. May be repeated in one to three-hour credits for a total of 6 hours. New materials are investigated in each repeat. (Varies)

401/501. Historical Geography of the United States. Credit 3 hours. Prerequisite: Junior standing, or consent of the Department Head. A historical study of the changing geographic aspects of the land area of the United States from the pre-Columbian era to the present. Emphasis is placed upon the sequence of land occupation and utilization in various regions of the country. Especially recommended to teachers of the social studies. (Varies)

402/502. Geography of United States and Canada. Credit 3 hours. Prerequisite: Junior standing or consent of the Department Head. The physical and cultural geography of the United States and Canada. Emphasis on the physical landscape, climate, settlement patterns, culture, land use, urbanization, and economic development. (Varies)

408/508. Geography of Natural Hazards and Disasters. Credit 3 hours. Prerequisite: GEOG 103 or consent of Department Head. Introduction to the geographic study of natural hazards and disasters. Topics include: hurricanes, earthquakes, tsunamis, and volcanoes.

410. Cultural Geography. Credit 3 hours. Prerequisites: GEOG 103 and Junior standing or consent of the Department Head. A study of man-land relationships, with emphasis on the distribution of peoples and variations in cultural landscapes. (Varies)

423/523. Climate Change. Credit 3 hours. Prerequisite: GEOG 103, ESSC 101, or ESSC 102. This course will provide an overview of global climate change. Topics covered will include: the basic science of climate change, climate models, paleoclimatology, impacts of future climate change, and mitigation strategies. (Varies)

443/543. Advanced Applications of GIS. Credit 3 hours. Prerequisite: GEOG 343/533 or consent of the Department Head. The course focuses on the use and applications of GIS techniques in solving practical geographic problems. Extensive hands-on experience with the various extensions of the ArcGIS® software package. One-hour lecture and two hours lab per week. (Varies)

470/570. Advanced Remote Sensing. Credit 3 hours. Prerequisite: GEOG 370/560 or consent of the Department Head. This course will cover the theory and application of image-processing techniques such as: data corrections, enhancements, transformations, and classification for digital imagery. One-hour lecture and two hours lab per week. (Varies)

473/573. Raster GIS. Credit 3 hours. Prerequisites: GEOG 443/543 and GEOG 470/570 or consent of the Department Head. An advanced course on the use of raster GIS for spatial query, problem analysis, modeling, and decision support. The remote sensing software packages, Imagine® and Imagine Analysis® by ERDAS, will be used to explore the procedures for processing digital satellite and air photo images and for developing modes for geographic analysis. One-hour lecture and two hours lab per week. (Varies)

495/595. Special Topics Seminar. Credit 3 hours. Prerequisites: Junior standing and consent of the Department Head. An in-depth study of selected topics in Geography that are not covered in existing courses. May be repeated for a total of six credit hours if content is different. (Varies)

698. Special Topics in Geography. Credit 3 hours. Selected topics in areas not available in existing courses. May be new or unique issues or contemporary geographical topics relevant to various social and/or global issues. May be repeated for credit when different topics are studied. (Varies)

German (GERM)

101. Elementary German I. [LCCN: CGRM 1013, Elementary German I]. Credit 3 hours. The beginning course for students with no knowledge of German. All appropriate elements of basic language learning are utilized for the purpose of providing a foundation in the language and culture of the countries where German is spoken. Class work supplemented by aural-oral drill in the language laboratory. Offered as the first of four sequential courses (101, 102, 201, 202) designed to provide an overall desired proficiency. (Fall, Spring)

102. Elementary German II. [LCCN: CGRM 1023, Elementary German II]. Credit 3 hours. Prerequisite: GERM 101 or equivalent. Continuation of GERM 101. (Fall, Spring)

201. Intermediate German I. [LCCN: CGRM 2013, Intermediate German I]. Credit 3 hours. Prerequisite: GERM 102 or equivalent. Completion and review of basic elements of grammar. Introduction of reading material of moderate difficulty. (Fall, Spring)

202. Intermediate German II. [LCCN: CGRM 2023, Intermediate German II]. Credit 3 hours. Prerequisite: GERM 201 or equivalent. A course with emphasis on proficiency in reading and continuation of grammar review. (Fall, Spring)

310. Advanced German Conversation. Credit 3 hours. Prerequisite: GERM 202 or equivalent. Intensive practice of German conversation. Work will be based on a study of conversational strategies, aural comprehension practice, coaching in pronunciation, and analysis of cultural differences bearing on social interactions. (Varies)

311. Advanced German Grammar and Composition. Credit 3 hours. Prerequisite: GERM 202 or equivalent. Intensive grammar review and writing practice in German. Recommended for students with a minor in German and for others who wish to perfect their language skills. (Varies)

314. German Civilization. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. Five hundred years of German history, arts, literature, music and politics from the Reformation to modern Germany. Taught in English. (Varies)

370. Studies in German Postwar Cinema. Credit 3 hours. A study of German postwar filmmakers in their confrontation with German history and postwar society. Taught in English; German language assignments for students minoring in German. (Varies)

423. Special Topics in German Study. Credit 3 hours. Prerequisite: Junior standing or permission of Department Head. A special topics course that offers a detailed analysis of a particular genre, movement, author, or topic. May be repeated for credit as topics vary. (Varies)

Health Sciences (HSCI)

270. Applying Evidence to Improve Healthcare Outcomes. Credit 3 hours. Students will build competencies in selecting, applying, and evaluating research methods in solving organizational problems or implementing outcome effectiveness strategies in healthcare organizations. This course provides an overview of the skills needed in daily operations for gathering statistical data used in planning and evaluating processes in the healthcare workplace. A laboratory fee is required for this course. (Fall)

463. Special Topics in Interdisciplinary Global Health and Wellness. Credit 3 hours. This course examines interdisciplinary global and multicultural health and wellness issues. Focused visits and corresponding projects in the student's major will be components of the course. May be repeated for 6 hours total credit. (Varies)

464. Interprofessional Education, Practice and Research in the Health Sciences. Credit 3 hours. This course emphasizes interprofessional education and collaborative practice in the core competencies of ethics, role and responsibilities, communication, and team work across healthcare settings and professions. Current issues, trends and practice strategies will be explored within interactive learning and practice opportunities. (Varies)

480/580. Prior Learning Assessment in Health Science. Credit 1-3 hours. Utilizes learning theories and reflection techniques to assist students to identify and evaluate previous learning outside the traditional classroom such as work, volunteer or military experiences. Students will create a professional portfolio to document college-level experiential learning. The course is graded Pass/Fail. May be repeated for up to 12 hours credit. (Varies)

499. Capstone Experience in Health & Human Sciences. Credit 3 hours. Prerequisite: Permission of the department head. The capstone experience will comprise a minimum of 120 hours of independent study. Students will apply the culminating knowledge and skills acquired during their program to the completion of a project that will draw on their real world and/or field experiences. This class requires independent and /or field work. (Varies)

663. Special Topics in Interdisciplinary Global Health and Wellness. Credit 3 hours. This course explores interdisciplinary global and multicultural health and wellness issues including: factors that influence the health and wellness of individuals and populations around the world; sources of global health information and services; and the role of healthcare professionals as providers and advocates for health and wellness of people in their communities and around the world. Focused visits and corresponding projects in the student's major will be components of the course. May be repeated for 6 hours total credit. (Varies)

664. Interprofessional Education, Practice and Research in the Health Sciences. Credit 3 hours. This course emphasizes interprofessional education and collaborative practice in the core competencies of ethics, role and responsibilities, communication, and team work across healthcare settings and professions. Current issues, trends and practice strategies will be explored within corresponding team-based projects in the student's major and professional scope of practice. Graduate students will engage in activities that place emphasis on the synthesis and analysis of evidence-based practice and its application to a variety of healthcare settings. (Varies)

678. Advanced Research Methods in the Health Sciences. Credit 3 hours. Prerequisites: Permission of the department head. This course focuses on the application of quantitative and qualitative research as well as interpreting and translating research within the health sciences. (Varies)

699. Capstone Experience in Health & Human Sciences. Credit 3 hours. Prerequisite: Permission of the department head. The capstone experience will comprise a minimum of 120 hours of independent study. Student will apply the culminating knowledge and skills acquired during their program to the completion of a project that will draw on their real world and/or field experiences. This class may require field work. (Varies)

700. Communication Across Cultures, Professions, and Languages in Healthcare Settings. Credit 3 hours. This course will focus on the role of communication and culture in the context of healthcare settings. Students will consider issues related to linguistic, cultural and professional differences that can create barriers to healthcare in a global context. Coursework will include case studies on specific populations and areas of healthcare that include both medical and administrative contexts. (Varies)

Health Studies (HS)

The Kinesiology and Health Studies Department recommends that each student obtain a medical examination and be covered by an adequate accident and hospital insurance policy before participating in any of the programs of the department.

131. Emergency Health Care. Credit 2 hours. A course dealing with the cause and prevention of accident; the acquisition of sufficient knowledge to determine the nature and extent of injury; and sufficient skill to administer proper first aid. Includes a study of the American Red Cross program and the American Medical Association Medical Self-Help Training Course. A laboratory fee is required for this course. (Fall, Spring)

133. Healthy Lifestyles for the 21st Century. Credit 3 hours. This course is designed so that students learn the importance of identifying and applying steps for making decisions and taking responsibility for their own health-related learning and behaviors. Knowledge recall as well as more advanced learning skills are addressed in assignments and examinations. Students also become aware of a wide range of health resources, support services, and technology. (Fall, Spring)

162. Drugs and Society. Credit 3 hours. Students will know the incidence of drug use and abuse in society, pharmacology of selected drugs and principles of altering one's state of consciousness; will know where they stand as to their own drug use, be able to communicate attitudes about drugs; explore alternatives to substance abuse, and approaches to prevention and community resource. (Fall, Spring)

200. Foundations of Public Health. Credit 3 hours. Prerequisite: HS 133. This course provides an overview and basic principles of health education and public health, including the public health system, the medical care system, and the role of law and government in public health. It will include the historical aspects of public health, ethics, and the CHES certification areas and responsibilities. (Fall, Spring)

232. Introduction to Elementary School Health and Physical Education. Credit 3 hours. Prerequisites: EDUC 203 and 212. Overview of health and physical education issues and topics. Consideration will be given to the principles of state law and policies regarding health and physical education. Introduction to curriculum content and activities in health and physical education. Two hours lecture and one-hour laboratory per week. (Varies)

251. Health and Human Sexuality-Contemporary Perspectives. Credit 3 hours. Emphasis will be placed on the relationship between personal health and human sexuality. The understanding of human sexuality through self-awareness, value clarification and decision-making will also be a concern. Students will be encouraged to reflect critically upon their feelings and attitudes toward their own sexuality and the sexuality of others in their cultural setting. (Fall, Spring)

252. Health and Stress. Credit 3 hours. Students will explore health problems related to stress and tension through analysis of causative and psycho-social stresses and intervening physiological mechanism. Particular emphasis is placed on prevention and control of stress through techniques such as exercise, neuro-muscular relaxation, nutrition, and meditation. (Fall, Spring)

312. Community and Population Health. Credit 3 hours. Prerequisites: HS 133 and Sophomore standing. This course highlights the concepts of population health, public health and interdisciplinary professional collaboration required to address the health needs of communities. Students will explore how human ecology and conservation of human resources, environmental health, disease prevention and control, and community resources impact the health of populations. (Fall, Spring)

313. Healthcare Delivery Systems. Credit 3 hours. Prerequisite: Junior Standing or permission of the Department Head. This course will examine the healthcare delivery system in the United States. It will examine the entire Continuum of Care and uses the construct of a fully integrated system as a means to evaluate the current system. Key issues confronting healthcare today will be explored. (Fall, Spring)

315. Study of Human Diseases I. Credit 3 hours. Prerequisites: HS 133, ZOO 250, and ZOOL 252. The course builds on an understanding of human anatomy and physiology, and integrates the study of human disease with focus on risk factors, clinical manifestations, pathology, and prevention. This course focuses on cardiovascular disease, hypertension, diabetes, and chronic kidney disease. Emphasis will be placed on common assessment and screening methods, behavioral interventions, and pharmacological interventions to address these issues. (Fall)

316. Study of Human Diseases II. Credit 3 hours. Prerequisites: HS 133, ZOO 250, and ZOOL 252. The course builds on an understanding of human anatomy and physiology, and integrates the study of human disease with focus on risk factors, clinical manifestations, pathology, and prevention. This course focuses on chronic obstructive pulmonary disease, cancer, and neurological diseases. Emphasis will be placed on common assessment and screening methods, behavior interventions, and pharmacological interventions to address these issues. (Spring)

331. Health Communication and Media. Credit 3 hours. Prerequisites: HS 133 and 200. This course is designed to provide students with a critical understanding of the effects of the media in promoting and impeding the achievement of public health goals. Students will develop the skills necessary to use media strategically to advance public health policies and social change. This course covers the design, implementation and evaluation of media campaign to promote public health goals. (Fall, Spring)

335. Contemporary Women's Health and Wellness. Credit 3 hours. Prerequisite: Sophomore standing. This course will identify a broad range of health issues that are unique to or of special importance to women, and will also examine the roles women play as both providers and consumers of health care. The student will be provided with the opportunity to explore health care issues of women throughout the lifespan as well as assess their current health status or the health status of women around them. The course encourages student to examine their current health knowledge, attitudes, and behaviors and explore possibilities for self-improvement. Special attention will be given to current social, environmental, physical, mental, economic, lifestyle, political and human rights factors that influence women's health. (Varies)

340. Healthcare Law and Ethics. Credit 3 hours. Prerequisites: HS 200, 312, or 313; and Junior standing or permission of the Department Head. The course will present government policies and guidelines related to the operation of health care systems. Emphasis will be placed on the implementation of healthcare and the responsibilities and ethics ascribed to healthcare managers. (Varies)

351. Health Problems of the Aging and Aged. Credit 3 hours. Students will examine the psychological, physiological and socio-economic aspects of aging; sexuality; death, dying, and bereavement; self-actualization and creativity; health needs and crisis; and medical-care programs. (Fall, Spring)

360. Introduction to Epidemiology. Credit 3 hours. Prerequisites: Junior standing, MATH 241, and HS 133, or permission of Department Head. An introduction to the study of distribution of health events in human populations. Methods of assessing health states in populations by the use of morbidity and mortality data. Includes disease tracking and control methods for use in health care decisions. Major types of epidemiological investigations are also studied. (Fall and Spring)

361. Introduction to Environmental Health. Credit 3 hours. Prerequisite: Sophomore standing. This course will cover environmental health issues at local, state, national, and international levels. Benefits of and advances in environmental health will be studied as well as limitations in this current science. (Varies)

362. Promoting Health in the Worksite. Credit 3 hours. Prerequisites: Junior standing and HS 133 or permission of Department Head. Introduction to the design and implementation of health programs in a variety of worksite settings. Attention to concerns of administrative and staff support, recidivism, specific interventions, and policy. (Fall, Spring)

401. Health Instruction. Credit 3 hours. Prerequisites: Junior standing, HS 133, and either HS 200, HS 312, EPSY 301, or PSYC 204. This course will examine different strategies and methods that can be used in health education in various settings, including schools, communities and worksites. This course is designed primarily for Kinesiology and Health Studies majors. Students in other majors who wish to enroll must receive permission from the KHS Department Head. Consideration is given to elementary and secondary school as well as adult content selection; implementation, and evaluation procedures. Includes preparation and presentation of selected health topics. Teaching strategies and basic principles of health education are emphasized. (Fall)

410. Internship in Health Sciences. Credit 3-6 hours. A senior-level internship during which students engage in practical experience in the field. A minimum of 320 field-based hours is required for course completion. Detailed requirements are provided in the catalog in the Department of Kinesiology and Health Studies section. May be repeated for a total of six hours. A laboratory fee is required for this course. (Fall, Spring)

420. Health Promotion Program Planning. Credit 3 hours. Prerequisites: Junior standing, HS 133, and either HS 200 or 312, or permission of Department Head. A course for the individual desiring to become a health educator. An exploration of the knowledge and skills required for effective professional health education practice. Includes an introduction to current theory and concept; methods of assessing, planning, implementing, and evaluating health education/promotion programs; ethical issues; plus professional competencies and credentialing. (Fall)

430. Health Consumerism and Introduction to Complementary and Alternative Modalities for Health Professionals. Credit 3 hours. An exploration of alternative and complementary healthcare treatments and therapies covering a broad range of healing philosophies. Students will examine safety and effectiveness, practitioner expertise, service delivery and cost. Current research conducted by the National Center of Alternative and Complementary Health will be investigated. (Varies)

435. Healthcare Administration. Credit 3 hours. Prerequisites: HS 200, 312, or 313; and Junior standing or permission of the Department Head. This course will introduce concepts, principles, and practices of healthcare administration. Students will develop their knowledge in areas including negotiation, leadership, organizational design, organizational culture, how people work in organizations and strategy. (Varies)

439. Spirituality and Health. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. An exploration of the influences of spirituality on aspects of health and disease. Through a combination of class discussion, group activities, guest speakers, and self-reflection, students will identify the relationship between spirituality, illness, and health promotion. (Varies)

440. Research Methods in Health Sciences. Credit 3 hours. Prerequisites: Junior standing, and either HS 200 or HS 312, or permission of the Department Head. This course introduces students to research theory and methods of the health science field. The research methodologies covered in this class are applicable to all disciplines of the health science field. Students will learn the entire process for conducting and evaluating scientific research. (Spring)

442. Social Determinants of Health. Credit 3 hours. Prerequisites: HS 133, 200, and 360 or permission of the Department Head. This course will provide an overview of the social determinants of health, health disparities, and the linkage between social epidemiology and health policy. Students will explore the ways health and illness are influenced by social and economic determinants. Includes a discussion of the key roles that health professionals play in ensuring equitable treatment of vulnerable populations. (Fall)

454. Health Coaching for Behavior Change. Credit 3 hours. Prerequisites: Junior standing and HS 133 or permission of Department Head. Students will explore and apply principles of modifying health behaviors on an individual, group, and community level for the prevention of health problems or the adoption of healthy lifestyles. Emphasis is placed on introducing the role of the Health Coach and the use of Motivational Interviewing and counseling skills for assisting others in confronting personal health concerns. (Fall, Spring)

461. The School Health Program. Credit 3 hours. Prerequisites: HS 131, 133 and Junior standing. A study of administrative policies, procedures and principles essential to the development and implementation of a comprehensive school health program. (Fall)

462. Health Seminar. Credit 3 hours. Prerequisite: Junior standing. Course identified by description each semester offered. May be repeated as topics vary. (Varies)

601. Statistical Methods in Health Studies. Credit 3 hours. Special parametric and non-parametric statistics applicable to research techniques in health studies. (Fall)

603. Contemporary Problems and Issues in Health. Credit 3 hours. Identification and study of current problems and issues in health and health education. Extensive reading and critical analysis of literature required. (Varies)

606. Introduction to Research. Credit 3 hours. Prerequisite: HS 601. Principles, procedures, and techniques of research with an intensive survey of current scientific investigations in the areas of health. Special attention is given to practical application. (Spring)

608. Introduction to Public Health. Credit 3 hours. This course focuses on principles of health education and public health. It will include an examination of public health history and ethics, the role of public health in medical care systems, the role of law and government in public health, and the areas of responsibilities of the Certified Health Education Specialist certification. (Varies)

610. Health Education Curriculum and Instruction. Credit 3 hours. Prerequisites: HS 638 and one of the following: HS 617, 619, 620, 621, 622, 624, 626, 627, 628, 629, or 636, or permission of the Department Head. This course will prepare graduate students with the necessary competencies for evaluating health education curricula and for developing health instructional units for teaching health in various settings such as schools, community, and work-sites. Graduate students will learn how to write and evaluate lesson plans using computer technology and instructional methods that are age and developmentally appropriate and demonstrate teaching competencies during field experiences. (Varies)

611. Environmental Health. Credit 3 hours. This course will survey local, state, national and international environmental health issues. Emphasis will be placed on environmental stewardship including health advocacy. (Varies)

613. Health Disparities. Credit 3 hours. This course provides students with an in-depth overview of health disparities. Topics include the interconnectedness of social, economic, environmental and cultural factors and health, and the ways these factors contribute to morbidity and mortality differences among underserved populations. Upon completion students will possess the knowledge and skills needed to measure local disparities and create health disparities reports. (Varies)

615. Health Communication. Credit 3 hours. Focuses on health media literacy, and methods of planning, implementing, and evaluating health presentations. Includes fundamentals of multimedia presentations, and designing and producing health education materials. (Varies)

617. Spiritual Health: Research and Programming in Health Promotion. Credit 3 hours. The focus of this class is to review current research in the field of spiritual health and its application in health promotion programming. Emphasis will be placed on an evaluation of current literature, a review of current assessment tools, and the process of integrating spiritual health into current health promotion programming. (Varies)

619. Complementary and Integrative Health Practices. Credit 3 hours. An exploration of the traditional health care fields including allopathic/osteopathic health care plus a variety of integrative and complementary healthcare treatments and therapies. This course will include information about health consumerism and current healthcare issues. Current research conducted by the National Center for Complementary and Integrative Health will be investigated. (Varies)

620. Drug Education Programming. Credit 3 hours. A study of overall drug use and abuse in our society, especially among youth. Particular attention will be given to the historical foundations of drug prevention and a review of successful drug prevention programs. Includes drug education curriculum development and evaluation strategies. (Varies)

621. Sexuality Education Programming. Credit 3 hours. The acquisition of human sexuality information and an exploration of personal values and current sexuality research. Includes sexuality education curriculum development and evaluation strategies. (Varies)

622. Stress Management Programming. Credit 3 hours. Of importance will be the mind-body connection or the psycho-physiological effects of stress on health. Emphasis will be placed on prevention of stress and demonstration of a variety of strategies to control stress and tension. Includes stress management program development and evaluation strategies. (Varies)

624. Health Counseling. Credit 3 hours. To provide health care provides educators and counselors the opportunity to develop skills and knowledge to advise students and clients confronted with personal health concerns. (Varies)

626. Health Aspects of Aging, Death and Dying. Credit 3 hours. Students will examine the physiological, psychological, and socio-economic aspects of aging, death and dying. Special consideration will be given to health needs and crisis, medical-care programs, wellness lifestyles, self-actualization and creativity, death, dying, and bereavement. (Varies)

627. Current Health Practices and Preventive Medicine. Credit 3 hours. This course will apply unified concepts of health and disease, including the body, mind and spirit, to a sound philosophy of the personal obligation to preserve one's own health; examine holistic approaches to health care and delivery and health behavior by addressing the biological, psycho-social, and environmental factors which emphasize the prevention of disease and maintenance of optimum health; analyze the application of wellness programs to business, industrial and educational settings. (Varies)

628. Health Seminar. May be repeated as topics vary. Credit 3 hours. Course identified by description each semester offered. (Varies)

629. Health Seminar. May be repeated as topics vary. Credit 3 hours. Course identified by description each semester offered. (Varies)

632. Independent Research. Credit 3 hours. Prerequisite: Must be a graduate student in the Health and Kinesiology Master of Arts program and have taken at least 9 hours of graduate course work including HS 601 or 606, or permission of the Department Head. Student will demonstrate research design and literature review competency. If a research study is implemented, student must obtain appropriate IRB approval. (Fall, Spring, Summer)

634. Independent Reading. Credit 3 hours. Prerequisites: Must be a graduate student in the Health & Kinesiology Master of Arts program and have taken at least 9 hours of graduate course work, or permission of the Department Head. Directed study of the professional and research literature in an area of health not covered in other courses. (Fall, Spring, Summer)

635. Worksite Health Promotion. Credit 3 hours. An analysis of strategies for planning, implementation, and evaluation of health promotion programs in worksite settings. Topics include: successful worksite models, assessing corporate culture, screening approaches, and legal issues. (Varies)

636. Nutrition for Health and Physical Performance. Credit 3 hours. Prerequisite: Basic nutrition or permission of the Department Head. Principles of nutrient metabolism and their role and function in the maintenance of health and prevention of disease. Development of nutritional plans for specific conditioning, including dietary concerns for those in physical performance programs. Credit may not be received for both HS 636 and KIN 636. (Varies)

637. Epidemiology. Credit 3 hours. Prerequisite: HS/KIN 601 or permission of Department Head. Covers the principles and methods of epidemiology. Includes research designs and methods used to study and describe disease occurrence. Develops skills in obtaining, evaluating and interpreting research findings and other population data sources. (Varies)

638. Program Planning and Evaluation. Credit 3 hours. Analysis of planning models and diagnostic techniques used to design programs in a variety of settings. Emphasis on systematic analysis of needs, establishment of objectives and development of evaluation strategies. (Varies)

646. Grant Proposal Writing. Credit 3 hours. Focuses on the necessary competencies and skills of writing and submitting proposals and evaluating and administering grants for health education, allied health, kinesiology and related fields including schools, communities and work sites. (Varies)

698. Sport Administration. Credit 3 hours. This course is a comprehensive overview of principles of the sport management industry including marketing, management/leadership, media, governance, sociological issues, facility & event management, and law & ethics. Specific attention is placed on the principles of leadership and management along with their association with theory. (Varies).

710. Internship in Health Promotion. Credit 3-6 hours. Prerequisite: Permission of the Department Head. A field work experience at a setting that relates to the student's academic preparation and intended employment area of interest. The purpose is to provide an opportunity for students to engage in practical learning activities and to gain and demonstrate professional competencies. May be repeated for a total of 6 hours. A laboratory fee is required for this course. (Fall, Spring, Summer)

770. Thesis. Credit 1-6 hours each semester, with 6 hours needed for graduation. The student must enroll in the thesis course each semester the thesis is in progress. The thesis is graded Pass-Fail. Prerequisites: HS 601 and 606 or 607. (Fall, Spring, Summer)

775. Writing for Publication in Health and Kinesiology. Credit 3 hours. Prerequisite: Permission of Department Head. This course focuses on the skills and practice of writing professional and research manuscripts in health and kinesiology. Includes conducting a review of professional literature, articulating the purpose and importance of a study, developing a research design, creating appropriate figures and tables to display results, and writing the thesis and scholarly manuscripts. May be repeated. (Fall, Spring, Summer)

Health Systems Management (HSM)

200. US Healthcare Organization and Delivery. Credit 3 hours. This course is an overview of how healthcare is organized, delivered, and financed in the United States. It traces the historical evolution in political, economic, cultural, and social contexts, including the distribution and access to medical and other services, the roles of public and private insurance and healthcare benefits, licensure and accreditation, quality, and reimbursement; access to healthcare, federal healthcare and legislative programs; and trends in healthcare delivery. (Spring)

210. Principles of Healthcare Management. Credit 3 hours. This course enables students to learn concepts and theories in healthcare management; develop the basic management skills and the ability to work productively with others; develop skills in using materials and reference, tools and/or technology central to healthcare management; and to integrate healthcare theory with real world problems. (Spring)

215. Microcomputer Applications for Healthcare. Credit 3 hours. This course introduces the student to the role of digital tools and electronic data records in the healthcare industry. The course will provide an overview of the role of spreadsheets, graphics, and data bases including primary and secondary data use in medical records and quality improvement. (Varies)

220. Healthcare Policy and Reform. Credit 3 hours. This course provides an overview of the history and structure of the American healthcare system, including the history of employment-based health insurance, the challenges surrounding access, cost and quality, and the medical malpractice conundrum. Discussions include the history and challenges of healthcare reform. (Spring)

240. Human Resource Management for Health Care. Credit 3 hours. Students will critically evaluate the healthcare human resources in the dynamic healthcare environment. Organizations' challenges of the future healthcare marketplace include garnering, managing, and developing personnel, keeping current on legalities, and making decisions given the economic, environmental, and societal needs will be discussed. Healthcare issues in human resources including the role of information technology, unions, compensation and benefits, and specific healthcare labor laws will be included. (Fall)

250. Principles and Practices of Case Management. Credit 3 hours. Students will explore the role of the case manager in a managed care environment. Principles of practice, historical and philosophical framework, roles and responsibilities of the case manager, models of case management, teambuilding and collaborative relationships, disease management, and quality and outcomes management are all addressed. (Fall)

260. Introduction to Quality Performance in Healthcare. Credit 3 hours. Students will explore the evolution of healthcare quality concepts and efforts, and explore the social, governmental, regulatory, and professional pressures that have driven the healthcare quality field. Emphasis will be placed on application of theory to practice for components of quality improvement programs and strategies within a healthcare setting. (Fall)

275. Anatomy, Physiology, and Medical Terminology for Healthcare Managers. Credit 3 hours. A general overview of anatomy and physiology and medical terminology at a level that is appropriate to the field of Healthcare Administration and Management. Emphasis is placed on the knowledge administrators will need to effectively understand documents, materials, and other references they may encounter as Health Systems Managers. (Spring)

315. Fundamentals of Healthcare Quality Improvement. Credit 3 hours. Prerequisites: HSM 215 and MATH 241 or permission of the Department Head. This course focuses on quality management as a core healthcare function and on how to implement a viable quality improvement program in various organizations along the continuum of care. Students will explore healthcare quality concepts and efforts, and the social, governmental, regulatory, and professional pressures that have driven the healthcare quality field. Emphasis will be placed on application of theory to practice in specifying a quality improvement project with desired outcomes and an appropriate measurement strategy. (Fall)

350. Healthcare and Regulatory Law. Credit 3 hours. Prerequisites: HSM 200 and HSM 210 or permission of Department Head. This course builds competencies in applying conceptual aspects of legislation, law, regulations, and standards in health, informatics, evaluating legal aspects of risk management and quality improvement initiatives, applying ethics to health information management, and analyzing how compliance requirements impact healthcare organizations. (Fall)

355. Healthcare Reimbursement Systems. Credit 3 hours. Prerequisites: HSM 200 and HSM 210 or permission of Department Head. This course introduces financial management of healthcare services and focuses on identification of costs and care and payment systems for medical services, explains the impact of benefit design on provider and patient behavior with particular focus on managed care versus fee for service models, and reviews data sources and their applicability to economic analysis, including inpatient billing and cost-accounting systems. (Spring)

365. Healthcare Quality Safety Measurement and Outcomes Analysis I. Credit 3 hours. Prerequisites: HSM 200 and HSM 210 or permission of Department Head. This course establishes a basis for critical analysis of issues in healthcare quality and safety and presents conceptual and scientific approaches to management. (Spring)

370. Integrated Care and Health Systems. Credit 3 hours. Prerequisites: HSM 200 and HSM 210 or permission of Department Head. Students will explore managed care from various perspectives and the progression of healthcare to managed care including various structures and components of the managed care system. Four key perspectives will be discussed including the healthcare provider, health system, employer, and consumer and their unique attributes, challenges, and operational issues. An analysis with application of managed care operations, including payment and reimbursement systems, legal issues including information brokering, privacy of information, and retrieval of information, clinical and business applications of information technology, contract negotiation, benchmarking, and outcomes management within various healthcare settings will be highlighted. (Fall)

375. Data Management. Credit 3 hours. Prerequisites: HSM 215 and MATH 241 or permission of the department head. Students will learn the skills and competencies in health data structures, usage, and data collection tools, data quality assessment and integrity, types and content of health records, and health information standards and regulations for documentation. (Spring)

400. Introduction to Healthcare Finance. Credit 3 hours. Prerequisites: HSM 200 and HSM 210 or permission of Department Head. An introduction to healthcare reimbursement systems, the regulatory environment, general accounting, cost concepts, product costing, strategic planning and an introduction to the operating budget. Emphasis will be on understanding and interpreting financial information, concepts and techniques of financial analysis and the decision-making process in the healthcare environment. (Spring)

410. Health Informatics. Credit 3 hours. Prerequisites: HSM 200 and HSM 210 or permission of Department Head. An introduction to project planning, management, evaluation, and the adoption of new technologies in diverse healthcare settings. Topics include competencies in evaluating medical practice workflow and functional needs of end-users, evaluating data infrastructure and information technology processes and systems, and analyzing the fiscal and human resource commitment needed in all phases of implementing and adopting new technologies. (Fall)

415. Management in Healthcare. Credit 3 hours. Prerequisites: HSM 400 and 410 or permission of the Department Head. Students will explore management theory and practice as it applies to healthcare organizations. They will critically evaluate human resources, study strategic management activities and marketing positioning, and develop leadership skills for healthcare teams and projects. The course will focus on state-of-the-art management practices, current healthcare legislation and other factors that affect healthcare organizations and the role of a manager. (Fall)

420. Healthcare: Managing Effectively in a Changing Environment. Credit 2 hours. Prerequisites: HSM 400 and HSM 410 or permission of Department Head. An exploration of healthcare reform, including the impacts and considerations of HIPPA, the enabling roles that process design and improvement and information technology play in helping organization meet meaningful use criteria; and the importance of leveraging organizational change management to help the people in organizations quickly adopt and efficiently use new processes and technology. (Fall)

421. Healthcare Innovation: Managing Effective Change. Credit 3 hours. An exploration of the effects and advantages of electronic records and information technology on change and innovation in healthcare. The course includes consideration of HIPPA and effects of digital health in the design and improvement of healthcare systems and organizations. A focus on the importance of leveraging organizational change management to help those in healthcare professions quickly adopt and efficiently use new processes and technology. (Fall)

430. Institutional Collaboration and Communication in Healthcare. Credit 3 hours. Prerequisites: HSM 400 and HSM 410 or permission of Department Head. This course will discuss the importance of communication and the connection between communication and medical error, the standards of effective communication, national and institutional patient safety goals, strategies for information exchange. Students will be able to identify barriers, tools, strategies and outcomes to effective collaboration and communication. (Fall)

433. Strategic Management in Healthcare Organizations. Credit 3 hours. Prerequisites: HSM 400 and HSM 410 or permission of Department Head. A detailed study of the development and implementation of strategy and market positioning by healthcare organizations in the changing healthcare marketplace and stresses practical approaches to articulate an organization's mission and vision with strategies to meet external and internal situations. Topics include: external and internal assessment, strategy development and implementation, market positioning, organizational structure to support strategy, provider-purchaser relationships, and governance and management structures. (Fall)

436. Systems Analysis. Credit 3 hours. Prerequisites: HSM 400 and HSM 410 or permission of Department Head. This course prepares individuals to apply programming and systems analysis principles to the selection, implementation, and troubleshooting of customized computer and software installations in a healthcare setting. Topics include: computer hardware and software; compilation, composition, execution, and operating systems; low- and high-level languages and language programming; programming and debugging techniques; installation and maintenance testing and documentation; process and data flow analysis; user needs analysis and documentation; cost-benefit analysis; and specification design. (Fall)

439. Leadership Skill Development for the Mid-Level Manager. Credit 3 hours. Prerequisites: HSM 400 and HSM 410 or permission of Department Head. An exploration of individual leadership styles, the characteristics of effective leaders and ways to develop personal goals and strategies for becoming a more effective leader of healthcare teams. Specific leadership concepts include: operational (team performance, commitment and motivation, delegation, and time and stress management); relational (communications, negotiation and conflict management, coaching, and counseling and interviewing); analytic (budgeting, managing financial and human resources, strategic thinking and decision making, and evaluating organizational and personal resources). (Fall)

442. Performance Initiatives. Credit 3 hours. Prerequisites: HSM 400 and HSM 410 or permission of Department Head. A discussion of performance initiatives aimed at improving the quality, efficiency, and overall value of healthcare. Specific topics include: feasibility, defining performance, program development, performance evaluation methods, and administration of performance appraisals. These arrangements provide financial incentives to hospitals, physicians, and other healthcare providers to carry out such improvements and achieve optimal outcomes for patients. (Spring)

445. Tools and Methods for Healthcare Quality and Safety Improvement. Credit 3 hours. Prerequisites: HSM 400 and HSM 410 or permission of Department Head. A detailed study of system-thinking methods and how systems' thinking is applied within the healthcare system. This course provides tools and methods for improving quality and safety within the healthcare system. (Fall)

448. Risk Management. Credit 3 hours. Prerequisites: HSM 400 and HSM 410 or permission of Department Head. A discussion of general and high-risk management strategies within the healthcare industry such as legal concepts, development of risk management programs and effective governance. Topics include: risk financing, ethics, patient communication, credentialing of providers, contract review concepts, employment liability, and patient and occupational safety. (Fall)

451. Research & Evaluations Methods for Quality and Safety Improvement. Credit 3 hours. Prerequisites: HSM 400 and HSM 410 or permission of Department Head. A review of health services research methodology and its application in evaluation of healthcare programs, including quality and safety improvement and interventions. (Fall)

454. Healthcare Quality and Safety Measurement and Outcomes Analysis II. Credit 3 hours. Prerequisites: HSM 365, HSM 400, and HSM 410, or permission of Department Head. A critical analysis of issues in healthcare quality and safety and conceptual and scientific approaches to

management. This course requires demonstrated competencies in analyzing how quality improvement programs are developed, implemented, and improved; and skills necessary for management in the healthcare environment. (Spring)

467. Care Coordination in the Community. Credit 3 hours. Prerequisites: HSM 400 and HSM 410 or permission of Department Head. This course focuses on the comprehensive identification and indexing of community resources across the life span in a wide variety of settings such as family welfare organizations, disability services, youth services, child protection and community health services, vocational services, and employment. (Fall)

470. Specialty Practices in Care Management. Credit 3 hours. Prerequisites: HSM 400 and HSM 410 or permission of Department Head. An examination of the care components of patient assessment, planning of care, coordinating and facilitating care plans for patients, working within and across the continuum of care, evaluating care provided, reassessing, mapping of care, evaluation, cost and quality containment strategies and patient advocacy. Specific topics include history and advocacy of case management best practices, insurance and alternative finance options, resource utilization management, and life care planning. (Fall)

480. Project Management Fundamentals in Healthcare Systems. Credit 3 hours. Prerequisites: HSM 400 and HSM 410 or permission of Department Head. The focus of this course is to provide students an overview of various healthcare systems and projects associated with these systems. This course reviews the basics of project management and includes hands-on application through a work-related project. Students learn to maximize time, money and personnel by using efficient techniques for managing projects in the healthcare systems. (Spring)

481. Project Management Fundamentals in Healthcare Quality Improvement. Credit 3 hours. Prerequisites: HSM 400 and HSM 410 or permission of Department Head. The focus of this course is to provide students with the history of healthcare quality improvement and an overview of various healthcare quality improvement initiatives. This course reviews the basics of project management and includes hands-on application through a work-related project. Students learn to maximize time, money and personnel by using efficient techniques for managing projects in healthcare quality improvement programs. (Spring)

482. Project Management Fundamentals in Care Coordination. Credit 3 hours. Prerequisites: HSM 400 and HSM 410 or permission of Department Head. The focus of this course is to provide students an overview of the roles and responsibilities of the healthcare coordinator and a review of significant care coordination initiatives. This course reviews the basics of project management and includes hands-on application through a work-related project. Students learn to maximize time, money and personnel by using efficient techniques for managing projects in the healthcare coordination programs. (Spring)

487. Internship in Healthcare Management. Credit 4 hours. Prerequisites: HSM 400 and HSM 410 or permission of the department head. This is a senior level internship where students engage in practical experiences in the field. A minimum of 210 hours is required. Students will demonstrate the ability to apply concepts, methods, and theories of healthcare management in a healthcare setting.

498. Internship in Healthcare Quality Improvement. Credit 8 hours. Prerequisites: HSM 400 and HSM 410 or permission of Department Head. This is a senior-level internship where students engage in practical experiences in the field. A minimum of 320 hours is required. Students will demonstrate the ability to apply concepts, methods and theories of healthcare quality improvement in a healthcare setting. (Spring)

499. Internship in Care Coordination. Credit 8 hours. Prerequisites: HSM 400 and HSM 410 or permission of Department Head. This is a senior-level internship where students engage in practical experiences in the field. A minimum of 320 hours is required. Students will demonstrate the ability to apply concepts, methods and theories of medical case management in a healthcare setting. (Spring)

History (HIST)

101. Western Civilization to 1500. [LCCN: CHIS 1013, Western Civilization I]. Credit 3 hours. No prerequisites. A survey of Western Civilization from prehistoric times to 1500. Four units on the Ancient Near East; the Ancient Greeks; the Ancient Roman World; and the Middle Ages. Includes in-depth coverage of the role of women. Lectures and readings. (Summer, Fall, Spring)

101H. Western Civilization to 1500 for Honors Students. Credit 3 hours. Prerequisite: Authorization by the Director of the Honors Program. A survey of Western Civilization from prehistoric times to 1500. Four units on the Ancient Near East; the Ancient Greeks; the Ancient Roman World; and the Middle Ages. Includes in-depth coverage of the role of women. Lectures, readings, and seminar-style discussions. (Fall)

102. Western Civilization since 1500. [LCCN: CHIS 1023, Western Civilization II]. Credit 3 hours. No prerequisites. A survey of Western Civilization from 1500 to the present. Four units on the Renaissance and Reformation (to 1610); Absolutism and Enlightenment (1610-1789); Revolutions and Nationalism (1789-1914); and Modern Europe (1914-present). Includes in-depth coverage of the role of women. Lectures and readings. (Summer, Fall, Spring)

102H. Western Civilization since 1500 for Honors Students. Credit 3 hours. Prerequisite: Authorization by the Director of the Honors Program. A survey of Western Civilization from 1500 to the present. Four units on the Renaissance and Reformation (to 1610); Absolutism and Enlightenment (1610-1789); Revolutions and Nationalism (1789-1914); and Modern Europe (1914-present). Includes in-depth coverage of the role of women. Lectures, readings, and seminar-style discussions. (Spring)

107. World Civilization to 1500. Credit 3 hours. This class examines the developments and interactions among Asian, African, European, American, and Oceanian cultures in the pre-modern age. This course also offers a consideration of issues related to the connections and relationships that shaped the civilizations as a result of migration, war, and commerce before 1500. Includes in-depth coverage of the role of women. Lectures and readings. (Summer, Fall, Spring)

108. World Civilization since 1500. Credit 3 hours. This course examines the developments and interactions among Asian, African, European, American, and Oceanian cultures in the modern era. This course also offers a consideration of issues related to the connections and relationships that shaped civilizations as a result of migration, war, and commerce since 1500. Includes in-depth coverage of the role of women. Lectures and readings. (Summer, Fall, Spring)

201. American History to 1877. [LCCN: CHIS 2013, American History I]. Credit 3 hours. No prerequisites. A survey of American history from the age of discovery to 1877. Four units on the Colonial Period (1492-1763); the Revolution and the Early National Period (1763-1816); the Age of Compromise (1816-50); and the Civil War and Reconstruction (1850-77). Includes in-depth coverage of the role of women and minorities. Lectures and readings. (Summer, Fall, Spring)

201H. American History to 1877 for Honors Students. Credit 3 hours. Prerequisite: Authorization by the Director of the Honors Program. A survey of American history from the age of discovery to 1877. Four units on the Colonial Period (1492-1763); the Revolution and the Early National Period (1763-1816); the Age of Compromise (1816-50); and the Civil War and Reconstruction (1850-77). Includes in-depth coverage of the role of women and minorities. Lectures, readings, and seminar-style discussions. (Fall)

202. American History since 1877. [LCCN: CHIS 2023, American History II]. Credit 3 hours. No prerequisites. A survey of American history since 1877. Four units on the Emergence of Modern America (1877-1917); World Wars and the New Deal (1917-45); the Cold War and Civil Rights (1945-76); and the New World Order (1976-present). Includes in-depth coverage of the role of women and minorities. Lectures and readings. (Summer, Fall, Spring)

202H. American History since 1877 for Honors Students. Credit 3 hours. Prerequisite: Authorization by the Director of the Honors Program. A survey of American history since 1877. Four units on the Emergence of Modern America (1877-1917); World Wars and the New Deal

(1917-45); the Cold War and Civil Rights (1945-76); and the New World Order (1976- present). Includes in-depth coverage of the role of women and minorities. Lectures, readings, and seminar-style discussions. (Spring)

321. History of Louisiana. [LCCN: CHIS 2033, Louisiana History]. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A survey of Louisiana history from the age of discovery to the present. Three units on Colonial Louisiana; 19th-Century Louisiana; and Modern Louisiana. Includes in-depth coverage of the role of women and minorities, with particular attention to African-American and Cajun influence. Lectures, readings, and discussions. (Summer, Fall, Spring)

322. Practicum for Education Majors. Credit 1 hour. A practicum for Education majors that will provide supervised direct teaching hours in Social Studies prior to student teaching. Social Studies majors must register for HIST 321 and 322 concurrently. Direct teaching hours will be structured to meet the particular needs of the students and the cooperating school(s). competency-based clinical practice required. (Summer, Fall, Spring)

323. Clinical Practice for Social Studies Education Majors. Credit 3 hours. A competency-based clinical practice class for Education majors that will provide supervised direct teaching hours in Social Studies prior to student teaching. (Fall, Spring)

403. Independent Study. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. Conducted as a tutorial for individual students seeking additional work beyond the introductory level. Readings chosen according to student interest, academic orientation, and level of preparedness. Evaluations conducted on the basis of discussions and written assignments. May be repeated once but Department Head approval is required to count more than 3 hours toward the B.A. in History. (Varies)

409/509. A History of Ancient Greece. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of Greek civilization from the Minoan period to the conquest of Greece by the Romans. Three units on Minoan, Mycenaean, and Dark Ages Greece (c.3000-800 B.C.); Classical Greece (c.800-362 B.C.); and Macedon, Alexander, and the Hellenistic Era (362-146 B.C.). Includes in-depth coverage of the role of women. Lectures, readings, and discussions. (Fall Odd Years)

410/510. A History of Ancient Rome. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of Roman civilization from the foundation of Rome to the death of the Emperor Justinian. Three units on the Monarchy and the Republic (origins to 31 B.C.); the Early Roman Empire (31 B.C.-284 A.D.); and the Later Roman Empire and the Byzantine Empire (284-565). Includes in-depth coverage of the role of women. Lectures, readings, and discussions. (Spring Even Years)

416/516. The Early Middle Ages. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of medieval Europe from the fall of the western Roman Empire to c.1050. Three units on the Germanic Kingdoms (476-687); the Carolingian Empire (687-843); and the Age of Invasions to c.1050. Includes in-depth coverage of the role of women. Lectures, readings, and discussion. (Fall Even Years)

417. History of Science and Technology. Credit 3 hours. Prerequisites: Junior standing or permission of the Department Head. Traces the development of scientific theories and the men who formulated and developed them from the days of ancient Greece through the Industrial and Technological Revolution to the Scientific Revolution of the twentieth century. (Fall Even Years)

418/518. The Later Middle Ages. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of medieval Europe from the beginning of the High Middle Ages c.1050 to the fall of Constantinople and the end of the Hundred Years War in 1453. Three units on the European Recovery, the Crusades, and the 12th Century Renaissance; Europe in the 13th Century; and the Crisis of the 14th and Early 15th Centuries. Includes in-depth coverage of the role of women. Lectures, readings, and discussion. (Spring Odd Years)

419/519. Renaissance Europe. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of Renaissance Europe from 1380 to 1530, with emphasis on Italy's central role in propagating cultural change and in the international politics of the period. Three units on Renaissance Europe from its Origins to the Peace of Lodi (1380-1454); Renaissance Europe from Lodi to the French Invasion (1454-94); and Renaissance Europe from the French Invasion to the Sack of Rome (1454-1530.) Includes in-depth coverage of the role of women. Lectures, readings, and discussion. (Fall Odd Years)

423/523. Reformation Europe. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of the Reformation from its late medieval origins to the Treaty of Westphalia, with emphasis on doctrinal conflict, religious wars, social upheaval, and the new monarchy. Three units on the Early Reformation (origins-1555); Religious Wars and Absolutism (1555-1610); and the Thirty Years War and Related Conflicts (1610-1648). Includes in-depth coverage of the role of women. Lectures, readings, and discussion. (Spring Even Years)

424/524. Europe in the Age of Reason, 1648-1789. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of Europe from the end of the Thirty Years War to the eve of the French Revolution. Three units on the Age of Louis XIV (1648-1715); the Enlightenment and the European State System (1715-48); and Enlightened Absolutism (1748-89). Includes in-depth coverage of the role of women. Lecture, readings, and discussion. (Fall Even Years)

429/529. Europe During the French Revolution and Napoleonic Era, 1789 to 1815. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of European history from the outbreak of the French Revolution to the final defeat of Napoleon. Three units on the Origins and Outbreak of the French Revolution (to 1792); the Reign of Terror and the Thermidorian Reaction (1792-99); and the Napoleonic Era (1799-1815). Includes in-depth coverage of the role of women. Lectures, readings, and discussion. (Spring Odd Years)

433/533. Nineteenth Century Europe, 1815-1914. Credit 3 hours. Prerequisite: Junior standing or Department Head. A detailed study of Europe from the Congress of Vienna to the outbreak of World War I. Three units on Reaction and Revolution (1815-48); Nationalism and Conflict (1848-71); and Democracy and Imperialism (1871-1914). Includes in-depth coverage of the role of women. Lectures, readings, and discussion. (Fall Odd Years)

434/534. Modern European History, 1914 to the Present. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of European history from the outbreak of World War I to the present. Three units on World War I and its Aftermath (1914-28); the Rise of Totalitarianism and World War II (1928-45); and the Cold War and After (1945-present). Includes in-depth coverage of the role of women. Lectures, readings, and discussion. (Spring Even Years)

437/537. Ancient and Medieval Britain. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of the British Isles from the ancient world to 1485. Three units on Celtic, Roman, and Anglo-Saxon Britain (origins to 1066); the Anglo- Normans and the Early Plantagenets (1066-1272); the Later Plantagenets, Lancastrians, Yorkists, and the Wars of the Roses (1272-1485). Includes in-depth coverage of the role of women. Lectures, readings, and discussions. (Fall Odd Years)

438/538. Tudor-Stuart Britain. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of the British Isles from the accession of Henry VII in 1485 to the death of Anne in 1714. Three units on the Early Tudors and the English Reformation (1485-1558); Elizabeth, the Early Stuarts, and the Civil War (1558-1649); and the Interregnum, Restoration, and Glorious Revolution (1649-1714). Includes in-depth coverage of the role of women. Lectures, readings, and discussions. (Spring Even Years)

439/539. Hanoverian and Victorian Britain. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of the British Isles from the accession of George I in 1714 to the death of Victoria in 1901. Three units on the Age of Walpole and Pitt (1714-60); the Reign of George III (1760-1820); and the Victorian Era (1820-1901). Includes in-depth coverage of the role of women and minorities. Lectures, readings, and discussions. (Fall Even Years)

440/540. Modern Britain. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of the British Isles from the rise of the Second Empire to the present. Three units on the British Empire and World War I (1900-20); Recovery, Depression, and World War II (1920-45); and Postwar Britain (1945-present). Includes in-depth coverage of the role of women and minorities. Lectures, readings, and discussions. (Spring Odd Years)

444/544. Ancient China and the Orient. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of the origins of Chinese civilization, the concept of the Middle Kingdom, the Tributary System (primarily Japan, Korea, and Vietnam), the sources of Chinese traditionalism, and their impact on or contrast with neighboring Asian nations up to the Manchu conquest of the 17th century. Three units on the Origins and Emergence of Chinese Civilization and Philosophy; the Early Imperial Period; and Soong China and the Emergence on non-Han Powers. Includes in-depth coverage of the role of women. Lectures, readings, and discussion. (Fall Odd Years)

445/545. Modern China and the Orient. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of the development of China from the 17th century Manchu conquest through the struggle for democracy characterizing the period since the late 1980s, with special emphasis on the background and dynamics of the revolution and the impact of a destabilized China on neighboring Asian powers (primarily Japan, Korea, and Vietnam). Three units on Traditional China and the Manchu Intrusion; Internal Instability and the Western Intrusion; and Revolution and the New World Order. Includes in-depth coverage of the role of women. Lectures, readings, and discussion. (Fall Even Years)

446/546. History of Latin America to 1820. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of Latin America from the European discovery in 1492 to the end of colonialism in 1820. Three units on the Preconquest Era; Conquest and Republicanism; and the Wars of Revolution. Includes in-depth coverage of the role of women. Lectures, readings, and discussion. (Fall Odd Years)

447/547. History of Latin America since 1820. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of Latin America from the end of the colonial period to the rise of modern nations, with special emphasis on Latin America's relationship to the United States. Three units on Mexico, Central America, and the Caribbean 1820 to the Present; Venezuela and Colombia 1820 to the Present; and Argentina, Bolivia, Brazil, Chile, Ecuador, and Peru 1820 to the Present. Includes in-depth coverage of the role of women. Lectures, readings, and discussion. (Spring Even Years)

448/548. History of the Caribbean Area. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of the Caribbean area and its part in the history of the world from the European discovery to the present, with emphasis on international rivalries, independence of certain areas, and strategic geographic position in world affairs. Three units on the Preconquest Period to 1830; 1830 to 1890; and 1890 to the Present. Includes in-depth coverage of the role of women. Lectures, readings, and discussion. (Fall Even Years)

449/549. History of Mexico. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of Mexico from the colonial period to the present, with emphasis on the war for independence and its effect on modern Mexico. Three units on Preconquest and Spanish Conquest to 1810; Wars of Independence and the First Republic to 1850; Modern Mexico 1850 to the Present. Includes in-depth coverage of the role of women. Lectures, readings, and discussion. (Spring Odd Years)

454/554. History of Modern Russia. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of Russian History from the Bolshevik Revolution to the present. Three units on the Bolshevik Revolution (1900-28); the Stalin Era (1928-53); and From Soviet Superpower to Post-Communist Period (1953-present). Lectures, readings, and discussion. Includes in-depth coverage of the role of women. (Spring Odd Years)

459/559. Revolutionary Asia. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. This course will cover Asian revolutionary movements from the late eighteenth century to the present and the economic, socio-cultural, religious, and political forces that contributed to the rise of revolutionary sentiment and the ultimate resolution of the process. Uprisings in India, Japan, China, Vietnam, Afghanistan, Indonesia, and Cambodia among others will be considered in the context of individual circumstances and the wider process of revolutionary change. Three units on Distinctive Regions of Asia and Sources of Revolutionary Thought, Revolutionary Movements in the Nineteenth and Early Twentieth Centuries, and Contemporary Revolutionary Movements and the Challenges of the Modern World. Lectures, readings, and discussions. (Varies)

463/563. Local/Regional History. Credit 3 hours. Prerequisite: Junior standing or permission of Department Head. A detailed study preparing students to uncover and present the comprehensive history of specific locales. (Varies)

466/566. Family History. Credit 3 hours. Prerequisite: Junior standing or permission of Department Head. A detailed study of the bibliography and methodology of the field. Students will also prepare an analytical report considering the various sources available for family history. (Varies)

467/567. Introduction to Museum Practice. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of the concerns and issues unique to working in museums. Students will learn the basics of research and interpretation involved in the design and preparation of exhibits. (Varies)

468/568. Women in European History. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of the role of women in European society from the ancient world to the present. Three units on Women in the Ancient World and the Middle Ages (c.3000 B.C.-1500); Women in Early Modern Europe (1500-1789); and Women in the Modern World (1789-present). Lectures, readings, and discussion. (Fall Odd Years)

469/569. Women in American History, 1600 to the Present. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of the role of women in American society, the image of women in popular literature, and American women's struggle for equal rights. Three units on Women in the Colonial Period; Women in 19th Century America; and Women in 20th Century America. Includes in-depth coverage of the role of minorities. Lectures, readings, and discussion. (Spring Even Years)

473/573. Colonial America, 1492-1763. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of Colonial America from the age of discovery to the end of the French and Indian War. Three units on Discovery and Early Colonization (1492-1607); the Growth of American Colonies (1607-88); and the Era of Colonial Wars (1689 to 1763). Includes in-depth coverage of the role of women and minorities. Lecture, readings, and discussion. (Fall Odd Years)

474/574. The American Revolution, 1763-1791. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of the American Revolution from the end of the French and Indian War to the ratification of the Constitution. Three units on the Origins of the Revolution (1763-76); the Revolutionary War (1776-83); and the Foundation of the Constitution (1783-91). Includes in-depth coverage of the role of women and minorities. Lectures, readings, and discussion. (Spring Even Years)

475/575. America in the Early National Period, 1788 to 1816. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of the new American nation from the election of Washington to the end of Madison's presidency. Three units on the Federalist Period (1788-1800); the Jeffersonian Revolution (1800-08); and the Madison Era (1808-16). Includes in-depth coverage of the role of women and minorities. Lectures, readings, and discussion. (Fall Even Years)

476/576. America in the Age of Compromise, 1816 to 1850. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of American history from the Missouri Compromise to the Compromise of 1850. Three units on Nationalism and Expansion

(1816-28); the Age of Jackson (1828-36); and Expansion and Reform (1836-50). Includes in-depth coverage of the role of women and minorities. Lectures, readings, and discussion. (Spring Odd Years)

477/577. Civil War and Reconstruction, 1850 to 1877. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of the sectional controversy in America. Three units on the Sectional Crisis (1850-60); the Civil War (1861-65); and Reconstruction (1865-77). Includes in-depth coverage of the role of women and minorities. Lectures, readings, and discussion. (Fall Odd Years)

478/578. The American Frontier. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A study of the American frontier from the colonial period to 1890, with emphasis on the Native American problem, the fur trade, mining, trade routes, and America's Western heritage. Includes in-depth coverage of the role of women and minorities. Three units on the Colonial Period to 1787; Nationhood to the Gold Rush (1787-1849); and the Late Frontier (1849-90). Lectures, readings, and discussion. (Spring Even Years)

479/579. Emergence of the Modern United States, 1877-1917. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of the development of the United States to the status of a world power, the rise of American industry, and political and intellectual developments. Three units on Industrialization and Westward Expansion (1877-88), Populism and Imperialism (1888-1900); Progressivism and World Power (1900-1917). Includes in-depth coverage of the role of women and minorities. Lectures, readings, and discussion. (Fall Even Years)

480/580. America, the World Wars, and the New Deal, 1917-1945. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of the United States from its entry into World War I through its victory in World War II and its achievement of superpower status. Three units on World War I and the 1920s; the Great Depression and the New Deal; and World War II. Includes in-depth coverage of the role of women and minorities. Lectures, readings, and discussion. (Spring Odd Years)

482/582. America in the Cold War and Beyond, 1945 to the Present. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of America's history as a superpower. Three units on the Origins of the Cold War (1945-60); the Vietnam Era (1960-75); and America as the Sole Superpower (1975-present). Includes in-depth coverage of the role of women and minorities. Lecture, readings, and discussion. (Fall Odd Years)

483/583. Heritage Tourism. Credit 3 hours. Prerequisite: Junior standing or permission of Department Head. A detailed study of the range of heritage tourism and the role of the historian. Students will address issues such as funding, historical authenticity, and audience. (Varies)

484/584. Audience and Media. Credit 3 hours. Prerequisite: Junior standing or permission of Department Head. A detailed study of the key concerns for the public historian, audience and media, including how to tailor presentations to meet the needs of the audience as well as the benefits and limitations of various types of media. Students will also discuss the ethical complications of public presentation of historical subjects. (Varies)

485/585. Military History of America to 1865. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of the battles and campaigns on land and sea in which American armed forces have participated from the colonial period to 1865. Three units on the Colonial Wars; the Revolutionary War, War of 1812, and Frontier Wars; and the Mexican War and Civil War. (Fall Even Years)

487/587. Military History of America since 1865. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of the battles and campaigns on land and sea in which American armed forces have participated since 1865. Three units on the Indian Wars and Spanish-American War; the World Wars; and Korea, Vietnam, and Beyond. (Spring Odd Years)

488/588. Oral History Techniques. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A survey of the methodology for collecting and preserving oral history. Includes how to prepare and conduct interviews and to edit and index transcriptions. (Varies)

489/589. African-American History. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of the role of African-Americans in American history from the age of discovery to the present. Three units on the Slave Era (c. 1500-1865); Reconstruction, Reaction, and Jim Crow (1865-1945); and the Civil Rights Movement (1945-present). Includes in-depth coverage of the role of women. Lectures, readings, and discussion. (Spring Even Years)

492/592. History of the Old South. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of Southern history from the colonial period to 1865, with emphasis upon political, social, and economic development and slavery. Three units on the Colonial Period (1607-1787); the Antebellum South and Slavery (1788-1850); and the Secession Crisis and the Civil War (1850-65). Includes in-depth coverage of the role of women and minorities. Lectures, readings, and discussions. (Spring Even Years)

493/593. History of the New South. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of Southern history since 1865, with emphasis upon reconstruction, industrialization, the changing status of African-Americans and Southern political leadership in post-Civil War America. Three units on Reconstruction and its Aftermath (1865-1900); the South in the Early 20th Century (1900-45); and the South, the Civil Rights Movement, and Beyond (1945-present). Lectures, readings, and discussions. Includes in-depth coverage of the role of women and minorities. (Spring Odd Years)

494/594. History of the Holocaust. Credit 3 hours. Prerequisite: Junior Standing or permission of the Department Head. A detailed study of the motives, choices, methods, actions and implications of the Holocaust. (Varies)

495/595. Crime in American History. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of major crimes and criminals in American history, with emphasis on 20th century crime. Special attention given to famous controversial crimes, such as the Lindbergh kidnapping case and the Manson murders. Special features include a history of organized crime in America, procedures of criminal investigation, and use of audio-visual materials. Three units on Historical Trends; Organized Crime; and Controversial Crimes. Lectures, readings, and discussion. (Varies)

496/596. The Kennedy Assassination. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of the assassination of President John F. Kennedy and the controversy about it. An examination of the main issues, the conspiracy, the role of the Federal government and organized crime, Lee Harvey Oswald, and Jack Ruby. Emphasis placed on analysis of primary source materials and such audio-visual materials as the Zapruder Film, the Dallas Police Tapes, and the JFK autopsy photographs. Three units on the Assassination; the Investigations; and the Controversy. Lectures, readings, and discussion. (Varies)

497. Seminar for Undergraduates in Major Problems in American History. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A seminar style readings course designed to give students a general survey of the main events and important historiographical trends in American history from the colonial period to the present. Student presentations and seminar discussions emphasized. (Summer, Fall, Spring)

498/598. Special Topics in History. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A detailed study of a topic selected by the Department Head. Topics and instructors will vary. May be repeated once, but the Department Head approval is required to count more than 3 hours towards the B.A. in History. (Varies)

600. Historical Research. Credit 3 hours. An introduction to the sources and methods for historical research, proper writing style and documentation, and historiography. (Fall)

602. Readings in History. Credit 3 hours. An intensive program of independent readings in secondary literature on a topic approved in advance by the instructor. May be repeated, but no more than three hours may be applied toward the M.A. in History degree. (Varies)

- 605. Seminar in American History to 1800.** Credit 3 hours. An intensive survey of American history from the age of discovery to 1800. Includes in-depth coverage of the role of women and minorities. Study of primary sources and the historical literature, with student presentations and student-led seminar discussions emphasized. (Summer)
- 606. Seminar in American History 1800 to 1900.** Credit 3 hours. An intensive survey of American history in the 19th century. Includes in-depth coverage of the role of women and minorities. Study of primary sources and the historical literature, with student presentations and student-led seminar discussions emphasized. (Fall)
- 607. Seminar in American History Since 1900.** Credit 3 hours. An intensive survey of American history since 1900. Includes in-depth coverage of the role of women and minorities. Study of primary sources and the historical literature, with student presentations and student-led seminar discussions emphasized. (Spring)
- 610. Seminar in Southern History.** Credit 3 hours. An intensive survey of Southern history from the colonial period to the present. Includes in-depth coverage of the role of women and minorities. Study of primary sources and the historical literature, with student presentations and student-led seminar discussions emphasized. (Fall)
- 611. Seminar in Louisiana History.** Credit 3 hours. An intensive survey of Louisiana history from the colonial period to the present. Includes in-depth coverage of the role of women and minorities. Study of primary sources and the historical literature, with student presentations and student-led seminar discussions emphasized. (Spring)
- 612. Seminar in American Military History.** Credit 3 hours. An intensive survey of American military history from the colonial period to the early twenty-first century. Study of primary sources and the historical literature, with student presentations and student-led discussion emphasized. (Fall Even Years)
- 613. Seminar in Global Military History.** Credit 3 hours. A thematic survey of various aspects of international conflicts from antiquity to the present. Study of primary sources and the historical literature with student presentations and student-led discussion emphasized. (Fall Odd Years)
- 621. Independent Study in History.** Credit 3 hours. An intensive program of research in primary sources on a topic approved in advance by the instructor. May be repeated, but no more than three hours may be applied toward the M.A. in History degree. (Varies)
- 628. Theories of History.** Credit 3 hours. Through an intensive reading of a number of key history texts, this seminar emphasizes the theoretical problems and questions that underpin the research strategies historians utilize. Study of primary sources and canonical texts in the discipline, along with student presentations and student-led seminar discussions. (Spring Odd Years)
- 630. Seminar in the History of Western Thought.** Credit 3 hours. An intensive survey of Western thought from the ancient world to the present. Study of primary sources and the professional literature, with student presentations and student-led seminar discussions emphasized. (Spring Even Years)
- 632. Introduction to Public History.** Credit 3 hours. This course serves as the cornerstone of the program and covers the opportunities and challenges for historians in the public arena. This is a historiographical course tracing the origins of public history and the variety of specialties within the field. One important unit within this course is the unique ethical concerns of the public historian. (Varies)
- 633. Public History Seminar.** Credit 3 hours. In this seminar students will create and critique extensive public history projects based on their experiences in previous courses. (Varies)
- 634. Seminar in Historic Preservation.** Credit 3 hours. The bulk of this course will be devoted to the production of a sizable research project within the field of historic preservation. (Varies)
- 635. Introduction to Historical Editing.** Credit 3 hours. The editing of manuscripts, transcriptions, and other historical and historiographical documents. In this class students will gain practical experience by editing documents and surveying the relevant literature. (Varies)
- 636. Introduction to Archival Practice.** Credit 3 hours. This course is designed to provide students with a broad overview of the theory and skills involved in archival practice. Students will visit local repositories, undertake projects in collection management, and study the ethical and historical issues guiding archival practice and management. (Varies)
- 637. Internship in Public History.** Credit 3 hours. An opportunity for students to gain valuable hands-on experience in a public history setting. Intern must work a minimum of twenty hours per week during a regular semester, a minimum of forty hours per week during a summer term, at times mutually agreeable to the individual and the agency. Any reading and paper requirements must be satisfied. All grade requirements and criteria will be established ahead of time by the faculty internship coordinator. (Varies)
- 641. Seminar in British History to 1485.** Credit 3 hours. An intensive survey of British history from the ancient world to 1485. Includes in-depth coverage of the role of women and minorities. Study of primary sources and the historical literature, with student presentation and student-led seminar discussions emphasized. (Summer Odd Years)
- 642. Seminar in British History since 1485.** Credit 3 hours. An intensive survey of British history from 1485 to the present. Includes in-depth coverage of the role of women and minorities. Study of primary sources and the historical literature, with student presentation and student-led seminar discussions emphasized. (Summer Even Years)
- 643. Seminar in Ancient European History.** Credit 3 hours. An intensive survey of European history from the origins of civilization to 500 A.D. Includes in-depth coverage of the role of women and minorities. Study of primary sources and the historical literature, with student presentation and student-led seminar discussions emphasized. (Fall Odd Years)
- 644. Seminar in Medieval European History.** Credit 3 hours. An intensive survey of European history from 500 to 1500. Includes in-depth coverage of the role of women and minorities. Study of primary sources and the historical literature, with student presentations and student-led seminar discussions emphasized. (Fall Even Years)
- 645. Seminar in Early Modern European History.** Credit 3 hours. An intensive survey of European history from 1500 to 1815. Includes in-depth coverage of the role of women and minorities. Study of primary sources and the historical literature, with student presentations and student-led seminar discussions emphasized. (Spring Even Years)
- 646. Seminar in Modern European History.** Credit 3 hours. An intensive survey of European history from 1815 to present. Includes in-depth coverage of the role of women and minorities. Study of primary sources and the historical literature, with student presentation and student-led seminar discussions emphasized. (Spring Odd Years)
- 655. Seminar in History and Political Science for Teachers.** Credit 3 hours. An intensive introduction to the sources, professional literature, and subject matter used in teaching history and political science at the middle and high school levels. May not be applied to the M.A. in History degree by students in the Thesis Option. May be repeated but Department Head approval is required to count for more than 3 hours toward the M.A. in History. (Varies)
- 698. Seminar in Selected Topics in History.** Credit 3 hours. An intensive survey of a topic selected by the instructor. Topics and instructors will vary from semester to semester. Study of primary sources and the historical literature, with student presentations and student-led seminar discussions emphasized. May be repeated but Department Head approval is required to count more than 3 hours toward the M.A. in History degree. (Varies)

770. Thesis Research and Thesis. Credit 1-6 hours each semester, with six hours needed for graduation. The student must enroll in the thesis course each semester the thesis is in progress. The thesis is graded Pass-Fail. (Varies)

Honors (HONR)

191. Interdisciplinary Arts. Credit 3 hours. Prerequisite: Active status in the University Honors Program; or a minimum ACT composite of 20 for non-Honors students with less than 12 hours; or a minimum cumulative GPA of 2.75 for non-Honors students with 12 hours or more. The course emphasizes processes of both artistic creation and critical analysis in dance, drama, music, and the visual arts. It can be used to satisfy a 3-hour arts requirement in most curricula. (Fall)

200. Interdisciplinary Honors Mentoring. Credit 1 hour. Prerequisites: Active status in the University Honors Program and permission of the Honors Director. This hands-on course provides leadership training to continuing Honors Program students selected to work as mentors for the first-year seminar, living-learning communities, and/or ambassador program. May be repeated for up to 3 hours credit. (Fall, Spring)

300. Senior Thesis. Credit 1 hour. Prerequisite: Completion the previous semester of a thesis project in a 300-400 level 3-hour Independent Study or other course in the student's major approved by the student's Department Head and the Honors Director. Limited to Honors students, Senior Thesis is a required course for an Honors Diploma. Each student pursuing an honors diploma must confer with the Honors Director in the junior year for approval of a thesis course to take in the fall semester of the senior year. Senior Thesis is a public forum scheduled in the spring for presentation of thesis projects completed the previous semester. On dates assigned by the Honors Director, students present results of their thesis projects and attend presentations by other honors students. (Summer, Fall, Spring)

304. Ideas and Issues in Pure and Applied Sciences. Credit 3 hours. Prerequisite: Sophomore standing with a GPA of 3.0 or higher, or consent of Honors director. Through reading, discussion, and oral presentation students will examine the many facets of a current or historical topic from the perspective of the Pure and Applied Sciences. (Fall Even Semesters)

305. Ideas and Issues in Social and Behavioral Sciences. Credit 3 hours. Prerequisite: Sophomore standing with a GPA of 3.0 or higher, or consent of Honors Director. Through reading, discussion, and oral presentations students will examine the many facets of a current or historical topic from the perspective of the Social and Behavioral Sciences. HONR 305 may be used to satisfy a "Social Studies" or "Social Science" elective in any curriculum. (Spring Odd Year Semesters)

311. Ideas in Conflict I: Ancient and Classical. Credit 3 hours. Prerequisite: Sophomore standing with 2.75 or higher GPA; consent of the instructor for students with lower than 2.75 GPA. An interdisciplinary seminar for Honors and non-Honors students. Through reading, discussion, and oral reports students examine world-transforming debates found in texts of rhetoric, literature, and moral and political philosophy in the Greek, Roman, and Biblical eras. Concepts and language having to do with justice understood as a human virtue and a condition for social harmony are a primary emphasis of this course. HONR 311 may be substituted for a 100-300 communication course with approval of the Head of the Department in which a student is majoring; or it may be used to satisfy a "Humanities," "Social Studies," or "Social Science" elective in any curriculum. (Fall Odd Year Semesters)

312. Ideas in Conflict II: Medieval and Renaissance. Credit 3 hours. An interdisciplinary seminar for Honors and non-Honors students. Prerequisite: Sophomore standing with 2.75 GPA. Through reading, discussion, and oral reports students examine world transforming debates found in texts of philosophy, theology, politics, and foundations of science in the medieval through early modern eras. Concepts of nature understood in ethical, political, and scientific terms are a primary emphasis of this course. HONR 312 may be substituted for a 300-400 level philosophy course with approval of the Head of the Department in which the student is majoring; or it may be used to satisfy a "Humanities," "Social Studies," or "Social Science" elective in any curriculum. (Spring Even Year Semesters)

313. Ideas in Conflict III: Enlightenment and Romantic. Credit 3 hours. An interdisciplinary seminar for Honors and non-Honors students. Prerequisite: Sophomore standing with a 2.75 or higher GPA; consent of the instructor for students with lower than 2.75 GPA. Through reading, discussion, and oral reports students examine world-transforming debates found in texts of political philosophy, history of ideas, literature, and theory of education. Ideas and terminology having to do with political right, social obligation, and individual development and responsibility are a primary emphasis of this course. HONR 313 may be substituted for a 200-400 political science course with approval of the Head of the Department in which the student is majoring; or it may be used to satisfy a "Humanities," "Social Studies," or "Social Science" (Fall Even Year Semesters)

314. Ideas in Conflict IV: Twentieth Century. Credit 3 hours. An interdisciplinary seminar for Honors and non-Honors students. Prerequisite: Sophomore standing with 2.75 or higher GPA; consent of the instructor for students with lower than 2.75 GPA. Through reading, discussion, and oral reports students examine world-transforming debates found in texts of psychology, philosophy, science, and literature of major significance in our own time. Concepts of the human psyche as a native endowment and a product of culture are a primary emphasis of this course. HONR 314 may be substituted for a psychology course with approval of the Head of the Department in which the student is majoring; or it may be used to satisfy a "Humanities," "Social Studies," or "Social Science" elective in any curriculum. (Spring Odd Year Semesters)

401. Ideas and Issues in Arts and Humanities. Credit 3 hours. Prerequisite: Sophomore standing with a GPA of 3.0 or higher, or consent of Honors Director. Through reading, discussion, and oral presentations students will examine the many facets of a current or historical topic from the perspective of the Arts and Humanities. HONR 401 may be used to satisfy a "Humanities" elective in any curriculum. (Fall Odd Year Semesters)

402. Ideas and Issues in Business and Finance. Credit 3 hours. Prerequisite: Sophomore standing with a GPA of 3.0 or higher, or consent of Honors Director. Through reading, discussion, and oral presentation students will examine the many facets of a current or historical topic from the perspective of Business and Finance. (Spring Even Year Semesters)

441. Interdisciplinary Independent Study. Credit 3 hours. Prerequisite: Active status in the University Honors Program or, for non-Honors students, a minimum cumulative GPA of 2.75. A student pursues independent study of an interdisciplinary topic under the guidance of one or more professors. Advance approval by the professor(s) is required. The course topic must not duplicate existing departmental Independent Study courses. A student may take no more than 9 hours for credit in 300 and 400-level Honors interdisciplinary courses. (Varies)

Horticulture (HORT)

301. Introductory Soils. Credit 4 hours. Prerequisites: CHEM 122/124. Formation, chemical properties, physical properties, classification, and conservation of soils. Three hours of lecture and two hours of laboratory per week. (Varies)

328. Plant Propagation. Prerequisites: GBIO 151 and GBIO 153, and Junior Standing, or permission of the Department Head. A study of the asexual and sexual processes in the propagation of herbaceous and woody plants. Two hours of lecture and two hours of laboratory per week. (Varies)

410. Fruit, Nut, and Vegetable Production. Credit 3 hours. Principles and practices in the production and marketing of fruit, nut and vegetable crops. Three hours of lecture per week. (Varies)

412. Turf Management. Credit 3 hours. Prerequisites: GBIO 151 and GBIO 153, and Junior Standing, or permission of the Department Head. Establishment and management of turf of residential and commercial sites; includes weeds, insects, disease identification and control. Three hours of lecture per week. (Varies)

424. Arboriculture. Credit 3 hours. GBIO 151 and GBIO 153 and Junior Standing, or permission of Department Head. Care of ornamental trees in the urban environment including pruning, bracing, transplanting, and fertilization. Three hours of lecture per week. (Varies)

426. Coastal Plant Production. Credit 3 hours. Prerequisites: GBIO 151 and GBIO 153 and Junior Standing, or permission of Department Head. The production, propagation and care of wetland plants for the purpose of coastal wetland restoration. Two hours of lecture and two hours of lab. (Varies)

428. Organic Gardening. Credit 3 hours. Prerequisites: GBIO 151 and GBIO 153 and Junior Standing, or permission of Department Head. Principles, production practices, maintenance, harvesting and marketing of organically and traditionally homegrown vegetables. Three hours of lecture per week. (Varies)

Human Development and Family Studies (HDFS)

100. Orientation to Human Development and Family Studies. Credit 1 hour. An orientation to the field of human development and family studies including knowledge base and career opportunities. (Varies)

302. Family and Individual Development Over the Lifespan. [FCS] Credit 3 hours. A study of how families and individuals' function, with emphasis on family systems and interpersonal relationships over the lifespan. (Fall, Spring)

304. Parenting: Issues and Education. [FCS] Credit 3 hours. Survey of contemporary issues in parenting, problems of parents, and methods and materials in education. (Summer, Fall, Spring)

308. Fatherhood. [FCS] Credit 3 hours. Exploration of the biological, cultural, and psychosocial roles of fathers across the lifespan. Emphasis on establishing, maintaining, and strengthening relationships between fathers and their children. (Varies)

320. Infant and Toddler Development. [FCS] Credit 3 hours. A study of infant and toddler growth and development from conception to age three with an emphasis on the relationships among the child and their family and society. (Fall, Spring)

321. Child Development. [FCS] Credit 3 hours. Prerequisite: Sophomore standing. A study of the development of the child from prenatal life through five years. Emphasis on constructive methods of guidance. (Fall, Spring)

322. Middle Childhood and Adolescent Development. [FCS] Credit 3 hours. Prerequisites: HDFS 302 or 321 and Sophomore standing. Principles of development and guidance of children six years of age through adolescence. Emphasis on various aspects of growth and their interrelationship to family life and society. (Summer, Fall, Spring)

371. Family Finance and Consumer Education. [FCS] Credit 3 hours. Prerequisite: Junior standing or approval of the Department Head. A study of personal and family finance with emphasis on management in relation to goals and resources and the application of these principles to households. Consumer education concepts, resources, and programs. (Summer, Fall, Spring)

412. Family Stress and Coping. [FCS] Credit 3 hours. Prerequisite: HDFS 302. The study of family functioning and resiliency during times of normal and non-normative stress. (Fall, Spring)

430. Current Trends in Family and Social Policy. [FCS] Credit 3 hours. Prerequisite: HDFS 302. The study of the current state of the family, family trends, and the implications for family policy with emphasis on the process of policy formation, implementation, and evaluation. (Fall, Spring)

441. Family Relations. [FCS] Credit 3 hours. Prerequisite: Junior standing or approval of the Department Head. A study of family cycles, relationships within families, and the personal and social factors which affect family relations. (Summer, Fall, Spring)

445. Family Life Education. [FCS] Credit 3 hours. Prerequisites: HDFS 302, 321, 346, 441, PSYC 220 or SW 360, and HUSC Majors only. The study of the roles and responsibilities of family life education methodology including principles and practice for effective outreach. (Fall, Spring)

448. Communication, Aging and Social Interaction. [FCS] Credit 3 hours. Prerequisite: HDFS 302 or permission of Department Head. Current understanding of the role of language and communication in social, cultural, and family dynamics across the lifespan. In particular, students will consider issues that may arise due to communication breakdown when interacting with older adults within the social, family, workplace, and healthcare settings. Students will be required to complete a capstone project based on their particular area of study. (Fall, Spring)

475. Family Resource Management. [FCS] Credit 3 hours. A study of the decisions individuals and families make about developing and allocating resources including time, money, material assets, energy, friends, neighbors, and space, to meet their goals. (Fall, Spring)

487. Field Experience in Human Development and Family Studies. [FCS] Credit 3-12 hours. Prerequisites: HDFS 302, HUSC 346, HUSC Major, a cumulative GPA of 2.0 or higher, and permission of the Department Head. Credit hours to be decided by agreement between the Department Head and the student. Understanding the practice, administration and promotion of the principles of human development and family studies through supervised work experience. This course may be repeated for a total of 12 credit hours. (Varies, Fall, Spring)

497. Applied Research in Human Sciences. [FCS] Credit 3 hours. Prerequisites: MATH 241 and HDFS 302 or permission of the department head. Advanced application of social science research methods investigating questions related to the health and well-being of children and families. (Fall, Spring)

498. Interactive Physical Activity Lab for Children and Youth. [FCS] Credit 3 hours. Prerequisites: MATH 241, PSYC 220 or SW 302, and HDFS 302 or permission of the Department Head. This course focuses on the development and implementation of motivational strategies to increase physical fitness and well-being of children and youth. Emphasis is on the application of the research process, including hands-on data collection and analysis. Students will spend a minimum of 3 hours per week working with children in the interactive physical activity lab (I-PAL). (Fall, Spring)

Humanities (HUM)

200. Cultural Studies in the Discipline. Credit 3 hours. A variable content course. An in-depth study of a discipline-specific topic conducted as part of a study abroad program. This independent study course may require readings, research, class attendance, and/or discussion as part of the requirements. May be repeated for 9 hours credit as topics vary. (Varies)

314. The Civilization of Europe. Credit 3 hours. A study of the history, culture, art, architecture, etc., of Western Europe. Attention to and social lectures on particular persons and places of historic importance, written and oral reports. Comprehensive final examinations to cover readings, lectures, special reports on historical personages involved. (Varies)

401/501. Special Topics in Humanities. Credit 3 hours. Prerequisite: Junior standing or permission of Department Head. A variable content course focusing on selected topics in Humanities, such as second language acquisition or discourse analysis. The content will change from semester to semester and will be advertised in advance. May be repeated twice for a total of six credit hours as topics vary. (Varies)

Human Sciences (HUSC)

252. Special Topics in Human Sciences. [FCS] Credit 3 hours. Consideration of fundamental concepts within the various subject matter areas of human sciences related to living in a contemporary society. May be repeated for up to six hours. (Varies)

346. Professional Development in the Human Sciences. [FCS] Credit 3 hours. Introduction to the roles and responsibilities of professionals in the field of Human Sciences with emphasis on the application of skills. (Summer, Fall, Spring)

400. Independent Study. [FCS] Credit 3 hours. Prerequisites: HUSC 346, Junior standing, submission of a proposal for study, and permission of the department head. An in-depth study of topics appropriate to the Human Sciences. Student works with an instructor on a one-to-one basis. May be repeated up to 6 credit hours. New materials are investigated in each repeat. (Varies)

401/501. Theories of Behavior Change in the Human Sciences. Credit 3 hours. Prerequisite: Permission of the department head. A study of the key dimensions of different theories of behavior change commonly used in human sciences and how those theories may be applied in various settings. (Varies)

442/542. Special Topics in Human Sciences. [FCS] Credit 3 hours. Prerequisite: 18 semester hours in Human Sciences or permission of the department head. Individual or group study of selected topics within the discipline of the human sciences. May be repeated for up to 6 credit hours. (Varies)

International Baccalaureate (IB)

400. Global Curriculum Design: Diploma Programme. Credit 3 hours. Prerequisite: Full SARTE status and completed interview with the IBEC coordinator. This course focuses on developing practical knowledge of how the IB programs are designed, interpreted and implemented. This lays the foundation for how the programs are delivered and assessed in support of student learning. International education students will gain an understanding of the IB's program curriculum frameworks and recognize that to develop knowledge, understanding, skills, and attitudes in their students, the focus must be on the learner and learning. (VARIES)

405. Global Curriculum Processes: Primary Years Programme. Credit 3 hours. This course is part of the sequence leading to the International Baccalaureate (IB) Educator Certificate in Teaching and Learning: Primary Years Programme (PYP). International educators recognize that to develop knowledge, understanding, skills, and attitudes in their students, the focus must be on the learner and learning. This course focuses on developing practical knowledge of how the IB programmes are designed, interpreted, and implemented. This lays the foundation for how the programmes are delivered and assessed in support of student learning. Demonstrating an understanding of the IB's programme curriculum frameworks and the processes that underpin them is thus an integral part of the knowledge that an IB teacher should possess. (Varies)

415. International Teaching and Learning: Primary Years Programme. Credit 3 hours. Prerequisite: Permission of Department Head. This course is part of the sequence leading to the International Baccalaureate (IB) Educator Certificate in Teaching and Learning: Primary Years Programme (PYP). This course focuses primarily on developing understanding of the relationship between teaching and learning, and the various teaching strategies that can be demonstrated to be effective in implementing the Primary Years Programme. Students in this course will develop their capacity to interpret and adopt appropriate teaching strategies and techniques instrumental in ensuring that programme learning objectives are achieved. (Varies)

425. Global Assessment of Learning: Primary Years Programme. Credit 3 hours. Prerequisite: Permission of Department Head. This course is part of the sequence leading to the International Baccalaureate (IB) Educator Certificate in Teaching and Learning: Primary Years Programme (PYP). The need for assessment to be an integral part of the curriculum and continual part of the learning process is essential if learning and understanding is to be effectively supported. This course is concerned with developing understanding of the assessment practices required and recommended by the relevant IB Programme. Considerable emphasis is placed on participants being able to demonstrate knowledge and understanding of assessment practices both in terms of formative and summative processes. (Varies)

435. Professional Learning: Primary Years Programme. Credit 3 hours. Prerequisite: Permission of Department Head. This course is part of the sequence leading to the International Baccalaureate (IB) Educator Certificate in Teaching and Learning: Primary Years Programme (PYP). This course focuses on the central tenet of teacher professionalism and the need to engage in critical self-reflection and improvement. Reflection is an essential part in the process of reviewing, and consequently amending, practice – itself a requisite in the ever-changing context of IB teaching and learning. In the area of international education, where affecting attitudinal and behavioral change is valued as highly as developing knowledge and skills, the need to review practice and to evaluate its success in achieving appropriate student learning outcomes is particularly salient. Teachers understanding of IB programme practices and their role in promoting international education. It is through the process of self and collegial reflection that teachers are able to develop and articulate a personal, independent and critical stance in relation to contrasting perspectives on issues, policies and developments in the IB programmes and thus able to contribute to a lasting impact on learning. (Varies)

600. Global Curriculum Design: Diploma Programme. Credit 3 hours. Prerequisite: Permission of Department Head. This course focuses on developing practical knowledge of how the IB programs are designed, interpreted, and implemented. This lays the foundation for how the programs are delivered and assessed in support of student learning. International education students will gain an understanding of the IB's program curriculum frameworks and recognize that to develop knowledge, understanding, skills and attitudes in their students, the focus must be on the learner and learning. (Varies)

605. Global Curriculum Processes: Primary Years Programme. Credit 3 hours. This research-based, which places considerable emphasis on knowledge of the IB literature and on-going research, course is part of the sequence leading to the International Baccalaureate (IB) Educator Certificate in Teaching and Learning: Primary Years Programme (PYP). International educators recognize that to develop knowledge, understanding, skills, and attitudes in their students, the focus must be on the learner and learning. This course focuses on developing practical knowledge of how the IB programmes are designed, interpreted, and implemented. This lays the foundation for how the programmes are delivered and assessed in support of student learning. Demonstrating an understanding of the IB's programme curriculum frameworks and processes that underpin them is thus an integral part of the knowledge that an IB teacher should possess. Candidates will conduct an in-depth semester project exploring international-mindset. (Varies)

610. International Teaching and Learning: Diploma Programme. Credit 3 hours. Prerequisite: IB 600 or permission of Department Head. This course focuses primarily on developing understanding of the relationship between teaching and learning, and the various teaching strategies that can be demonstrated to be effective in implementing the Diploma Programme. While knowledge of curriculum processes is essential, the capacity to interpret this by adopting appropriate teaching strategies and techniques is instrumental in ensuring the programme learning objective are achieved. Can be taken concurrently with IB 600. (Varies)

615. International Teaching and Learning: Primary Years Programme. Credit 3 hours. Prerequisite: Permission of Department Head. This research-based, which places considerable emphasis on knowledge of the IB literature and on-going research, course is part of the sequence leading to the International Baccalaureate (IB) Educator Certificate in Teaching and Learning: Primary Years Programme (PYP). This course focuses primarily of developing understanding of the relationship between teaching and learning, and the various teaching strategies that can be demonstrated to be effective in implementing the Primary Years Programme. Students in this course will develop their capacity to interpret and adopt appropriate teaching strategies and techniques instrumental in ensuring that programme learning objectives are achieved. Candidates will conduct an in-depth semester project exploring the role of collaboration and reflection in the development of authentic IB Primary Years Programme transdisciplinary learning. (Varies)

620. Global Assessment: Diploma Programme. Credit 3 hours. Prerequisites: IB 600 and 610. This course is concerned with developing understanding of the assessment practices required and recommended by the relevant IB Programme. Considerable emphasis is placed on participants being able to demonstrate knowledge and understanding of assessment practices both in terms of formative and summative processes. The need for assessment to be an integral part of the curriculum and continual part of the learning process is essential if learning and understanding is to be effectively supported. (Varies)

625. Global Assessment and Learning: Primary Years Programme. Credit 3 hours. Prerequisite: Permission of Department Head. This research-based, which places considerable emphasis on knowledge of the IB literature and on-going research, course is part of the sequence leading to the International Baccalaureate (IB) Educator Certificate in Teaching and Learning: Primary Years Programme (PYP). The need for assessment to be an integral part of the curriculum and continual part of the learning process is essential if learning and understanding is going to be effectively supported. This course is concerned with developing understanding of the assessment practices required and recommended by the relevant IB Programme. Considerable emphasis is placed on participants being able to demonstrate knowledge and understanding of assessment practices both in terms of formative and summative processes. Candidates will conduct an in-depth semester project exploring the purpose of assessment and its relationship to and implications for planning, teaching, and learning. (Varies)

630. Professional Learning: Diploma Programme. Credit 3 hours. Prerequisite: IB 620 or permission of Department Head. This course recognizes the capacity and commitment of participants to engage in collaborative learning and collegial activity in support of the aims and objectives of the IB programs. Such collaborative engagement can also present many opportunities and possibilities for professional learning with fellow international educators, within their schools and throughout the world. Such professional engagement can enable teachers to develop their own understanding, contribute to the learning of others, and participate as active members of a global community of professional learners, in the development and understanding of IB standards and practice. Can be taken concurrently with IB 620. (Varies)

635. Professional Learning: Primary Years Programme. Credit 3 hours. Prerequisite: Permission of Department Head. This research-based, which places considerable emphasis on knowledge of the IB literature and on-going research, course is part of the sequence leading to the International Baccalaureate (IB) Educator Certificate in Teaching and Learning: Primary Years Programme (PYP). This course focuses on the central tenet of teacher professionalism and the need to engage in critical self-reflection and improvement. Reflection is an essential part in the process of reviewing, and consequently amending, practice – itself a requisite in the ever-changing context of IB teaching and learning. In the area of international education, where affecting attitudinal and behavioral change is valued as highly as developing knowledge and skills, the need to review practice and to evaluate its success in achieving appropriate student learning outcomes is particularly salient. Teachers reflecting individually and collaboratively not only model good learning strategies to their students, but also enhance their own understanding of IB programme practices and their role in promoting international education. It is through the process of self and collegial reflection that teachers are able to develop and articulate a personal, independent and critical stance in relation to contrasting perspectives on issues, policies and developments in the IB programmes and thus able to contribute to a lasting impact on learning. Candidates will conduct an in-depth semester project exploring current innovations and ideas in the area of international education. (Varies)

Industrial Technology (IT)

100. Introduction to Technology. Credit 3 hours. The evolution of technology in industry and its impact. This course addresses the concentrations offered in the industrial technology program, focusing on employment opportunities, career paths, technological growth, salaries and job descriptions as well as technical, ethical and professional requirements. The three concentrations of the Industrial Technology manufacturing curriculum will be defined and emphasized throughout the course. (Fall, Spring)

111. Engineering Drafting with Computer Assisted Design. Credit 3 hours. Study of terminology, concepts, theories, and fundamental skills necessary to understand and operate a CAD system, and specifically using the system to graphically communicate through the basic elements of drafting, including orthographic projection, sectioning, dimensioning, isometric and oblique pictorial representation, standard symbols, simple auxiliary views, precision and tolerancing. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Fall, Spring)

112. Descriptive Geometry. Credit 3 hours. Prerequisite: IT 111. Industrial and engineering application of design concepts involving the uses of points, planes, and lines; spatial relationships. The application of primary, secondary, and successive auxiliaries used in the various engineering disciplines. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Spring)

202. Fundamentals of Supervision. Credit 3 hours. Prerequisite: Sophomore standing. A basic study of the role of the supervisor in modern organizations, including the basic knowledge required to effectively supervise, interact with and motivate employees of various demographics in a variety of current work environments. (Spring)

205. Preventive/Predictive Maintenance and Supervision. Credit 3 hours. Prerequisite: IT 100. A study of the methods required to develop, implement, and supervise a comprehensive preventive/predictive maintenance management program to minimize equipment and system breakdown. Major topics include methods of monitoring critical equipment and systems, predicting machine failures, scheduling equipment maintenance, and the use of computer software in preventive/predictive maintenance programs. (Fall)

209. Special Topics. Credit 3 hours. Organized class or individual instruction. May be repeated when topics vary for a maximum of six credit hours. (Varies)

211. Codes and Other Standards. Credit 3 hours. Study of the structure, scope, intent, and application of commonly referenced U.S. and International industrial codes and standards used in industrial design/engineering, fabrication, and construction, including procedure and personnel qualification/certification, product acceptance standards, QA and QC requirements. Regulatory implications of codes adopted by states for the purpose of regulating the design, fabrication, and/or operation of fired and unfired pressure vessels will also be studied. Codes and standards published by AWS, ASME, API, IIW, ASTM, ASNT, and others will be used during the course to illustrate and instruct the students in the principles of code compliance and application. (Fall, Spring)

215. 3D Rendering Using CAD Software. Credit 3 hours. Prerequisites: IT 112. An introductory study of terminology, concepts, theories, and fundamental skills necessary to understand and operate a 3D CAD system. Students will learn how to create three-dimensional models inside a

computer software system and use that model to create professional Engineering and Technical drawings. Two hours of lecture and two hours of laboratory a week. A laboratory fee is required for this course. (Fall)

221. Nondestructive Testing. Credit 3 hours. Study of the theory, limitations, and practice of Nondestructive Testing methods including visual, dye penetrant, magnetic particle, radiography, acoustic emission, ultrasonic, phased array ultrasonic, PMI, magnetic resonance, metrology, and others. Course will include theory of procedure development, and NDE personnel qualification and certification in accordance with American Society for Nondestructive Testing (ASNT) and American Welding Society (AWS) as well as principles of code compliance and application. A laboratory fee is required for this course. (Fall, Spring)

233. Introduction to Basic Electricity and Electronics. Credit 3 hours. Prerequisite: MATH 161. The fundamental concepts of electricity and electronics that involve direct current (dc), alternating current (ac), series and parallel resistive circuits, network analysis, magnetism, inductance, capacitance, transformers, motors, residential wiring, electronic components, and various types of test equipment found in industry. Two hours of lecture and two hours of laboratory problem solving per week. A laboratory fee is required for this course. (Fall, Spring)

236. Advanced Electronics. Credit 3 hours. Prerequisite: IT 233. The study of semi-conductor electronics beginning with the diode, progressing through transistors, amplifiers, JFETs, MOSFETs, OP-AMPS, power supplies, oscillators, thyristors, and integrated circuits (ICs). Two hours of lecture and two hours of laboratory problem solving per week. A laboratory fee is required for this course. (Fall, Spring)

241. Manual Welding. Credit 3 hours. Practical applications of manual cutting, fabrication, and welding process technology to complete a fabricated project. Students will be introduced to Shielded Metal Arc Welding, Oxy-Fuel Cutting, Oxy-Fuel Welding, and Gas Tungsten Arc Welding which will provide for a working knowledge suitable for supervision of welding practitioners. This course will use Welding Procedure Specifications (WPS) and project designs (one structural and one pipe) provided by the instructor, to improve practical fabrication and welding skills of the student. Each project to be assessed for ability to meet all requirements of the project design as well as the quality of the fabrication and welding required to complete the project. A laboratory fee will be required for this course. (Fall)

242. Materials and Processes. Credit 3 hours. Prerequisite: IT 100. An introductory study of materials and processes as applied to industrial materials with special emphasis on metals, plastics, woods and ceramics. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Summer, Fall, Spring)

256. Principles and Metallurgy of Welding. Credit 3 hours. Theory and practice in oxy-fuel gas and electric arc welding processes with emphasis on preparation of joints, manipulation in various weld positions, and the selection and use of welding accessories and equipment. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Fall, Spring)

262. Principles of Technology. Credit 3 hours. Prerequisite: Sophomore standing or permission of the Department Head. A course designed to help students perceive the interaction of science, technology, and society. Scientific theories and law are merged with technological skills through the study of mechanical, fluid, electrical, and thermal systems found in technological devices. Through experimentation, students learn that technology is the application of science to the solution of practical problems. Two hours of lecture and two hours of laboratory per week. (Varies)

264. Industrial Fluid Power. Credit 3 hours. Prerequisite: IT 111 and MATH 161. Theory and practice of hydraulic and pneumatic power for industrial production. Functional examination of units: pumps, valves, boosters, etc. Simulated systems used to emphasize design and other industrial materials. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Summer, Fall, Spring)

281. Industrial Design using Emerging Technologies. Credit 3 hours. Prerequisite: IT 215. An advanced study of emerging design technologies critical to manufacturing, engineering, and industrial practices. Students will develop technical skills necessary for using design equipment such as 3D printers, 3D scanners, CNC machines, and other developing technologies. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Spring)

291. Industrial Internship. Credit 3 hours. Prerequisites: Sophomore standing and permission of the Department Head. This course is a cooperative venture between Southeastern Louisiana University and a variety of industries. It combines the student's academic and technical preparation at the university with actual on-the-job experiences in approved modern industrial enterprises. For three (3) hours credit a student must be employed a minimum of 20 hours per week during a regular semester and a minimum of 40 hours per week during the summer. Grades assigned on a Pass/Fail basis only. (Summer, Fall, Spring)

292. Independent Study. Credit 3 hours. Prerequisites: A "B" average or recommendation by the faculty and approval of the Department Head. A course devoted to research and development through laboratory experimentation of selected problems of special interests. Enrollment limited. Grades assigned on a Pass/Fail basis only. (Varies)

308. Supervision of Production Planning and Controlling. Credit 3 hours. Prerequisite: Junior or Senior Standing. A problem-based approach to the organization, control, and supervision of production planning. The course also addresses reliability centered maintenance programs and automatic data collection relative to production and inventory control. (Fall)

309. Special Topics. Credit 3 hours. Organized class or individual instruction. May be repeated when topics vary for a maximum of six credit hours. (Varies)

312. Principles and Applications of Industrial Codes and Standards. Credit 3 hours. Prerequisite: IT 256. Study of the industrial codes and standards used in industrial design/engineering, fabrication, and construction around the world. This course will include procedure and personnel qualification/certification, product acceptance standards, QA and QC requirements. Students will develop an understanding of the structure, scope, intent, and application of commonly used codes and standards. Codes and standards published by AWS, ASME, API, IIW, ASTM, ASNT, and others will be used during the course to illustrate and instruct the students in the principles of code compliance and application. Two hours of lecture and 2 hours of laboratory per week. A laboratory fee is required for this course. (Fall, Spring)

322. Materials Science and Metallurgy. Credit 3 hours. Prerequisite: IT 242. Study of the major materials used in industrial engineering, considering structure and properties, testing methods (destructive and nondestructive), and microscopic examination. Two hours of lecture and two hours of laboratory a week. A laboratory fee is required for this course. (Fall, Spring)

331. Industrial Control Systems. Credit 3 hours. Prerequisites: IT 233. The study and the application of microprocessor-based control systems in industrial operations. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Spring)

333. Fundamentals for Mechanical Design. Credit 3 hours. Prerequisite: ET 111 or IT 111. Study and applications of ANSI fundamentals for mechanical product design. Topics include engineering design process, 3D parametric modeling, working drawings prototyping, and geometric dimensioning and tolerancing pertaining to ASME Y14.5. Two hours of lecture and two hours of laboratory per week. (Spring)

341. Automatic and Semiautomatic Welding. Credit 3 hours. Prerequisite: IT 241. Practical applications of automatic and semiautomatic welding process technology to complete a fabricated project. Student will be introduced to Flux Core Arc Welding, Gas Metal Arc Welding, and Submerged Arc Welding which will provide for a working knowledge suitable for supervision of welding practitioners. Each project to be assessed for ability to meet all requirements of the project design as well as the quality of the fabrication and welding required to complete the project. A laboratory fee is required for this course. (Spring)

351. Machine Tool Technology. Credit 3 hours. Prerequisites: IT 111 and 242 or ET 111 and 283. Principles and practices of metal machining involving lathes, shapers, millers, planers, and precision grinders. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Fall, Spring)

381. Welding Joint Design. Credit 3 hours. Prerequisites: IT 211 and MATH 162 or MATH 175. Study of the theory and practice of determining code-compliant welding joint designs for pressure and vacuum retaining systems, structural systems, connections, weld profiles, and welding Symbology. Course will include use of static and dynamic considerations for weld efficiency, material thickness, and joining process selection to meet both owner and code considerations. This course will draw upon courses in design, code & standards, Engineering Materials and metallurgy, Nondestructive Testing, and welding/joining, previously completed by the student to provide a foundation for this course. A laboratory fee is required for this course. (Fall)

391. Industrial Internship. Credit 3-12 hours. Prerequisite: Permission of Department Head. Students receive on-the-job work experience with selected and approved industrial firms. Completion of all 100- and 200- level major courses are required before internship is taken. For three hours credit a student must be employed a minimum of 20 hours per week during a regular semester and a minimum of 40 hours per week during the summer semester. Course may be repeated for a maximum of 12 credit hours. Grades assigned on a Pass/Fail basis only. (Summer, Fall, Spring)

402. Industrial Supervision. Credit 3 hours. Prerequisites: IT 205 and credit for or enrollment in MGMT 351. The competencies and knowledge required of industrial supervisors to effectively manage production, groups and work teams in a dynamic workplace comprised of diverse populations. (Summer, Fall)

403. Senior Project CWI/CWS. Credit 3 hours. Prerequisites: Senior Standing and Department Head Approval. This Senior Project brings together previous courses completed by the student into a comprehensive look at professions in Inspection or Supervision. This course will use the American Welding Society Body of Knowledge in either Inspection or Supervision (Student's Choice) to blend previously completed courses for a strong understanding in Welding Inspection and Supervision. Each student completing this course will be expected to demonstrate a comprehensive knowledge of welding topics sufficient to be certified by AWS as either a CWI or CWS. (Varies)

405. Work Methods and Measurement. Credit 3 hours. Prerequisite: IT 351. A study of the work methods and measurement concepts and techniques that are common to modern industry, including productivity improvement, work methods, work measurement, labor reporting, ergonomics, incentives and alternative methods for increasing productivity. (Fall, Spring)

406. Facilities Planning and Design. Credit 3 hours. Prerequisite: IT 405. A study of principles, methods, and techniques for analyzing existing and proposed facilities to achieve improvements in productivity. Major topics include strategic facilities planning; plant location; product, process and schedule requirements; materials handling and costing. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Fall, Spring)

407. Six Sigma Industrial Quality. Credit 3 hours. Prerequisites: MATH 175 or 241 or permission of Department Head. An approach to quality that focuses on the improvement of processes. Topics include teams, strategic planning, cause-and-effect diagrams, Pareto diagrams, basic statistics, probability, control charts, project management, flow diagrams and failure modes and effects analysis. (Summer, Fall, Spring)

409. Special Topics. Credit 3 hours. Organized class or individual instruction. May be repeated when topics vary for a maximum of six credit hours. (Varies)

442. CAD/CAM/Robotics. Credit 3 hours. Prerequisites: IT 331, IT 351 and ET 202 or ET 212. A course designed to cover the application of Computer-Aided Design, Computer-Aided Manufacturing and robotics in modern industrial settings. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Fall)

444. Computer-Integrated Manufacturing (CIM). Credit 3 hours. Prerequisite: IT 442. This course will cover the integration of various automated systems and peripherals into a functioning and flexible manufacturing system. The interfacing of the central control computer and robot systems into a workable manufacturing cell will also be covered. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Spring)

492H. Research and Development. Credit 3 hours. Prerequisites: A "B" average or recommendation by the faculty and approval of the Department Head. An honors course devoted to research and development of selected problems. Course may be repeated for a total of six hours with no more than three hours in any one semester. Grades assigned on a Pass/Fail basis. (Fall)

625. Automated Design and Manufacturing. Credit 3 hours. Prerequisites: DDT 316, IT 442 or permission of the ISAT Coordinator. A study of design principles and rapid prototyping through solid model development. Students will develop solid models, convert them to machine tool software for code development and produce prototypes with CAM and 3-D printing. Two hours of lecture and two hours of laboratory work each week. (Varies)

Industrial Technology Education (ITE)

261. Transportation, Energy, Power Technology. Credit 3 hours. A study of modern transportation systems; energy-its sources, forms, and control; the conversion of energy into usable power through the various prime movers; and the impact of transportation, energy and power technology on our society.

272. Exploration of Construction Technology. Credit 3 hours. A broad-based systems-oriented course investigating all areas of the construction industry from planning to completion of light, heavy, industrial and civil construction, and the various careers associated with each area.

301. Technology and Society. Credit 3 hours. Prerequisite: Junior standing. A comprehensive study of technology and its effects on society.

302. Technology and Education Management. Credit 3 hours. Prerequisite: Junior standing. A study of the principles of office management and laboratory layout for technology education. Studies of student advising, student organizations, professional organizations and fund-raising techniques will also be conducted.

481. Materials and Methods of Curriculum Development. Credit 3 hours. Prerequisite: Junior standing. A study of curriculum and teaching materials, specialized equipment, and instructional methods utilized in technology education. The use of audio/video equipment, field trips, guest speakers, curriculum materials, and computers for technology education classroom/laboratories will be emphasized.

Integrated Science and Technology (ISAT)

201. Introduction to Interdisciplinary Science and Technology. Credit 3 hours. Prerequisites: Completion of 8 hours of science and Math 161 with a C or better. This course is designed to expose students to a wide variety of applications and careers in Science and Technology. It will also address the interdisciplinary nature of many modern-day topics. Lessons will assist students in exploring their abilities and goals to help them make informed decisions about degree and career planning. (Varies)

301. Professional Aspects of Scientific and Technical Careers. Credit 3 hours. Prerequisites: Major in ISAT and ISAT 201. This course will focus on a variety of topics and skills important in science and technology including scientific ethics, analytical methods, and economic issues.

Active engagement including individual and group discussions, problem-solving, case studies and student presentations will be emphasized. (Varies)

401. Professional Experience. Credit 1-3 hours. Prerequisite: Junior/ Senior standing and permission of ISAT coordinator. This course is designed to give students practical experience working with professionals in their chosen fields. The student is responsible for finding a professional with whom to work. Students earn 1 credit hour per 45 hours worked up to a maximum of 3 credit hours in a single semester. Course may be repeated more than once for up to 6 credit hours. (Varies)

600. Applied Science Seminar I. Credit 3 hours. Students in the ISAT program will be expected to take Applied Sciences Seminar I or Applied Sciences Seminar II during their first year in the ISAT program. The purpose of these seminars is to move the student toward formulating and initiating their ISAT capstone research project. Sharing of professional knowledge and expertise is expected to occur during the flow of classroom interactions. Guest speakers from various scientific and technical disciplines will be an integral part of these seminars. (Fall)

601. Applied Science Seminar II. Credit 3 hours. Prerequisite: Admission to ISAT program or approval of ISAT Coordinator. Students in the ISAT program will be expected to take Applied Sciences Seminar I or Applied Sciences Seminar II during their first year in the ISAT program. The purpose of these seminars is to move the student toward formulating and initiating their ISAT capstone research project. Sharing of professional knowledge and expertise is expected to occur during the flow of classroom interactions. Guest speakers from various scientific and technical disciplines will be an integral part of these seminars. (Spring)

605. Research and Development in Industrial Technology. Credit 3 hours. Prerequisites: ISAT 600 or ISAT 601 or concurrent enrollment in one of these courses. A course devoted to research and development through laboratory experimentation of selected problems of special interest. Course may be repeated for a total of six hours with no more than three hours in any one semester. (Varies)

615. Technology in Industry and Society. Credit 3 hours. Prerequisite: ISAT 600 or concurrent enrollment. This course investigates the historical evolution of technology for use in developing models appropriate for predicting future technological trends. The course provides technical understanding and communication skills needed across the disciplines of mathematics, chemistry and physics, industrial technology, and computer science. The course provides an understanding of the impact of technology on individuals, the global community and the environment. (Fall)

625. Applications of Computing in Science and Technology. Credit 3 hours. Prerequisite ISAT 600 or permission of the ISAT Coordinator. This course teaches students the Software Development Life Cycle & Agile Design (SDLC&AD) processes that are used in the industry to take a software idea through to the marketplace. Students will implement the process in their own software projects. (Fall, Spring)

635. Industrial Chemistry. Credit 3 hours. Prerequisite: ISAT 600 or concurrent enrollment. This course will be of a survey nature. It will introduce the student to the importance of the chemical industry to our economy as a whole and inform the student about the role of the chemist in typical plant operations such as quality control and assurance, safety compliance, and research and development. In addition, the student will become acquainted with some important industrial processes in the chemical industry. (Spring)

645. Mathematical Modeling for Science and Technology. Credit 3 hours. Prerequisite: ISAT 600 or concurrent enrollment. A study of typical operation research problems representative of various business and industrial organizations. These problems include production planning, distribution and scheduling, inventory control, project planning and control, simulation and forecasts of sales. (Fall)

651. Applied Knowledge Discovery for Engineering and Science. Credit 3 hours. Prerequisite: CMPS 340 or permission of ISAT Coordinator. The aim of this course is to teach theoretical foundation of discovering hidden patterns by means of advanced data mining algorithms. A basic background in statistics and probability and experience in the use of Python libraries are required. Topics include OLAP and multidimensional data analysis, association rule mining, genetic algorithms, clustering algorithms of hierarchical clustering, partitioning, density-based clustering, and grid-based clustering. In addition, this course aims to apply these algorithms to a real-life problem through a term project, which requires utilizing scientific libraries. The term project may be guided in team-teaching style such that a co-supervisor may lead the project as needed. (Varies)

655. Error and Risk Analysis. Credit 3 hours. Prerequisite: ISAT 600 or concurrent enrollment. This course will present the basic tools of error and risk analysis, with extensive use of case studies. The goal of this course is to provide students with the mathematical and physical problem-solving skills to attack similar data-driven problems and to understand the methods by which data are converted into information for decision making. (Fall)

665. Industrial Internship. Credit 3 hours. Prerequisite: ISAT 600, 601, 9 hours of lower level core courses and permission of the ISAT Coordinator. This course is a cooperative venture between Southeastern Louisiana University and a variety of business, industry, governmental, or educational institutions. It combines the student's academic and technical preparation at the University with actual on-the-job experiences. Grades assigned on a Pass/Fail basis only. (Varies)

670. Pattern Recognition and Applications for Engineering and Science. Credit 3 hours. Prerequisite: CMPS 340 or permission of ISAT Coordinator. This course covers the topics on theoretical foundation of advanced machine learning algorithms including reinforcement learning, statistical learning, kernel-based learning, ensemble learning, and Bayesian Network Model as well as discussion of real-life recognition problems such as biomedical signal recognition. A basic background in linear algebra, statistics and probability, and experience in use of Python libraries are required. In addition, this course aims to apply ML algorithms to a real-life problem utilizing a term project, which requires utilizing scientific libraries. The term project may be guided in team-teaching style such that a co-supervisor may lead the project as needed. (Varies)

690. Special Topics in Science and Technology. Credit 3 hours. Prerequisite: ISAT 600 or 601 or permission of the program coordinator. A study of a special topic in one of the disciplines covered by the ISAT program. This course may be taken up to four times for credit if different topics are studied. (Varies)

770. Thesis. Credit 1-6 hours each semester with 6 hours needed for graduation. Prerequisites: ISAT 600, 601 and approval of Program Coordinator. The thesis will investigate a significant interdisciplinary topic centered in the area of the student's concentration. The results must provide a significant contribution to the knowledge base in the discipline. The thesis is graded Pass/Fail. The student must enroll in the thesis course each semester that the thesis is in progress. (Varies)

771. Research Project. Credit 1-6 hours each semester with 6 hours needed for graduation. Prerequisites: ISAT 600, 601 and approval of Program Coordinator. Students will design and implement a research project. Research projects will investigate a significant interdisciplinary, applications-oriented topic centered in the area of the student's concentration. The research project is graded Pass/Fail. The student must enroll in the research project course each semester that the research is in progress. (Varies)

Italian (ITAL)

101. Elementary Italian I. Credit 3 hours. The beginning course for students with no knowledge of Italian. All appropriate elements of basic language learning are utilized for the purpose of providing a foundation in the language and culture of Italy. Classwork supplemented by aural-oral drill in the language laboratory. Offered as the first of four sequential courses (101, 102, 201, 202) designed to provide an overall desired proficiency. (Fall, Spring)

102. Elementary Italian II. Credit 3 hours. Prerequisite: ITAL 101 or equivalent. Continuation of ITAL 101. (Fall, Spring)

- 201. Intermediate Italian I.** Credit 3 hours. Prerequisite: ITAL 102 or equivalent. Completion and review of basic elements of grammar. Introduction of reading material of moderate difficulty. (Fall, Spring)
- 202. Intermediate Italian II.** Credit 3 hours. Prerequisite: ITAL 201 or equivalent. A course with emphasis on proficiency in reading and continuation of grammar review. (Fall, Spring)
- 213. Art and Literature in the Italian Renaissance.** Credit 3 hours. A study of the art and literature of the Italian Renaissance with emphasis on Leonardo da Vinci and Michelangelo Buonarroti. Taught in English. (Varies)
- 311. Advanced Italian Grammar.** Credit 3 hours. Prerequisite: ITAL 202 or equivalent. Intensive study of grammar. Recommended for students with a minor in Italian and for others who wish to perfect their language skills. (Varies)
- 312. Advanced Italian Composition and Syntax.** Credit 3 hours. Prerequisite: ITAL 202 or equivalent. Descriptive and narrative compositions in Italian with emphasis on syntax and verb forms. Effective writing of letters and short reports will be stressed to develop business skills. Recommended for students with a minor in Italian and for others who wish to improve their language skills. (Varies)
- 332. Advanced Italian Conversation.** Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. Exercise in speaking Italian based on the intensive study of model conversation of specialized subjects. (Varies)
- 371. Studies of the Italian Cinema.** Credit 3 hours. The Italian cinema from the mid-40's to the present. A close analysis of the evolution of cinema in Italy with emphasis on the films and the strategies used by the director to tell a particular story as well as to portray aspects about Italian culture. (Varies)
- 381. Italian Civilization.** Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. Geography, history, literature, art, music, educational systems, economy of Italy. The introduction of culture and civilization of Italy. This course cannot be used to fulfill the foreign language requirement. (Varies)
- 423. Special Topics in Italian Studies.** Credit 3 hours. Prerequisite: ITAL 202 or permission of Department Head. A special topics course that offers a detailed analysis of a particular genre, movement, author, or topic. May be repeated twice for credit as topics vary. (Varies)

Kinesiology (KIN)

The Kinesiology and Health Studies Department recommends that each student obtain a medical examination and be covered by an adequate accident and hospital insurance policy before participating in any of the programs of the department.

- 120. Foundations of Kinesiology.** Credit 3 hours. This course explores Kinesiology as an academic discipline, and provides an overview of careers associated with the discipline. Concepts in the study of physical activity are introduced, including those in musculoskeletal anatomy, exercise physiology, fitness assessment, biomechanics, motor behavior, and sport/exercise psychology. (Fall, Spring)
- 201. Introduction to Health and Physical Education.** Credit 1 hour. For Health and Physical Education majors only. This course is an introduction to the health and physical education career path. Topics include professional development, lesson planning, pedagogical concepts, resources, and career preparation for health and physical education teachers. (Fall)
- 232. Introduction to Sport Management.** Credit 3 hours. This course is designed to prepare the individual for the academic and professional field of sport management. An introductory course concerned with the disciplinary foundations of sport and physical activity, opportunities available in various segments of the sport industry, and professional preparation and development. (Fall, Spring)
- 235. Foundations of Coaching.** Credit 3 hours. Special attention to issues related to the coaching field. Topics include but are not limited to developing a coaching philosophy, coaching constituents, team unity, sport psychology, legal issues, and the coach as administrator. (Fall, Spring)
- 251. Motor Development and Movement.** Credit 3 hours. Focuses on stage theories and developmental task analysis of motor skill acquisition. A study of motor development, movement and the child-centered approach to teaching movement in grades K-6. Develops understanding and skills concerning the broad concept of motor development across the life span. This course will provide competency-based clinical practice. (Spring)
- 270. Fitness Concepts and Application.** Credit 3 hours. Prerequisite: Sophomore standing. Introduces concepts of exercise and fitness and their application to the development of programs to enhance health and physical performance. Includes components of fitness, concepts of exercise physiology, fitness assessment, and the design of exercise programs for weight management, health, and performance enhancement. (Spring)
- 275. Anatomy and Anatomical Kinesiology.** Credit 3 hours. A study of basic anatomy and physiological principles with practical application to motor performance. Emphasis on analysis of motor performance and development of therapeutic exercise programs. (Fall, Spring)
- 276. Practicum in Sport Management.** Credit 3 hours. Prerequisites: Sophomore standing (30 or more hours), 2.0 grade point average. Provides student with sport management experience in an assignment approved by the instructor. Enrollment is limited to students majoring in Sport Management. (Fall, Spring)
- 300. Mitigating Risk and Minimizing Injuries in Athletic Competition.** Credit 3 hours. This course focuses on prevention and care of sports injuries and risk reduction in the sports arena. Special attention is given to factors related to liability and other legal issues associated with the coaching profession, as well as the recognition and appropriate response to injuries and illnesses common to sports. (Varies)
- 301. Coaching Baseball and Softball.** Credit 3 hours. Prerequisite: KIN 235 or permission of Department Head. Focuses on theory and methods of coaching baseball and softball. Includes rules of the sport, individual and team skills, offensive and defensive strategies, development of practice schedules and sport-specific training and conditioning. Expertise in sport is expected of students enrolling in the course. (Varies)
- 302. Coaching Basketball.** Credit 3 hours. Prerequisite: KIN 235 or permission of Department Head. Focuses on theory and methods of coaching basketball. Includes rules of the sport, individual and team skills, offensive and defensive strategies, development of practice schedules and sport-specific training and conditioning. Expertise in sport is expected of students enrolling in the course. (Varies)
- 303. Coaching Football.** Credit 3 hours. Prerequisite: KIN 235 or permission of Department Head. Focuses on theory and methods of coaching football. Includes rules of the sport, individual and team skills, offensive and defensive strategies, development of practice schedules and sport-specific training and conditioning. Expertise in sport is expected of students enrolling in the course. (Varies)
- 304. Coaching Volleyball.** Credit 3 hours. Prerequisite: KIN 235 or permission of Department Head. Focuses on theory and methods of coaching volleyball. Includes rules of the sport, individual and team skills, offensive and defensive strategies, development of practice schedules and sport-specific training and conditioning. Expertise in sport is expected of students enrolling in the course. (Varies)
- 305. Coaching Cross Country and Track and Field.** Credit 3 hours. Prerequisite: KIN 235 or permission of Department Head. Focuses on theory and methods of coaching track and field and cross country. Includes rules of the sport, individual and team skills, offensive and defensive strategies, development of practice schedules and sport-specific training and conditioning. Expertise in sport is expected of students enrolling in the course. (Varies)
- 306. Special Topics in Coaching.** Credit 3 hours. Selected topic in coaching that are not covered in existing courses. This course may be repeated as topics vary. (Varies)

310. Practicum in Sport Administration. Credit 2 hours. Prerequisite: KIN 232 or permission of Department Head. Practical application of sport management concepts and responsibilities. Requires a minimum of 160 contact hours per semester; 10 hours per week. (Fall, Spring)

313. Current Topics in Health and Physical Education. Credit 2 hours. Prerequisite: KIN 201. For Health and Physical Education majors only. This course covers current topics in health and physical education professional development, resources, career preparation, and content for the health and physical education state-mandated licensure exam. (Fall)

321. Motor Learning. Credit 3 hours. Prerequisite: Sophomore standing. Principles of motor learning and their application to teaching and learning motor skills. Includes stages of learning, modeling, verbal instructions, feedback, issues of practice scheduling, and theories of motor control. (Fall, Spring)

332. Sport Information and Media Relations. Credit 3 hours. Prerequisite: ENGL 322, Junior Standing or permission of the Department Head. The course is designed to introduce students to the role of effective communication in the sport industry. The nature and function of communication will be examined in a variety of settings. Emphasis will be placed on interpersonal communications, public relations, mass media relations, media promotion techniques and innovative technology within the sport industry. (Fall)

333. Ethics and Governance in Sport. Credit 3 hours. Prerequisite: Junior Standing or permission of the department head. A survey of major ethical theories and how they apply in the context of sport and the major governing bodies within the sport industry. An examination of the reasons behind rules and in-depth analysis of the structure of sports' major governing bodies. (Spring)

334. Social Aspects of Sport. Credit 3 hours. Prerequisite: Junior Standing. This course is designed to provide an introduction to sociological issues, practices and phenomena associated with sport. Course content explores such areas as social theories, the social significance of sport in society, social problems related to sport, the interaction of sport and other social institutions, and international cultures and sport. (Fall, Spring)

335. Special Topics in Sport Management. Credit 3 hours. Prerequisite: Junior Standing. May be repeated one time as topics vary. Course identified by description each semester offered. This course provides an opportunity for in-depth study of selected topics in sport management. (Varies)

351. Physical Education in the Elementary School. Credit 3 hours. Prerequisites: Full SARTE status and KINL 221. Application of knowledge and theory to the development of physical education curriculum and instruction for children in the elementary school. The course includes competency-based clinical practice in the elementary school each week. Two hours lecture, two hours laboratory a week. (Spring)

362. History of Sport and Physical Education. Credit 3 hours. Historical development of sport and physical education from ancient societies to the present. Political, social, economic and religious factors that have shaped the history of sport and physical education. History and contemporary status of sport and physical education in the U.S. and selected countries around the world. (Fall, Spring)

366. Facility and Event Management. Credit 3 hours. Prerequisites: KIN 232 and Junior standing, or permission of Department Head. This course is designed to assist the sport management major with acquiring the necessary knowledge and skills needed to manage a sport facility and to plan a sporting event. The course will provide information concerning the planning, organization, and administration of sport facilities and event management. A key component of the course is the planning and organizing of an event. Field-based practicum hours are included. This course is limited to students majoring in Sport Management. (Spring)

372. Biomechanics. Credit 3 hours. Prerequisites: MATH 105, 107 or 161 and KIN 275, or permission of department head. A study of the basic laws and principles of Physics with specific application to the analysis of motor performance and sport skills. (Fall, Spring)

380. Legal Issues in Sport. Credit 3 hours. Prerequisite: Junior Standing or permission of the Department Head. Legal structures, major laws, regulations and case precedents that establish legal responsibilities, rights, privileges, and controls related to sport management. (Fall, Spring)

392. Physiology of Exercise. Credit 3 hours. Prerequisites: Grade of "C" or higher in ZOO 250, ZOOL 252, ZOO 251 and ZOOL 253 or permission of the department head. Neuromuscular, cardiorespiratory, hormonal and environmental responses and adaptations to exercise are covered with an emphasis on bioenergetics. Laboratory experience will include experiments which reveal the principles of exercise physiology. Two hours of lecture and two hours of lab per week. (Fall, Spring)

395. Kinesiology Seminar. Credit 3 hours. Prerequisite: Junior or Senior standing and permission of Department Head. Examination of specialized topics in Kinesiology, Physical Education, and Exercise Science. Course identified by title and description of content covered. May be repeated one time as topics vary. (Varies)

405. Health and Physical Education Methods in the Elementary School. Credit 3 hours. Prerequisites: HS 232 and current enrollment in EDUC 415. A course for elementary education majors. Health and physical education curriculum for the elementary school. Includes study of principles of lesson development and demonstration of health and physical education teaching techniques to elementary school children. Two hours lecture and two hours laboratory per week. (Varies)

406. Sport Promotion and Fundraising. Credit 3 hours. Prerequisites: KIN 232 and MRKT 303 and Junior standing, or permission of Department Head. This course is designed to study the areas of marketing, promotion, and fundraising within the context of interscholastic, intercollegiate, amateur, and professional sports. The course will include a general introduction to the history of sport marketing, promotions in the sport industry, sponsorships, trends, event management, booster clubs, and fundraising. Field-based practicum hours are included. This course is limited to students majoring in Sport Management. (Spring)

408. Sport Business and Finance. Credit 3 hours. Prerequisite: FIN 381. Foundational business theory in finance, economics, accounting and management applied to the managerial control of sport organizations. Emphasis will be placed on ownership structures, business structures in the sport industry, financial analysis, feasibility studies, and economic impact (Spring)

410. Internship in Exercise Science, Fitness or Sport Management. Credit 3-6 hours. A senior-level internship during which students engage in practical experience in the field. A minimum of 320 field-based hours is required for course completion. Detailed requirements are provided in the catalog in the Department of Kinesiology and Health Studies section. May be repeated for a total of six hours. A laboratory fee is required for this course. (Fall, Spring)

424. Fitness Testing and Prescription. Credit 3 hours. Prerequisite: A grade of "C" or higher in KIN 392. A presentation of the basic techniques in exercise testing and prescription. Includes information pertinent for Health Fitness Instructor certification by the American College of Sports Medicine. Two hours of lecture and two hours of laboratory each week. (Varies)

426. Strength Development and Conditioning Programs. Credit 3 hours. Prerequisite: A grade of "C" or higher in KIN 392. Instruction in basic physiological adaptations to strength and speed development, exercise prescription and testing for athletes, and facility design and safety. (Fall, Spring)

431. Measurement and Evaluation. Credit 3 hours. Prerequisites: Junior Standing and EDUC 201 or 203 or permission of the Department Head. Terminology and evaluation procedures appropriate to health and physical education. Special attention to applications of the criterion-referenced evaluation model to tests, ratings and grading procedures. (Fall)

434. Clinical Aspects of Exercise Testing and Prescription. Credit 3 hours. Prerequisite: A grade of "C" or higher in KIN 392, Junior standing, or permission of Department Head. Selection and implementation of tests for health-related fitness levels in a variety of populations.

Includes methods for designing and administering exercise programs for people with special medical conditions. Two hours of lecture and two hours of laboratory each week. (Fall, Spring)

436. Psychosocial Dimensions of Physical Activity. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. An examination of psychosocial theories and research related to sport and exercise behavior. Consists primarily of lectures and discussion activities aimed at clarifying, exemplifying, and expanding upon the assigned readings. (Fall, Spring)

451. Sport Administration. Credit 3 hours. Prerequisites: Junior standing and KIN 232 and KIN 380, or permission of the Department Head. A critical examination of sport business administrative principles. The competencies and responsibilities of administrators in the organizations, administration and management of sport businesses will be emphasized. (Fall)

460. Teaching Physical Education in the Secondary Schools. Credit 3 hours. Prerequisites: Full SARTE status, KIN 351, KINL 209, 210, 214, 224, 226, 228, and completion of or current enrollment in KIN 431, or permission of the Department Head. A course that focuses on teaching methods and materials in secondary physical education settings (junior high/high school). Activities will primarily center on curricular issues and planning, teaching, and evaluating instruction. This course will provide competency-based clinical practice. (Fall)

490. Internship in Sport Management. Credit 3-9 hours. Prerequisites: Senior standing, 2.0 GPA, completion of the majority of course work required in the degree (no more than 6 hrs remaining), earning a grade of C or higher in all indicated courses, completion of KIN 332, 333, 334, 380, 406, 451, FIN 381 and MGMT 351. The B.S. in Sport Management requires the completion of 9 credit hours of the course which includes a minimum of 400 hours of field-based internship experience during which students will gain experience in methodologies, administration techniques, and programs specific to the internship site. May be repeated for a total of 9 credit hours. (Fall, Spring)

491/591. Introduction to Physical Education for Individuals with Disabilities. Credit 3 hours. Prerequisite: Junior or Senior standing. The focus of this survey course is on handicapped children who will be mainstreamed for physical education. Other topics include: federal and state legislation, handicapping conditions, similarities between handicapped and non-handicapped children in growth, fitness, learning and performance, and psycho-social variables. Three hours lecture per week. (Varies)

492/592. Perceptual Motor Development of Individuals with Disabilities. Credit 3 hours. Prerequisite: Junior or Senior standing. This course was designed for those certifying in Adapted Physical Education and Special Education Mild/Moderate. The most frequent handicapping conditions (multi/moderate mental retardation, learning disability, and emotional/behavioral disorder) are the focus of this class. Topics include: neurological, sensory, perceptual, perceptual-motor, memory, learning, performance, assessment. Two hours lecture, two hours laboratory a week. (Varies)

493/593. Physical Education for Individuals with Physical Disabilities and Other Impairments. Credit 3 hours. Prerequisite: Junior or Senior standing. This course is designed for those certifying in Adapted Physical Education and Severe/Profound Impairments. Severe motor deficits resulting from Severe/Profound Mental Retardation, Orthopedically Handicapped, Other Health Impaired, Sensory Handicapped, Multi-handicapped conditions are the focus of this course. Analysis of movement, assessment, treatment and long-range planning are covered in terms of theory, school programs and recreation. Two hours lecture and two hours laboratory a week. (Varies)

494/594. Curriculum Development for Adapted Physical Education. Credit 3 hours. Prerequisites for KIN 494: KIN 491, Junior standing, or permission of Department Head. Prerequisites for KIN 594: KIN 491, or 591, or permission of Department Head. Theory of curriculum design is translated into practical programs. Special emphasis is placed on the similarity between physical education and adapted physical education, I. E. P. development, and program evaluation (curriculum and instruction). Three hours lecture a week. (Varies)

601. Statistical Methods in Kinesiology. Credit 3 hours. Special parametric and non-parametric statistics applicable to research techniques in kinesiology. (Fall)

606. Introduction to Research. Credit 3 hours. Prerequisite: KIN 601. Principles, procedures, and techniques of research with an intensive survey of current scientific investigations in the areas of kinesiology. Special attention is given to practical application. (Fall)

610. Therapeutic Principles of Sport Related Injuries. Credit 3 hours. Course objectives include: Instruction and practice in the care, prevention, treatment and rehabilitation of injuries commonly encountered in the recognition of injury signs, stabilization techniques, prosthetic strapping techniques and the use of selected therapeutic modalities. (Varies)

612. Motor Learning. Credit 3 hours. Factors involved in the acquisition and performance of motor skills. Major motor learning theories. Reading of research literature and participation in experiments. (Varies)

614. Principles and Theories of Motor Development. Credit 3 hours. Focuses on the theories and principles of motor development. The course will cover aspects of motor development across the lifespan from infancy through elderly populations. The course will also relate motor development to cognitive and social development, especially during early childhood. (Varies)

621. Mechanical Analysis of Motor Performance. Credit 3 hours. Prerequisite: KIN 372. The mechanical analysis of motor skill with special reference to the use of photographic and mechanical aids. (Varies)

622. Sports Performance Assessment and Analysis. Credit 3 hours. Explores concepts and skills in the acquisition, analysis, and interpretation of data relevant to human motion and performance. Addresses standards, techniques, and approaches for evaluating performance and using assessment to modify training to enhance athlete performance, health and well-being. (Varies)

623. Human Behavior in Exercise and Sport. Credit 3 hours. An examination of theories and research related to Exercise and Sport Psychology. Including individual differences, motivation, social influence processes, psychophysiological aspects and behavior change technique applied to exercise and sport. (Varies)

624. Applied Research in Exercise and Sport Behavior. Credit 3 hours. This course will examine the need for and purpose of applied Exercise and Sport Psychology research, outline the area of study, and examine the research on interventions used to address behavioral issues in sport and exercise. (Varies)

625. Cardiorespiratory Aspects of Exercise. Credit 3 hours. Prerequisite: KIN 392 or permission of Department Head. A study of alterations in cardiovascular and pulmonary function from exercise with a focus on physiological mechanisms. Laboratory experiences included. (Varies)

626. Strength Development and Conditioning Programs. Credit 3 hours. Prerequisites: KIN 392 and 275 or consent of the department. Isotonic and isometric programs for the development of muscular strength and endurance including background neuromuscular physiology. A study of other types of conditioning methods for the development of general fitness. (Varies)

628. Kinesiology Seminar. Credit 3 hours. May be repeated as topics vary. Course identified by description each semester offered. (Varies)

629. Kinesiology Seminar. Credit 3 hours. May be repeated as topics vary. Course identified by description each semester offered. (Varies)

632. Independent Research. Credit 3 hours. Prerequisites: Must be a graduate student in the Health and Kinesiology Master of Arts program and have taken at least 9 hours of graduate course work including KIN 601 or 606 or permission of the Department Head. Student will demonstrate research design and literature review competency. If a research study is implemented, student must obtain appropriate IRB approval. (Fall, Spring, Summer)

634. Independent Reading. Credit 3 hours. Prerequisites: Must be a graduate student in the Health and Kinesiology Master of Arts program and have taken at least 9 hours of graduate course work or permission of the Department Head. Directed study of the professional and research literature in an area of kinesiology not covered in other courses. May be repeated as topics vary. A maximum of six hours may be used in a degree plan. (Fall, Spring, Summer)

636. Nutrition for Health and Physical Performance. Credit 3 hours. Prerequisite: Basic Nutrition or permission of the Department Head. Principles of nutrient metabolism and their role and function in the maintenance of health prevention of disease. Development of nutritional plan for specific conditioning, including dietary concerns for those in physical performance programs. Credit may not be received for both HS 636 and KIN 636. (Varies)

638. Neuromuscular Aspects of Exercise. Credit 3 hours. Prerequisite: KIN 392 or permission of the Department Head. The course emphasizes current understanding of effects of exercise on skeletal muscle and nervous tissue structure and function with some application to training. (Varies)

640. Advanced Exercise Physiology I. Credit 3 hours. Prerequisite: KIN 392 or permission of Department Head. An advanced course focusing on physiological responses to exercise related to bioenergetics, metabolism, and endocrine exercise physiology; the nervous system and skeletal muscle excitation, contraction, and fatigue; and exercise testing and programming related to metabolism and neuromuscular performance. The course builds on principles and concepts learned in undergraduate courses in the areas of anatomy, physiology, and exercise physiology. Content emphasizes exercise and physiological responses to challenges in health and disease. (Varies)

642. Advanced Exercise Physiology II. Credit 3 hours. Prerequisite: KIN 392 or permission of Department Head. An advanced course focusing on the integrative physiology and physiological responses to exercise as it relates to cardiovascular, respiratory, and hemodynamic regulation; physiological responses to environmental challenges; and exercise testing and exercise programming related to cardiovascular performance. The course builds on principles and concepts learned in undergraduate courses in the areas of anatomy, physiology, and exercise physiology. (Varies).

644. Advanced Exercise Testing and Prescription. Credit 3 hours. Prerequisites: KIN 392, KIN 424, and KIN 434 or permission of the Department Head. A study of the proper method for exercise testing and prescription with emphasis on risks and benefits. Includes preparation for clinical experiences with rehabilitative fitness agencies and for advanced certification. Some laboratory required. (Varies)

646. Grant Proposal Writing. Credit 3 hours. Focuses on the necessary competencies and skills of writing and submitting proposals and evaluating and administering grants for health education, allied health, kinesiology and related fields including schools, communities and work sites. (Varies)

693. Socio-Cultural Issues in Sport and Physical Activity. Credit 3 hours. The sport manager must understand people who engage in sport within their respective living environments, thus comprehending their interest and values for sport participation and/or their sport spectator interest. Social and cultural influences on sport, as well as those revealed through sport will be discussed. (Varies)

694. Sport Marketing and Media. Credit 3 hours. This course examines marketing information systems, pricing strategies, media relations, promotional methods, and endorsements as they relate to marketing theory and sport and physical activity settings. It also examines the interactive relationship between sports and mass media. (Varies)

695. Legal Issues in Sport and Fitness. Credit 3 hours. Study of the law and implications relative to sport and fitness. Emphasis on safety procedures, preventative measures, and legal responsibilities of the sport and fitness professional. (Varies)

696. Managing Events and Facilities in Sport and Fitness. Credit 3 hours. This course is designed to provide the knowledge and skills needed for the sport and fitness professional to successfully manage sport and fitness facilities and events. Topics include planning facilities and events, staff management, marketing, scheduling, and event operations. (Varies)

697. Financial Management in Sport. Credit 3 hours. Financial management, planning and budgetary components of the sport industry. Through this course students will obtain the problem solving and decision-making abilities to maximize success in the sport industry. (Varies)

698. Sport Administration. Credit 3 hours. This course is a comprehensive overview of principles of the sport management industry including marketing, management/leadership, media, governance, sociological issues, facility & event management, and law & ethics. Specific attention is placed on the principles of leadership and management along with their association with theory. (Varies).

710. Internship in Kinesiology. Credit 3-6 hours. Prerequisite: Permission of the Department Head. A field work experience at a setting that relates to the student's academic preparation and intended employment area of interest. The purpose is to provide an opportunity for students to engage in practical learning activities and to gain and demonstrate professional competencies. May be repeated for a total of 6 hours. A laboratory fee is required for this course. (Fall, Spring, Summer)

770. Thesis. Prerequisites: KIN 601 and 606 or 607. Credit 1-6 hours each semester, with six hours needed for graduation. The student must enroll in the thesis course each semester the thesis is in progress. The thesis is graded Pass/Fail. (Fall, Spring, Summer)

Kinesiology Laboratory (KINL)

Kinesiology Laboratory Courses may be taken for a regular grade or Pass-Fail as an option for non-majors.

Basic Courses

Basic courses are open to all students, and provide a lifetime activity program with primary emphasis on the acquisition of motor skills, physical fitness, knowledge, and appreciation. Students needing two required activity courses may select any two of the basic laboratory courses. If additional courses are required or needed for electives, the additional courses may be selected from the basic laboratory courses or from the major laboratory courses.

100. Adaptive I. Credit 1 hour. Therapeutic exercise for handicapped students. Requires physician's referral and permission of the department. Three hours a week. (Fall, Spring)

101. Adaptive II. Credit 1 hour. Therapeutic exercise for handicapped students. Requires physician's referral and permission of the department. Three hours a week. (Varies)

102. Beginning Badminton. Credit 1 hour. Basic skills, strategies, rules and procedures. Instruction and practice of short and deep serves, clears, drops and smash. Singles and doubles play. Three hours a week. (Varies)

103. Jogging. Credit 1 hour. Aerobic conditioning using long distance running. Principles and techniques of endurance training are studied. Three hours a week. (Fall, Spring)

107. Beginning Golf. Credit 1 hour. Putting, chipping, and the full swing with all clubs. Rules and procedures of play. Most classes are held at an off campus driving range, and students must arrange for their transportation and pay a small fee for balls at the range. Three hours a week. A laboratory fee is required for this course. (Varies)

110. Beginning Tennis. Credit 1 hour. Basic skills, strategies, rules and procedures. Instruction and practice of the serve, ground strokes and volleys. Singles and doubles play. Three hours a week. (Fall, Spring)

111. Swim Fitness. Credit 1 hour. For experienced swimmers. Aerobic conditioning using long distance swimming and other endurance activities in the water. Principles and techniques of endurance training are studied. Three hours a week. (Fall, Spring)

112. Bowling. Credit 1 hour. Beginning bowling skills, scoring, procedures and terminology. Three hours a week. A laboratory fee is required for this course. (Fall, Spring)

113. Weight Training. Credit 1 hour. Instruction in proper technique in strength conditioning using free weights and weight machines. Three hours a week. (Fall, Spring)

115. Aerobic Dance. Credit 1 hour. Aerobic exercise activities with musical accompaniment. Three hours a week. (Varies)

120. Beginning Swimming. Credit 1 hour. The basic swimming strokes: front crawl, back crawl, breaststroke, sidestroke, and elementary backstroke. Basic water safety skills. Three hours a week. (Fall, Spring)

122. Intermediate Tennis. Credit 1 hour. Prerequisite: KINL 110 or permission of Department Head. Reviews basic skills, terminology, and rules of tennis play, and provides instruction and practice of advanced skills (e.g., use of spin, overhead, service return), singles and doubles strategy, and match play. Three hours of laboratory per week. (Fall, Spring)

133. Walking for Fitness. Credit 1 hour. Aerobic conditioning using long distance walking. Designed to assist individuals acquire the knowledge, attitudes, and skills necessary for participation in a lifelong fitness walking program. Three hours a week. (Fall, Spring)

134. Pump and Run. Credit 1 hour. This fitness course combines aerobic activity (primarily walking and jogging) with strength training. It is developed to assist individuals acquire the knowledge, attitude, and skills necessary for participation in a lifelong total fitness program. Three hours per week. (Varies)

135. Aqua Fitness. Credit 1 hour. This course is designed to introduce a variety of aquatic exercises to maintain or improve cardiovascular endurance, muscular strength, endurance, and flexibility. Three hours per week. (Fall, Spring)

140. Beginning Jujitsu. Credit 1 hour. A beginning laboratory course in jujitsu open to all university students. Three hours a week. (Fall, Spring)

141. Advanced Jujitsu. Credit 1 hour. Prerequisite: KINL 140 or permission of the Department Head. A second laboratory course in jujitsu designed to build on knowledge and skills. Three hours a week. (Fall, Spring)

144. Introduction to Judo. Credit 1 hour. Introduces basic skills, terminology, and background of Judo. Includes instruction and physical training to develop self-defense techniques and physical fitness. Three hours of laboratory per week. (Fall, Spring)

145. Intermediate Judo. Credit 1 hour. Prerequisite: KINL 144. Designed as a second course in Judo. Includes a review of basic skills, terminology, and background of Judo. Provides instruction and training to extend Judo's use in self-defense, and introduces elements of competition. Three hours of laboratory per week. (Fall, Spring)

160. Functional Fitness. Credit 1 hour. This course provides instruction and opportunities to participate in a variety of fitness activities that include aerobic and strength training, plyometrics, Pilates, body weight training, and exercises that promote agility and flexibility. Activities take place indoors and outdoors and require a moderate entry level of fitness. Three hours of laboratory per week. (Fall, Spring)

165. Pilates. Credit 1 hour. Pilates-based exercise techniques focusing on development of core body strength, breathing, and flexibility. (Fall, Spring)

203. Basketball. Credit 1 hour. Individual skills and basic offensive and defensive patterns. Basic rules and strategies. Three hours a week. (Varies)

204. Soccer. Credit 1 hour. Fundamental skills and basic strategies of individual position play as well as teamwork. Three hours a week. (Varies)

207. Volleyball. Credit 1 hour. Basic skills and offensive and defensive team play. Rules, procedures and terminology. Three hours a week. (Varies)

220. Physical Activity Workshop. Credit 1 hour. Course identified by description each semester offered. May be repeated as topics vary. (Fall, Spring)

232. Lifeguard Training. Credit 1 hour. Must be a strong swimmer to take this course. Students must pass prerequisite skill tests. Covers skills and knowledge required for effective lifeguarding. Successful completion of this course will satisfy the requirements to obtain an American Red Cross Lifeguard Training Certificate. Three hours a week. (Spring)

311. Recreational Games. Credit 1 hour. Covers a variety of sports, games, and recreational pursuits appropriate as content of school-based physical education programs. Three hours a week. (Varies)

313. Outdoor Leisure Pursuits. Credit 1 hour. A recreational laboratory class emphasizing introductory instruction and experience in a variety of outdoor leisure pursuits. Topics may be selected from but are not limited to the following: camping, bait casting, boating, backpacking, hiking. Three hours a week. (Varies)

Laboratory Courses for Health and PE Majors

Students not majoring in Kinesiology and Health Studies must have permission of the department to schedule these classes.

209. Content and Teaching Strategies for Swimming. Credit 1 hour. Basic skills, standard strokes, and teaching methods of beginning swimming. Three hours per week. (Summer, Fall)

210. Content and Teaching Strategies for Net & Racket Games. Credit 1 hour. Skills, rules, strategies, and teaching methods of net and racket games. Three hours per week. (Varies)

214. Content and Teaching Strategies for School-Based Fitness. Credit 1 hour. This course will provide content and strategies for teaching fitness, conducting fitness testing and incorporating fitness into games and sports. Three hours per week. (Varies)

221. Content and Teaching Strategies for Elementary School Physical Education. Credit 1 hour. Introduction to content and activities in elementary physical education. This course provides experiences in basic movement skills, fundamental motor skills, games, rhythmic activities and dance. Three hours per week. (Varies)

224. Content and Teaching Strategies for Recreational Games, Golf, and Outdoor Recreation. Credit 1 hour. Skills, rules, strategies, and teaching methods of golf, recreational games, and outdoor leisure pursuits. Three hours per week. (Varies)

226. Content and Teaching Strategies for Invasion Games. Credit 1 hour. Skills, rules, strategies, and teaching methods of invasion games including soccer, flag football, and basketball. Three hours per week. (Varies)

228. Content and Teaching Strategies for Track & Field, Volleyball, and Softball. Credit 1 hour. Skills, rules, strategies, and teaching methods of team sports including track & field, volleyball, and softball. Three hours per week. (Varies)

Latin (LAT)

101. Elementary Latin I. [LCCN: CLTN 1013, Elementary Latin I]. Credit 3 hours. The beginning course for students with no knowledge of Latin. Non-laboratory approach to the language. Emphasis will be on the development of reading skills and on the essentials of grammar. Offered as the first of four sequential courses (101, 102, 201, 202) designed to provide an overall desired proficiency. (Fall, Spring)

102. Elementary Latin II. [LCCN: CLTN 1023, Elementary Latin II]. Credit 3 hours. Prerequisite: LAT 101 or equivalent. Continuation of LAT 101. (Fall, Spring)

201. Intermediate Latin I. [LCCN: CLTN 2013, Intermediate Latin I]. Credit 3 hours. Prerequisite: LAT 102 or equivalent. Completion and review of basic elements of grammar. Introduction of reading material of moderate difficulty. (Fall, Spring)

202. Intermediate Latin II. [LCCN: CLTN 2023, Intermediate Latin II]. Credit 3 hours. Prerequisite: LAT 201 or equivalent. A course with emphasis on proficiency in reading and continuation of grammar review. (Fall, Spring)

311. Advanced Grammar and Translation. Credit 3 hours. Prerequisite: LAT 202 or equivalent. Casual, concessive, final consecutive, temporal, substantive, conditional, relative clauses; forms and uses of subjunctive; gerunds and gerundives, etc. Further practice in translation from Latin into English and English into Latin. (Varies)

319. Advanced Latin Translation. Credit 3 hours. Prerequisite: LAT 311 or equivalent. Translation of part of Caesar's De Bello Gallico. (Varies)

320. Survey of Latin Literature. Credit 3 hours. Prerequisite: LAT 319 or permission of Department Head. Translation of passages by some of the best-known writers of the Early Period, the Golden Age and the Silver Age of Latin Literature (300 B.C.- A.D. 138). (Varies)

Leadership Training (LT)

301. Special Topics: Leadership Training. Credit 3 hours. Designed to provide students with knowledge, attitudes, and skills necessary to become effective in campus organizations. May be repeated for a maximum of six credit hours, as the topics vary. (Summer, Fall, Spring)

Library Science (LS)

102. Introduction to Information Research. Credit 1 hour. A course designed to teach the information research process. Methods for locating and evaluating sources and the creation of effective search strategies are discussed and practiced. Required exercises and assignments reinforce the course content. (Summer, Fall, Spring)

421. Library Practice. Credit 3 hours. Prerequisites: LSA 403/503, 404/504, 405/505 and LSED 401/501 or 402/502. Six hours a week work-experience in Sims Memorial Library; practice in the selection, acquisition, and organization of library materials; the use of these materials; and library administrative duties. (Varies)

Library Science Administration (LSA)

403/503. School Library Administration. Credit 3 hours. Service objectives and standards of school libraries, including school library management of housing, equipment, acquisition of materials, management of materials, budgets, and use of technology in library management and instruction in information literacy. (Varies)

404/504. Classification and Cataloging. Credit 3 hours. Basic principles of cataloging and classifying books and non-print materials. Study of Dewey Decimal Classification system, professional cataloging tools and technology, and an overview of the Library of Congress classification system and appropriate computer software. Two hours of lecture and two hours of laboratory a week. (Varies)

405/505. Library Reference Materials. Credit 3 hours. Introduction to books and materials most commonly used in a library to answer simpler reference questions; characteristics of both general and specific reference materials (bibliographies, indices, on-line search systems, ERIC, etc.) studied in detail; methods of reference work with teachers and students; teaching the use of reference materials. (Summer)

406/506. Technology for the Library Media Specialist. Credit 3 hours. This course is designed to assist the Library Media Specialist integrate to the newest technology into the library program. Instruction will cover aspects of both hardware and software appropriate to the library; purchase and efficient utilization of technology to accomplish routine library tasks, the use of on-line services and planning for future technological utilization and expansion. Requires minimal familiarity with microcomputer. (Varies)

580. School Library Practicum. Credit 3 hours. Prerequisites: Teacher certification or eligibility, LSED 401/501 or 402/502, or LSA 610, LSA 403/503, 405/505, and 406/506. Library administrative experience at elementary, middle, and secondary schools to include observation and participation in all activities in the school library. Qualified students must make application to the Departmental office one (1) semester prior to their registration for LSA 580. (Varies)

610. Bibliotherapy. A course designed to research and explore children's literature and investigate the technique of bibliotherapy in an effort to help children confront and solve personal problems and to enhance their self-concept. (Varies)

618. Information Literacy. Credit 3 hours. A course designed to investigate materials and methods needed to implement the Louisiana Content Standards for information literacy in elementary and secondary schools, including the principles of critical thinking and problem-based learning. Students will learn to recognize the need for information and how to locate, evaluate and effectively use the information available to them. (Varies)

Library Science Education (LSED)

401/501. Books and Related Materials for Children. Credit 3 hours. Study of reading interests of children at various age levels; principles of book selection for children; tools for selecting books and materials; particular consideration given to writers, illustrators, publishers, and editions; emphasis placed on extensive reading and evaluation of all types of literature for children; methods of presentation; examination of all types of print and non-print resources, including electronic materials. (Summer, Fall, Spring)

402/502. Books and Related Materials for Young People. Credit 3 hours. Library in relation to educational program of the school; reading needs and interests of young people; principles of selecting books and materials for young people; aids and tools in selection; reading and evaluating many books for adolescents; methods for guidance in use of library materials; examination of all types of print and non-print resources, including electronic materials. (Summer, Fall, Spring)

408/508. Educational Material for the Classroom. Credit 3 hours. Prerequisite: Junior standing. A course designed primarily for persons who will be teaching at the elementary or secondary levels. It is designed to give a working knowledge of the theory and production of classroom teaching/learning materials. Additionally, the course will provide opportunities for students to develop proficiency in the operation and utilization of most types of school audio-visual equipment. Students may take this course as an education elective but it is not to be counted toward certification in media. (Varies)

409/509. Instructional Design and Production of Specialized Curriculum Materials. Credit 3, 6, or 9 hours. Prerequisite: Junior standing or permission of the Department Head. This course is designed to help teachers research, write, and produce specialized materials for their classroom. Course materials developed might include materials such as annotated bibliographies, slide presentations, audio tapes, teachers' guides, or media kits. Students may be required to purchase instructional supplies or pay travel expenses when required. (Varies)

Management (MGMT)

101. Fundamentals of Business Success. Credit 1 hour. Prerequisite: Freshman standing or permission of the Department Head. Focuses on the fundamentals of business success, basic job interview skills, how to market oneself and provide value to prospective employers through creating the right first impression, dressing for success, projecting confidence, proper body language, personal and business etiquette, etc. Required for freshman business majors; open to students of all levels and majors. (Fall, Spring)

141. Introduction to Business. [LCCN: CBUS 1003, General/Introduction to Business Administration]. Credit 3 hours. An orientation course in business activity, including a study of organization, ownership, marketing, personnel, finance, and management. Not open to juniors or seniors majoring in the College of Business. (Varies)

210. Microcomputer Applications for Business. [LCCN: CBUS 2203, Computer Applications]. Credit 3 hours. Emphasis is on hands-on usage of microcomputer applications needed by business such as information/word processing, data base management, spreadsheets and graphics, and other relevant applications as developed. Credit toward the degree will not be granted for both MGMT 210 and CMPS 110. (Summer, Fall, Spring)

220. Advanced Spreadsheet Applications for Business. Credit 3 hours. Prerequisite: MGMT 210 or permission of Department Head. A thorough study of the advanced features of spreadsheet applications in business environments. Course includes preparation for the Microsoft Office Specialist Certifications for the MS Excel Core and Expert exams. MOS exams require additional fee. (Summer, Fall, Spring)

240. Business Communication. Credit 3 hours. Prerequisite: ENGL 101. Students will learn how to use computer networks and traditional methods to facilitate the following tasks: compose and submit routine business messages; interact with peers on problem-solving teams; research; draft; format; and submit business reports; create and deliver business presentations; seek and maximize job-search resources. (Summer, Fall, Spring)

285. Entrepreneurial Principles and Mindset (LCCN: CMGM 2413, Introduction to Entrepreneurship (Lower Level)). Credit 3 hours. This course provides an introduction to the foundations of entrepreneurship and helps students to develop an entrepreneurial mindset. Emphasis is placed on studying the roles of creativity and innovation in the process of developing new products, services, or ideas as the basis for new venture creation. Experiential exercise are used to equip students with skills and tools that can be applied to create and pursue entrepreneurial opportunities (Summer, Fall, Spring)

321. Family Business Management. Credit 3 hours. Prerequisite: Junior standing. This course explores the unique challenges and dynamics associated with the family-owned and managed enterprise. Topics include challenges and opportunities for family businesses, the dynamics of family interactions within the family business culture, conflict resolution among family members, building relationships with non-family managers, stages of family business growth, strategic planning in the family business, and succession planning. (Fall, Spring)

326. Entrepreneurial Funding. Credit 3 hours. Prerequisite: Junior Standing. This course emphasizes the financial and funding aspects of a new venture. Topics included financial theories, knowledge, tools and techniques entrepreneurs need to start, build and harvest a successful venture (Fall, Spring)

351. Principles of Management. [LCCN: CMGM 3103, Principles of Management (Upper Level)]. Credit 3 hours. Prerequisite: Junior standing. Introduction to theory and practice of managing formal organizations, including planning, organizational theory, ethics, international management, human behavior, and control. (Summer, Fall, Spring)

375. Small Business Management. [LCCN: CMGM 3413, Small Business Management (Upper Level)]. Credit 3 hours. Prerequisite: MGMT 351. A study of the complexities, challenges, rewards, and risk of managing small businesses. Special focus on forms of ownership, the creation of a business plan, financing small businesses, legal, ethical, and social responsibilities, as well as international opportunities for small businesses. (Fall, Spring)

391. Management Internship. Credit 3 hours. Prerequisites: 2.5 Overall GPA, completion of six semester hours in concentration area, and permission of the Department Head. Management internship provides a student with work experience in an assignment selected and approved by the University and Department. Students will earn three hours credit for a minimum of 300 hours of approved work experience. Only management majors can receive credit for the Management Internship course. All grades are assigned on a Pass/Fail basis. (Summer, Fall, Spring)

420. Managing Across Global Environments. Credit 3 hours. Prerequisite: Junior standing. This course examines the fundamental aspects of the relationships between countries and the international organizations that support the economic, social, and commercial development. Credit toward the degree will not be granted for both MGMT 420 and GB 495. (Summer, Fall, Spring)

425. Introduction to International Business. [LCCN: CMGM 4213, Management in a Global Context (Upper Level)]. Credit 3 hours. Prerequisite: Senior standing. An introduction to the field of international business. The empirical dimensions of the world economy; business enterprise in international trade; trade channels; effects of economic, political and social environment on international management problems of international operations; the role of government in fostering international business. (Summer, Fall, Spring)

430. Study Abroad. Credit 3 hours. Prerequisite: Junior Standing. This course is designed to enrich students' awareness and appreciation for international business and to gain a better understanding of management techniques and national cultures in other countries. (Summer)

435. Communication for International Business. Credit 3 hours. Prerequisite: Junior standing. International and cross-cultural communication problems of multinational organization. Analysis of the role of cultural and linguistic barriers to objectives-oriented communication in international business. (Fall, Spring)

440. People, Cultures, and Opportunities. Credit 3 hours. Prerequisite: MGMT 351. Examine organizational issues arising at interface between workforce diversity and corporate sustainability. Discussion of business approaches that create long-term employee and organizational value. Topics include diversity consciousness, corporate social responsibility, and business ethics. (Fall, Spring)

457. The Art and Science of Negotiation. Credit 3 hours. Prerequisite: MGMT 351. This course is an introduction to the art and science of negotiation. Students will learn about the nature of negotiation and gain skills that will help them secure agreements in a variety of contexts. The course is designed to be largely experiential, providing students with the opportunity to develop and practice their negotiation skills by participating in role-play exercises. This experiential component enables students to integrate their experiences with the principles presented in the assigned readings and course discussions. (Fall, Spring)

458. Entrepreneurship Capstone. Credit 3 hours. Prerequisite: Senior Standing. This course integrates topics and theories in entrepreneurship and applies them to the new venture creation and development context. Case studies will be used to illustrate real-world problems confronting contemporary entrepreneurs. Students will engage in experiential learning to gain hands-on experiences in solving entrepreneurial challenges. (Fall, Spring)

464. Business Strategy. Credit 3 hours. Prerequisites: MGMT 351, FIN 381, MRKT 303, OMIS 200 and Senior standing. Application of managerial, financial, marketing, and accounting principles in strategic decision making; extensive use of cases and written reports. (Summer, Fall, Spring)

471. Human Resource Management. [LCCN: CMGM 3313, Human Resource Management (Upper Level)]. Credit 3 hours. Prerequisite: MGMT 351. A study of personnel management to include historical development; planning for and organizing the personnel department; selection and training of employees; incentive programs; wages, salary, and fringe benefits; utilization of the labor force; ethical treatment of employees; and management-labor relations. (Summer, Fall, Spring)

472. Special Topics in Management. Credit 3 hours. Prerequisite: MGMT 351. A course designed to encourage critical thinking and awareness of current issues and problems confronting business, such as individual and organizational performance issues, ethics, environmental problems, and technological changes. Intensive use of current reference materials, and class discussion. The content may change from semester to semester and will be announced in advance. (Varies)

473. Organizational Behavior and Applied Leadership. [LCCN: CMGM 4103, Organizational Behavior (Upper Level)]. Credit 3 hours. Prerequisite: MGMT 351. A study of the various methods of motivating employees and handling a multitude of human problems involved in local, national, and international business. Particular emphasis will be placed on the application of leadership theories and concepts within organizations. The student will actively participate in role-playing situations and will study actual companies in the Southeast Louisiana area. (Summer, Fall, Spring)

475. Employment Law. Credit 3 hours. Prerequisites: BLAW 231 and MGMT 471. Legal concepts underlying employment laws including evaluating job descriptions and job specifications, wrongful discharge, wage and hour laws, anti-discrimination statutes, and development of employment policies that ensure fair treatment of employees within the legal system. (Fall, Spring)

476. Seminar in Applied Human Resource Management. Credit 3 hours. Prerequisites: BLAW 231, MGMT 471 and consent of Department Head; only open to seniors in the Human Resource Management concentration. A skills-based course for seniors in the human resource management concentration. Emphasis is placed on fusing theory and practice in the areas of human resource planning, staffing, performance evaluation, compensation, and training and development (Fall, Spring)

478. Leadership. Credit 3 hours. Prerequisite: MGMT 351; Senior Standing (or permission of Dept. Head). An overview of theoretical and practical aspects of organizational leadership. Critically examines leadership approaches, debates, and controversies. Emphasizes the development of leadership approaches, ethics, and controversies. Emphasizes the development of leadership skills for influence in organizational settings. (Summer, Fall, Spring)

485/585. Creativity, Innovation and Entrepreneurship. [LCCN: CMBM3513, Introduction to Entrepreneurship (UPPER LEVEL)]. Credit 3 hours. Prerequisite: Junior standing. A study of the role of creativity and innovation in the process of developing new products, services or ideas as the basis for new venture creation. Focus on tools to facilitate entrepreneurial creativity and the development of skills using them, as well as on factors that support or hinder innovation and entrepreneurship. (Summer, Fall, Spring)

620. Environmental Management. Credit 3 hours. A course designed to provide students an overview of the issues and concepts associated with the business-economy/environmental interaction. The course will focus on the evolution of four themes, or four "shades of green," that contribute toward creating and sustaining competitive and strategic advantage. (Varies)

630. Study Abroad. Credit 3 hours. Prerequisite: Graduate Standing. This course is designed to enrich students' awareness and appreciation for international business and to gain a better understanding of management techniques and national cultures in other countries. (Summer)

650. Health Care Law. Credit 3 hours. A course designed to familiarize the student with federal and state laws and regulations which affect the management of health care centers such as hospitals and nursing homes. (Varies)

656. Advanced Health Care Administration. Credit 3 hours. A course designed to focus on many of the varied skills and disciplines which must be mastered in order to be a highly effective health care manager. Emphasis is placed on an accurate and relatively comprehensive picture of health care management theory and practice that should serve as a foundation for further development within the field of health care administration. (Varies)

657. The Art and Science of Negotiation. Credit 3 hours. This course exposes students to a broad range of negotiation techniques, including complex, advanced techniques and issues associated with the digital age. Students will learn about the nature of negotiation and gain skills that will help them secure agreements in a variety of contexts. This course is designed to be largely experiential, providing students with the opportunity to develop and practice their negotiation skills by participating in role-play exercises. This experiential component enables students to integrate their experiences with the principles presented in the assigned readings and course discussion. (Spring)

663. Organization Theory and Behavior. Credit 3 hours. Prerequisite: MGMT 351. Contributions of both formal theory of organizations and the behavioral sciences are examined as they impact upon organizational functions and processes. (Summer, Fall, Spring)

683. Business Policy and Strategy. Credit 3 hours. Prerequisite: Open to MBA candidates during the last twelve hours of the program. This is the integrative capstone course for graduate students in business and utilizes a systems perspective to analyze complex organizational issues and problems from the viewpoint of top management. The case method is used for problem identification and solution proposals. (Summer, Fall, Spring)

695. Special Topics in Management. Credit 3 hours. Prerequisite: Graduate standing. A seminar course focusing on selected issues in management. The content will change from semester to semester and will be announced in advance. (Fall, Spring)

Marketing (MRKT)

123. Contemporary Marketing. [LCCN: CMKT 2003, Foundations of Marketing (Lower Level)]. Credit 3 hours. A survey course which introduces the student to the ABCs of marketing. Focuses on current developments in the application of marketing techniques in such areas as entertainment (e.g., movies), special events (e.g., festivals, sports, concerts), and e-Commerce. Designed to serve various groups of students—those from other colleges/departments who would like to develop an understanding of marketing; those who are undecided about a major and would like to explore marketing as a possibility; and those who desire to take a contemporary marketing course to assist them in their present career path. Not open to students who have previously earned credit for MRKT 303 or Juniors and Seniors majoring in the College of Business. May be used as a Business Elective, but not a Marketing Elective in the Marketing Degree Curriculum. (Varies)

205. Social Media and Personal Branding. Credit 3 hours. This course will prepare students to utilize social media and other tools to effectively present their personal brand to employees and clients. Students will learn about a wide range of media channels and how to best deploy their brand through the most appropriate channels. The active utilization of these channels for both personal and business application will be explored. (Varies)

303. Principles of Marketing. [LCCN: CMKT 3003, Principles of Marketing (Upper Level)]. Credit 3 hours. Prerequisite: Junior standing. An introduction to the marketing discipline with coverage of marketing fundamentals and strategy, ethics, consumer decision making, product, promotion, pricing, and distribution concepts and their role in the business environment. (Summer, Fall, Spring)

310. Foundations of Marketing Design. Credit 3 hours. Prerequisite: Junior standing. Marketing identity is communicated through its collateral pieces, such as brochures, business cards, and its online presence. Thoughtful design is necessary to create an impact. This is an introductory course that develops technical skills and artistic awareness demanded by companies to create marketing communications using software that is considered industry standard. Students will complete projects applying marketing concept development and logo design. They will create common collateral pieces such as brochures, flyers, and posters. (Fall)

314. Public Relations and Digital Marketing Content. Credit 3 hours. Prerequisites: ENGL 102 and Junior standing. Students will be introduced to marketing concepts in earned, owned, and paid media. Students will explore the role of marketers in modern public relations while developing an understanding of emerging trends in content marketing. (Summer, Fall, Spring)

319. Consumer Behavior. Credit 3 hours. Prerequisites: MRKT 303 and Junior standing. A study of consumer interests, consumer needs and demands, and an exploration of the cultural, social, and psychological determinants of buying behavior. Emphasis is placed on the behavioral sciences with the aim of providing bases for developing marketing strategy. (Summer, Fall, Spring)

320. Supply Management and Purchasing. [LCCN: CMKT 3203, Personal/Professional Selling (Upper Level)]. Credit 3 hours. Prerequisites: MRKT 303 and Junior Standing. An introduction to the role of supply management within the organization and as a member of the entire supply chain. The buyer-seller or vendor relationship is examined from a process perspective including both the strategic and transactional level. The course examines the changing nature of the supply management function as organizations respond to changes in the global, legal, economic, competitive and technological environments. The contributions that supply management makes to an organization's competitive position are the focus of the course. Credit toward the degree will not be granted for both MRKT 320 and OMIS 325. (Fall, Spring)

321. Introduction to Professional Sales. [LCCN: CMKT 3203, Personal Selling]. Credit 3 hours. Prerequisite: Junior standing. A study of sales as a profession. Students will develop skills such as prospecting, building relationships, making sales presentations, handling objections, and obtaining client commitment. Students will make sales presentations as a key component of the course. (Summer, Fall, Spring)

331. Retailing. [LCCN: CMKT 3103, Retail Marketing]. Credit 3 hours. Prerequisites: MRKT 303. A course emphasizing the importance of organizational structure, policies, promotional and strategic decision making as it relates to both online and physical retail environments. (Fall, Spring)

332. Business to Business Marketing. Credit 3 hours. Prerequisites: MRKT 303 and Junior standing. A problem-solving approach to the marketing of business, industrial, and governmental goods and services; including an analysis of the purchasing function from the vendor's viewpoint. Emphasis is given to product planning and development; technical advisory and management services; distribution channels and methods; cost/price/profit relationships and practices; and promotion in the various segments of the industrial market. (Varies)

342. Advertising. Credit 3 hours. Prerequisite: Junior standing. An introductory course designed to help students understand the strategic role and function of advertising and the components of an advertising campaign. (Fall, Spring)

373. Digital and Social Media Marketing. Credit 3 hours. Prerequisite: MRKT 303. An exploration and application of the tactics associated with online marketing, including SEO, user experience, email marketing, social media, digital advertising and overarching digital strategy. (Fall, Spring)

391. Marketing Internship. Credit 3 hours. Prerequisites: MRKT 303, Junior Standing, 2.5 adjusted grade point average and permission of the Department Head. The Marketing Internship provides a student with marketing experience in an assignment selected and approved by the University with a cooperating business firm. Students will earn three hours credit for a minimum of 300 hours of approved work experience. Only marketing majors can receive credit for the Marketing Internship course. All grades are assigned on a Pass/Fail basis. (Summer, Fall, Spring)

392. Marketing Internship. Credit 3 hours. Continuation of MRKT 391. In order to obtain credit for MRKT 392, the work assignment must be different from that of MRKT 391. (Summer, Fall, Spring)

421. Advanced Professional Sales. Credit 3 hours. Prerequisite: MRKT 321. An advanced course in sales intended to develop a high level of competence in professional sales skills. Role playing exercises, negotiation exercises, lectures, and significant engagement with the professional sales community will develop sales competence in students to a high level. Students are required to apply sales techniques by participating in a sales competition judged by industry professionals. (Fall, Spring)

425. Sales Leadership. Credit 3 hours. Prerequisite: MRKT 321. An advanced course in which students apply the principles and concepts of sales planning and control to a comprehensive, revenue-generating project. Emphasis is placed on the leadership sales teams, including the organization of sales departments and territories, motivating salespeople, and controlling sales operations. (Fall, Spring)

432. Marketing Research and Analytics. Credit 3 hours. Prerequisites: MRKT 303 and OMIS 200 or MATH 241. A study of marketing research methods and analytics and their application. Students will design, research, gather, and analyze data to guide marketing decision making. (Summer, Fall, Spring)

435. e-Commerce and Marketing Strategy. Credit 3 hours. Prerequisites: MRKT 303, OMIS 360 and Junior Standing. This course introduces students to Internet-based marketing strategy and related issues, ranging from identification of market opportunities via WWW to evaluation of marketing strategy on the Internet. Topics include: e-Business models, identification of online business opportunities and market segmentation, online marketing research, online customer behavior, the Internet marketing strategy and its components, the Internet as a distribution channel, Internet sales process, virtual storefront, online customer relationship management, effective pricing decisions, and implementation of e-commerce marketing strategy and its evaluation. (Varies)

442/542. Advanced Marketing Communications. Credit 3 hours. Prerequisites: MRKT 303 and 342. An advanced course emphasizing the application of previously learned advertising principles through the development of a Marketing Communications Campaign that includes the production of advertisements for a variety of media including traditional and digital media. (Spring)

443. International Marketing. Credit 3 hours. Prerequisite: MRKT 303. A study of resources of foreign market information; trading channels abroad; elements of foreign market surveys; foreign sales promotion; financing of international trade transactions. (Fall)

444. Marketing Strategy. Credit 3 hours. Prerequisites: MRKT 303 and Senior standing. Marketing capstone course in which students examine and apply advanced marketing concepts from a managerial perspective. Students will learn to create strategies for enhancing customer value, analyze market opportunities, build marketing programming, execute marketing leadership, evaluation marketing tactics, and implement an agile marketing philosophy. (Fall, Spring)

475/575. Current Marketing Issues. Credit 3 hours. Prerequisite: MRKT 303 or consent of the Department Head. A variable content course which treats subjects of special interest in the field of Marketing. The content may change from semester to semester and will be announced in advance. May be taken by both majors and non-majors. (Varies)

476. Asian Marketing Issues. Credit 3 hours. Prerequisite: Junior Standing. This course is designed to enrich students' awareness and appreciation of Asian marketing practices and their understanding of the Asian market. Implication of Asian marketing practices, regional economic integration, and environmental issues as they relate to marketing are investigated. (Varies)

478. Latin American Marketing Issues. Credit 3 hours. Prerequisite: Junior Standing. This course is designed to enrich students' awareness and appreciation of Latin American marketing practices and their understanding of the Latin American market. Implications of Latin American marketing practices, regional economic integration, and environmental issues as they relate to marketing are investigated. (Summer)

480. Marketing Yourself for Success. Credit 3 hours. Prerequisite: Senior standing. This senior level course helps ensure a successful transition into the professional environment. Students will learn to sell themselves in a competitive market, enhance their interview skills, develop and leverage a professional network, and create a personal portfolio. Topics such as contract negotiation and interpersonal problem-solving skills will be discussed. This class will involve a significant interaction with the local business community. (Varies)

623. Marketing Communications. Credit 3 hours. Prerequisites: MRKT 303 and Graduate standing. A study of the role that advertising, marketing information systems, personal selling, promotion, public relations, and communications theory play in the accomplishment of a firm's total marketing objectives. (Varies)

650. Business Research. Credit 3 hours. Prerequisites: OMIS 200, 600 and Graduate standing. Examination of research methods and techniques and their application to individual problems. Introduction to sources of business information. Emphasis on basic experiment, survey, and descriptive techniques. The place of business research in management. (Varies)

673. Marketing Administration. Credit 3 hours. Prerequisites: MRKT 303 and Graduate standing. A study of the various problems and policy decisions required in the areas of product policies, price policies, distribution policies, and promotion policies. (Fall, Spring)

676. Strategic Marketing Management in Asia. Credit 3 hours. Prerequisite: Graduate Standing. This course is an in-depth look at marketing management activities in Asia. Marketing strategy application and current activities impacting marketing efforts are studied. This course is designed to give students insights into how regional and global issues impact marketing. (Varies)

678. Strategic Marketing Management in Latin America. Credit 3 hours. Prerequisite: Graduate standing. This course is an in-depth look at marketing management activities in Central America. Marketing strategy applications and current activities impacting marketing efforts are studied. The course is designed to give students specific insights into how regional and global issues impact marketing. (Summer)

695. Special Topics in Marketing. Credit 3 hours. Prerequisite: Graduate standing. A seminar course focusing on selected issues in marketing. (Summer)

Marriage, Couple, and Family Counseling (MCFC)

621. Introduction to Marriage, Couple, and Family Counseling. Credit 3 hours. An introduction to the profession, major theories, and practices of marriage and family therapy, including the historical development and principle conceptualization of cybernetic and systems theory. (Summer, Fall)

622. Advanced Theory in Marriage, Couple, and Family Counseling. Credit 3 hours. Prerequisites: COUN 601, 603, 605, and MCFC 621. A study of advanced theories of counseling and psychotherapy employed in the practice of marriage and family therapy. The course will include an examination of systems and cybernetic theory, as well as the study of the post-modernist perspectives of constructivism and social constructionism. (Fall)

626. Techniques in Marriage, Couple, and Family Counseling. Credit 3 hours. Prerequisites: MCFC 621 and MCFC 683 (or concurrent with MCFC 683). A course focusing on basic clinical interviewing procedures and interventions commonly used with couples and families, utilizing selected major theories of marriage and family counseling. (Spring)

683. Marriage, Couple, and Family Counseling Practicum. Credit 3 hours. Prerequisites: COUN 604, 607, 608, 609, 610, and MCFC 621. A practicum course focusing on a study of specialized techniques utilized in the practice of marriage and family therapy. The course involves critical activity and practice to refine interventions with couples and families. This course will be graded Pass/Fail only. (Fall, Spring)

693. Marriage, Couple, and Family Counseling Internship. Credit 3 hours. Prerequisite: MCFC 683. Supervised experience in a setting appropriate to the student's program area emphasizing competencies in family systems. Students must complete 600 clock hours over the course of their final two semesters, and must register each semester for a total of 6 credit hours. The internship is graded Pass-Fail. (Summer, Fall, Spring)

Master of Arts in Teaching (MAT)

610. Fundamentals I: Teaching and Learning for General Education. Credit 3 hours. Prerequisites: Full SARTE status and concurrent enrollment in MAT 615, MAT 620, and MAT 630. An introduction to general education. Topics include contemporary issues such as the effective educator, school law, rights and responsibilities, educational foundations and philosophies, and best practices, including self-assessment. Competency-based clinical practice required. (Summer)

615. Fundamentals II: Teaching and Learning for Special Education. Credit 3 hours. Prerequisites: Full SARTE status and concurrent enrollment in MAT 610, MAT 620, and MAT 630. An introduction to children with exceptionalities. Topics include physical, mental, emotional and social traits of individuals with exceptionalities, legal issues related to special education, and current trends. Competency-based clinical practice required. (Summer)

620. Learning and Behavior Theories in Inclusive Elementary Classrooms. Credit 3 hours. Prerequisites: Full SARTE status and concurrent enrollment in MAT 610, MAT 615, and MAT 630. The study and application of learning and behavioral theories including taxonomies of learning, pedagogical principles, child and adolescent development, and teaching and managing diverse populations. Competency-based clinical practice required. (Summer)

622. Classroom Management and Organization for Inclusive Elementary Classrooms. Credit 3 hours. Prerequisites: Full SARTE status and successful completion of MAT 610, MAT 615, MAT 620, and MAT 630, and concurrent enrollment in with MAT 631 and MAT 640. The study and application of behavioral and humanistic approaches to classroom management and motivation with an emphasis on process, principles, and theories related to changing inappropriate behaviors. This course includes group management, behavior modification, conflict resolution, assertiveness, responsibility training, anti-social behavior and youth at risk, aggression and mistaken goals and preventive discipline techniques. Competency-based clinical practice required. (Fall)

623. Classroom Management and Organization for Secondary Education. Credit 3 hours. Prerequisites: Full SARTE status and successful completion of MAT 610, MAT 615, and MAT 620. A detailed investigation of behavioral and humanistic approaches to classroom management and motivation with an emphasis on process, principles, and theories related to changing inappropriate behaviors. This course includes group management, behavior modification, conflict resolution, assertiveness, responsibility training, anti-social behavior and youth at risk, aggression and mistaken goals and preventive discipline techniques. Clinical practice required. (Varies)

630. Assessment in Inclusive Classrooms. Credit 3 hours. Prerequisite: Full SARTE status. Use of assessment in the modern school program. Topics will include lesson plan development, matching objectives to assessment, informal teacher-made tests and performance-based assessment, as well as standardized tests, reading diagnostics, and curriculum-based assessment. Clinical practice required. (Varies)

631. Educational Research for the Reflective Practitioner. Credit 3 hours. Prerequisites: Full SARTE status and MAT 630. Use of research in the modern school program. Topics will include case study design, action research, and data tracking for school improvement. Students will complete a research project. Clinical practice required. (Varies)

636. Assessment II: Secondary Education. Credit 3 hours. Prerequisites: Full SARTE status, MAT 610, MAT 615, MAT 620, and MAT 630. This course is designed as a continuation and application of the concepts examined in Assessment I. Emphasis will be placed on partnerships with parents and colleagues regarding school and classroom expectations and student progress. Changes that have occurred in practice for student evaluation will be addressed. Competency-based clinical practice required. (Varies)

640. Introduction to Reading and Language Arts in Inclusive Elementary Classrooms. Credit 3 hours. Prerequisites: Full SARTE status and successful completion of MAT 610, MAT 615, MAT 620, and MAT 630. Concurrent enrollment in MAT 622 and MAT 631. A study of the reading, writing, and language processes as a fundamental aspect of the elementary and special education curriculum. Special attention will be given to the basic reading skills and strategies needed by mature readers. The latest in theories, methods, and materials will be appraised through study, observations, and demonstrations in classrooms. Competency-based clinical practice required. (Fall)

642. Literacy Instruction for Secondary Education. Credit 3 hours. Prerequisites: Full SARTE status and successful completion of MAT 610, MAT 615, MAT 620, and MAT 630. A study of theories and methods for integrating literacy instruction in content area classrooms. Reading assessments and literacy strategies that are designed to increase vocabulary learning and comprehension of expository text are introduced and practiced. Competency-based clinical practice required. (Varies)

650. Integrated Learning Methods. Credit 3 hours. Prerequisite: Enrollment in the multi-level MAT program or Certification-Only program. Course in methodology for diverse classroom settings for integrating content areas such as mathematics, the sciences, social sciences, humanities, and information literacy. Thematic units will be designed to include integrated content from areas appropriate for the teacher candidate's area of certification being earned. Units will include instructional planning, teaching, and assessment with an emphasis on differentiation and infusing technology. Competency based clinic practice required. (Fall, Spring)

651. Integrated Learning Methods: Life Sciences, Health and P.E., and Information Literacy. Credit 3 hours. Prerequisites: Full SARTE status and successful completion of MAT 610, MAT 615, MAT 620, MAT 622, MAT 630, MAT 631, and MAT 640. Concurrent enrollment in MAT 650 and MAT 652. Integrated course in methodology for teaching math, physical sciences, and information literacy to diverse groups of learners in inclusive elementary classes. Thematic units will be designed to include integrated content from the three subject areas. Development of literacy competencies for informational text and children's literature are also integrated into instructional planning, teaching, and assessment. Competency-based clinical practice required. Professional development hours are required. (Spring)

652. Integrated Learning Methods: Social Studies, Arts, Music, and Information Literacy. Credit 3 hours. Prerequisites: Full SARTE status and successful completion of MAT 610, MAT 615, MAT 620, MAT 622, MAT 630, MAT 631, and MAT 640. Concurrent enrollment in MAT 650 and MAT 651. Integrated course in methodology for teaching math, physical sciences, and information literacy to diverse groups of learners in inclusive elementary classes. Thematic units will be designed to include integrated content from the three subject areas. Development of literacy competencies for informational text and children's literature are also integrated into instructional planning, teaching, and assessment. Clinical practice is required. Professional development hours are required. (Spring)

660. Specialty Area Learning Methods. Credit 3 hours. Prerequisite: Enrollment in the multi-level MAT program or Certification-Only program. Consideration of methods and materials in the student's major content teaching field. The course includes competency-based clinical practice. (Fall, Spring)

661. Specialty Area Learning Methods II: Secondary Education. Credit 3 hours. Prerequisites: Full SARTE status and successful completion of MAT 610, MAT 615, MAT 620, MAT 630, and MAT 660. A continuation of the consideration of methods and materials in the student's major content teaching field. The course includes clinical practice required at the secondary level. (Fall, Spring)

662. Apprenticeship I in Elementary or Secondary Education. Credit 9 hours. Prerequisites: Full SARTE status, successful completion of Introductory Portfolio, passing score on the Content Praxis II, Minimum 2.5 GPA required with a 3.0 GPA preferred to make application, and permission of the Department Head and school district. Also offered as EDUC 448. This apprenticeship provides the Elementary or Secondary Education major or alternative certification candidate with an assigned placement selected and approved by the University in partnership with a cooperating school/district. The content of this apprenticeship encompasses materials and methods including best practices and innovative teaching strategies in the teacher candidate's major field of certification that is engaged through on-the-job training in the school environment. Lesson planning, alternative assessment, classroom management, and education technology are topics addressed in the apprenticeship. Teacher candidates will earn nine hours of credit for a minimum of 500 hours of approved work experience that follows the school district calendar. Candidates must apply with written application, interview and be selected as an apprentice teacher. (Varies)

670. Research Design for Inclusive Elementary Classroom Education. Credit 3 hours. Prerequisites: Full SARTE status and successful completion of all MAT courses other than student teaching or internship. Principles and procedures for exploring, analyzing, and studying educational problems. Qualitative, quantitative, and single-subject research design methods will be examined in relation to their application for improving education for students in inclusive elementary classes. Survey of significant research studies and application of research principles within action research in the classroom will be implemented. (Summer)

681. Student Teaching in the Elementary and Mild/Moderate Special Education Classroom. Credit 6 hours. Prerequisites: See Requirements for Student Teaching section for the MAT degree program. All-day, all-semester student teaching experiences, including observation, participation, and a minimum of 180 actual clock hours of teaching under the supervision of the assigned cooperating, school teacher. Students may not student teach outside the service region of Southeastern Louisiana University. Available on a pass/fail basis only. (Fall, Spring)

682. Teaching Residency. Credit 3 hours. Prerequisites: Full SARTE status and approval from the Office of Clinical Practice and Residency. See the MAT or Certification-Only catalog sections for specific requirements for Teaching Residency. Teaching Residency is the first semester of a full year residency for competency based clinical practice. Residents will be placed in schools according to their certification programs. The teacher resident will spend at least 60% of the instructional time in partnering schools under the supervision of an assigned mentor teacher. Through co-teaching with a mentor teacher, the resident will work on instructional planning and implementation, classroom management, and increasing student engagement and achievement. Residents must pass with a B or higher for the course to count towards program completion. (Fall, Spring)

683. Internship in Elementary and Mild/Moderate Special Education. Credit 3 hours. Prerequisites: See Requirements for Internship section for the MAT degree program. To be repeated for two consecutive semesters for a total of six hours. An internship designed to meet the requirements for the Master of Arts in Teaching degree program. Students will enroll in this course for both semesters of the internship year. Approval of the Director of Performance Assessment is required. Available on a pass/fail basis only. (Varies)

684. Student Teaching in Mild/Moderate Special Education. Credit 6 hours. Prerequisites: See Requirements for Student Teaching section for the MAT degree program. All day, all semester student teaching experiences, including observation, participation, and a minimum of 180 actual clock hours of teaching (with a substantial portion of the 180 hours in a full teaching day) under the supervision of the assigned cooperating school teacher. Students may not student teach outside the teacher education service region. Available on a pass/fail basis only. (Varies)

686. Student Teaching in the Secondary Classroom. Credit 6 hours. Prerequisites: See Requirements for Student Teaching section for the MAT degree program. All-day, all-semester student teaching experiences, including observation, participation, and a minimum of 180 actual clock hours of teaching under the supervision of the assigned cooperating, school teacher. Students may not student teach outside the service region of Southeastern Louisiana University. Available on a pass/fail basis only. (Varies)

687. Teaching Internship. Credit 3 hours. Prerequisites: Full SARTE status and approval from the Office of Clinical Practice and Residency. See Requirements for Internship section for the MAT degree or the Certification-Only program sections of the catalog. Teaching Internship is the first semester of a full year internship designed to meet the requirements for teacher candidates already employed as teachers of record in approved school classrooms. Students may not intern outside the service region of Southeastern Louisiana University. Through supported teaching under the guidance of a mentor teacher and a University site coordinator, the intern will work on instructional planning and implementation, classroom management, and increasing student engagement and achievement. Interns must pass with a B or higher for the course to count towards program completion. (Fall/ Spring)

688. Teaching Internship Capstone. Credit 3 hours. Prerequisites: A grade of B or higher in MAT 687 and a passing score on all Praxis exams required in the certification area. Teaching Internship Capstone is the final semester of an internship designed to meet the requirements for teacher candidates already employed as teachers of record in approved school classrooms. Through supported teaching under the guidance of a mentor teacher and a University site coordinator, the intern will demonstrate proficiency in instructional planning and implementation, classroom management, and increasing student engagement and achievement. Interns must receive a final grade of B or higher for the course to graduate. (Fall, Spring)

689. Student Teaching in Elementary Education (Grades 1-5). Credit 6 hours. Prerequisites: See Requirements for Student Teaching section for MAT degree program. All day, all semester student teaching experiences, including observation, participation, and a minimum of 180 actual clock hours of teaching (with a substantial portion of the 180 hours in a full teaching day) under the supervision of the assigned cooperating school teacher. Students may not student teach outside the teacher education service region. Available on a pass/fail basis only. (Varies)

690. Internship in Mild/Moderate Special Education. Credit 3 hours. Prerequisites: See Requirements for Internship section for the MAT degree program. To be repeated for two consecutive semesters for a total of six hours. Students may not intern outside the teacher education service region. Available on a pass/fail basis only. (Varies)

692. Teaching Residency Capstone. Credit 3 hours. Prerequisite: A grade of B or higher in MAT 682 and a passing score on all Praxis exams required in the certification area. Teaching Residency Capstone is the final semester of a residency for competency based clinical practice and is all day, all week following the assigned school district calendar. Teacher Residents will be placed in schools according to their certification programs. The teacher resident will spend up to 100% of the instructional time in partnering schools under the supervision of an assigned mentor teacher. Through co-teaching with the mentor teacher, the resident will work on instructional planning and implementation, classroom management, and increasing student engagement and achievement. The residency experience will culminate in the teacher resident being the lead teacher for the classroom. Residents must receive a final grade of B or higher for the course to graduate. (Fall, Spring)

Math Education (MTED)

385. Methods for School Mathematics. Credit 4 hours. Prerequisite: Concurrent enrollment in or prior credit for MATH 360, 370, or 380. Course will cover teaching methods and strategies for topics in the grades 7-12 mathematics curricula. This course is designed for teacher candidates who will be teaching mathematics primarily at the secondary level. The course includes a competency-based clinical practice component involving direct teaching in the secondary mathematics classroom. Two hours lecture per week. (Varies)

386. Methods for School Mathematics. Credit 3 hours. Prerequisite: EDUC 315 or 316, EDUC 307 or 407, 2.75 cumulative grade point average, and permission of Department Head. Course covers best practices for instruction in mathematics. Topics include Louisiana Student Standards of Mathematics, Standards for Mathematical Practice, effective teaching practices, facilitating mathematical discussions, and inquiry-based teaching. This course is designed for teacher candidates who will be teaching mathematics primarily at the middle school and secondary levels. Competency-based clinical practice required. (Fall)

611. Topics in Algebra for Teachers, Grades 1-8. Credit 3 hours. Prerequisite: Regular admission to Graduate Studies. A course designed to relate the algebraic concepts and processes taught and discussed in grades 1-8 to the mathematically unifying concept of algebraic structure, the properties and operations of the natural numbers, integers, rational, and real numbers, patterns, relations, and functions; analysis of mathematical situations and structures using algebraic symbols; and analysis of change in various contexts. Students will be expected to become familiar with the research in the teaching and learning of algebra and the implications of this research to the teaching of algebra in grades 1-8. (Varies)

612. Topics in Geometry and Measurement for Teachers, Grades 1-8. Credit 3 hours. Prerequisite: Regular admission to Graduate Studies. A course designed to study various mathematical approaches to the geometric concepts and measurement processes taught and discussed during grades 1-8. Concepts will include coordinate geometry, transformations, symmetry, modeling, measurement, the development of the educational structure of the van Heile levels and its application to the teaching of geometry and measurement, the research in the teaching and learning of geometry and measurement, and the implications of this research to the teaching of geometry and measurement in grades 1-8. (Varies)

615. Topics in Number Theory for Elementary and Middle School Teachers. Credit 3 hours. Prerequisite: Regular admission to Graduate Studies. A course designed to study properties and patterns of natural numbers with emphasis on prime numbers, divisibility, and congruences. Students will be exposed to number theoretic results from a historical perspective, the connection between number theory, algebra and patterns, how the concepts of number theory can appear in mathematics curriculum, in grades 1-8, and the research in the teaching and learning of number theoretical concepts in grades 1-8. (Varies)

616. Topics in Data Analysis and Probability for Teachers, Grades 1-8. Credit 3 hours. Prerequisite: Regular admission to Graduate Studies. An introduction to informal comparing, classifying, and counting activities that provide the mathematical beginnings for developing young learners' understanding of data, analysis of data, and statistics. Probability will be approached as the study of activities that underlie experimental probability. Statistics will be approached as both a descriptive and predictive science. Students will be expected to become familiar with the concepts of data analysis and probability that appear in the mathematics curriculum, in grades 1-8, and the research in the teaching and learning of data analysis and probability concepts in grades 1-8. (Varies)

622. Topics in Geometry for Teachers, 7-14. Credit 3 hours. Prerequisites: Regular admission to Graduate Studies and completion of MATH 200 with a grade of C or better. A course designed to study various mathematical approaches to the geometric concepts and processes taught and discussed during grades 7-12 and in the community colleges. Topics include geometric concepts and processes through axiomatics, coordinate geometry, vectors, and groups of transformations, the historical development of the educational structure of the van Heile levels. The students will be expected to become familiar with the research in the teaching and learning of geometry and the implications of this research to the teaching of geometry in grades 7-14. (Varies)

623. Topics in Calculus for Teachers, 7-14. Credit 3 hours. Prerequisites: Regular admission to Graduate Studies and completion of MATH 200 with a grade of C or better. A study of the concepts of calculus with an emphasis on the concepts of limit, continuity, derivative and integral, real world problems, the appropriate use of technology including computer algebra systems in the teaching and learning of calculus, the research in the teaching and learning of calculus, and the implications of this research to the teaching of the concepts of calculus in grades 7-14. (Varies)

625. Topics in Number Theory for Teachers, 7-14. Credit 3 hours. Prerequisites: Regular admission to Graduate Studies and completion of MATH 200 with a grade of C or better. A course designed to study properties of natural numbers with emphasis on prime numbers, divisibility, and congruencies. Topics include number theoretic results from a historical perspective and the connection between number theory and algebra. Students will be expected to become familiar with how the concepts of number theory can appear in the mathematics curriculum, in grades 7-14, and the research in the teaching and learning of number theoretical concepts in grades 7-14. (Varies)

626. Topics in Probability and Statistics for Teachers, 7-14. Credit 3 hours. Prerequisites: Regular admission to Graduate Studies and completion of MATH 200 with a grade of C or better. An introduction to the study of probability and statistics with an emphasis on the mathematical theories of both. Probability will be approached as the study of specific functions with certain properties. Statistics will be approached as both a descriptive and predictive science. Statistical packages will be utilized as well as studied for their impact on the teaching of statistics. Students will be expected to become familiar with the concepts of probability and statistics that appear in the mathematical curriculum, in grades 7-14, and the research in the teaching and learning of probability and statistical concepts in grades 7-14. (Varies)

Mathematics (MATH)

100. Corequisite Mathematics. Credit 1-3 hours. Prerequisite: Permission of the Department Head. This course is offered as a corequisite component designed to facilitate student success in entry-level mathematics courses. A minimum of two laboratory hours per week. The final course grade will be on a Pass (P) or Unsatisfactory (U) basis. Credit hours earned do not count toward graduation. (Summer, Fall, Spring)

105. Finite Mathematics. [LCCN: CMAT 1313, Finite Mathematics]. Credit 3 hours. Prerequisite: Mathematics ACT score of 19 or above or an appropriate score on the ALEKS Placement Assessment or satisfactory completion of an appropriate developmental mathematics course. An introductory level course covering mathematical ideas appropriate for students majoring in disciplines that do not require calculus or calculus-preparation courses, including algebra and trigonometry. Topics include linear equations and linear inequalities, linear programming, matrix theory, sets and counting techniques, permutations and combinations, financial math, and an introduction to probability and statistics. A laboratory fee is required for this course. (Summer, Fall, Spring)

107. Applied Algebra. [LCCN:CMAT 1203, Applied Algebra]. Credit 3 hours. Prerequisite: Minimum mathematics ACT score of 19 or an appropriate score on the ALEKS test or completion of an appropriate developmental mathematics course with the grade of "C" or better. Must be taken concurrently with MATH 100 or MATH 108, depending on placement. An introduction to the study of solving equations and inequalities; function properties and graphs; linear, quadratic, polynomial, exponential and logarithmic functions, and their applications. Only one of MATH 107 or 161 may be used for degree credit. (Summer, Fall, Spring)

108. Applied Algebra Laboratory. Credit 2 hours. Prerequisite: Minimum mathematics ACT score of 19 or an appropriate score on the ALEKS test or completion of an appropriate developmental mathematics course with the grade of "C" or better. Must be taken concurrently with MATH 107. Laboratory integrated into MATH 107. The final course grade will be on a Pass (P) or Unsatisfactory (U) basis. Four hours of laboratory per week. (Summer, Fall, Spring)

161. College Algebra. [LCCN: CMAT 1213, College Algebra]. Credit 3 hours. Prerequisite: Minimum mathematics ACT score of 22 or a grade of "C" or better in MATH 107 or an appropriate score on the ALEKS Placement Assessment. An in-depth study of solving equations and inequalities; function properties and graphs with transformations; inverse functions; linear, quadratic, polynomial, rational, exponential and logarithmic functions with applications. Only one of MATH 107 or 161 may be used for degree credit. (Summer, Fall, Spring)

162. Plane Trigonometry. [LCCN: CMAT 1223, Trigonometry]. Credit 3 hours. Prerequisite: MATH or 161. The study of trigonometric functions. Topics include the laws of sine and cosine, the trigonometric functions and their graphs, inverse trigonometric functions, trigonometric identities and equations, complex numbers, graphs of parametric equations and graphs in polar coordinates. Trigonometry and trigonometric functions will be used to model and solve real world applications. (Summer, Fall, Spring)

163. Applied Calculus. [LCCN: CMAT 2103, Applied Calculus]. Credit 3 hours. Prerequisite: MATH or 161. An introduction to differential and integral calculus. Topics will include limits, the derivative, antiderivatives, and the definite integral. Polynomial, rational, radical, exponential, and logarithmic functions will be studied. Not open to students with credit for MATH 200. (Summer, Fall, Spring)

175. Pre-Calculus with Trigonometry. [LCCN: CMAT 1235, Algebra and Trigonometry]. Credit 5 hours. Prerequisite: Minimum mathematics ACT score of 25 or higher or a grade of "C" or better in MATH or 161. A combined course on function properties and graphs; inverse functions; linear, quadratic, polynomial, rational, exponential and logarithmic functions with applications; trigonometric functions and graphs; inverse trigonometric functions; fundamental identities and angle formulas; solving equations, and triangles with applications. (Summer, Fall, Spring)

175H. Honors Pre-calculus with Trigonometry. [LCCN: CMAT 1235, Algebra and Trigonometry]. Credit 5 hours. Prerequisites: Active status in the University Honors Program and minimum mathematics ACT score of 25, a grade of "C" or better in MATH or 161, or permission of the Department Head. A combined course on function properties and graphs; inverse functions; linear, quadratic, polynomial, rational, exponential and logarithmic functions with applications; trigonometric functions and graphs; inverse trigonometric functions; fundamental identities and angle formulas; solving equations, and triangles with applications. (Fall)

185. Contemporary Mathematics. [LCCN: CMAT 1103, Contemporary Math]. Credit 3 hours. Prerequisite: MATH 105 or 107 or 161. An introduction to topics in contemporary mathematics. Topics may be selected from the theory of finance, perspective and symmetry in art, formal Aristotelian logic, graph theory, probability and odds, elementary number theory, optimization, numeracy in the real world, and historical topics in mathematics that have influenced contemporary mathematics. (Spring)

200. Calculus I. [LCCN: CMAT 2115, Calculus I]. Credit 5 hours. Prerequisite: Minimum mathematics ACT score of 28 or a grade of "C" or better in MATH 175. The first of a standard three-course sequence on the foundations of differential and integral calculus. Topics include limits, continuity, the derivative, techniques of differentiation, applications of the derivative, antiderivatives, definite integrals, the calculus of transcendental functions, applications of definite integrals, work and volume. (Summer, Fall, Spring)

200H. Calculus I Honors. [LCCN: CMAT 2115, Calculus I]. Credit 5 hours. Prerequisites: Active status in the University Honors Program and minimum mathematics ACT score of 28, a grade of "C" or better in MATH 175, or permission of the Department Head. The first of a standard three-course sequence on the foundations of differential and integral calculus. Topics include limits, continuity, the derivative, techniques of

differentiation, applications of the derivative, antiderivatives, definite integrals, and the calculus of transcendental functions, applications of definite integrals, work and volume. (Fall)

201. Calculus II. [LCCN: CMAT 2125, Calculus II]. Credit 5 hours. Prerequisite: A grade of "C" or better in MATH 200. The second of a standard three-course sequence on the foundations of differential and integral calculus. Topics include techniques of integration, applications of the integral, parametric equations, polar coordinates, sequences, and infinite series. (Fall, Spring)

223. Foundations of Discrete Mathematics. Credit 3 hours. Prerequisite: MATH 200. This course is designed to introduce students to the techniques of writing mathematical proofs. Topics include logic, quantified statements, elementary number theory, sets, and functions and relations. (Fall, Spring)

241. Elementary Statistics. [LCCN: CMAT 1303, Introductory Statistics]. Credit 3 hours. Prerequisite: MATH 105 or 107 or 161. An introduction to descriptive and inferential statistics. Topics include: organizing and displaying data; measures of central tendency, position, and dispersion; correlation and linear regression; discrete and continuous probabilities; normal distribution; Student t-distribution; sampling distributions; confidence intervals; and hypothesis testing. (Summer, Fall, Spring)

241H. Elementary Statistics Honors. [LCCN: CMAT 1303, Introductory Statistics]. Credit 3 hours. Prerequisite: Active status in the University Honors Program and MATH 105 or 107 or 161 or mathematics ACT of 28 or higher or permission of the department head. An introduction to descriptive and inferential statistics. Topics include: organizing and displaying data; measures of central tendency, position, and dispersion; correlation and linear regression; discrete and continuous probabilities; normal distribution; Student t-distribution; sampling distributions; confidence intervals; and hypothesis testing. (Varies)

247. Number Structure for PK-8 Teachers. [LCCN: CMAT 1413, Math for Elementary Teachers]. Credit 3 hours. Prerequisites: A grade of "C" or better in two of the following courses: MATH 105, MATH 107, MATH 161, or MATH 241. This course is designed to prepare early childhood, elementary, and middle school math teachers to teach number and operations concepts in the PK-8 curriculum. Topics include number systems, fractions, operations on rational numbers, ratio and proportional relationships, and number theory. This course will emphasize Standards for Mathematical Practice, conceptual understanding, mathematical language, procedures, algorithms, applications, and dispositions. No calculators allowed for this course. (Fall, Spring)

248. Algebra and Geometry Concepts for PK-8 Teachers. [LCCN: CMAT 1423, Geometry for Elementary Teachers]. Credit 3 hours. Prerequisite: A grade of "C" or better in MATH 247. This course is designed to prepare early childhood, elementary, and middle school math teachers to teach algebra and geometry concepts in the PK-8 curriculum. Topics include algebraic expressions, equations, and functions; two- and three-dimensional space; measurement; perimeter, area, and volume; and geometry of motion and change. This course will emphasize Standards for Mathematical Practice, conceptual understanding, mathematical language, procedures, algorithms, applications, and dispositions. (Fall, Spring)

249. Mathematics for Middle School Science, Social Studies, and English Teachers. Credit 3 hours. Prerequisites: A grade of "C" or better in two of the following courses: MATH 105, MATH 161, or MATH 241. Topics include mathematics concepts based on the Louisiana Student Standards for grades 3-9, including rational numbers, algebraic and proportional reasoning, measurement, probability, statistics, and mathematical modeling. This course will emphasize Standards for Mathematical Practice; mathematical language; procedures; algorithms; applications to science, social studies, and English; and dispositions. Graphing technology is required for this course. (Spring)

257. Probability and Statistics for Middle School and Secondary Mathematics Teachers. Credit 2 hours. Prerequisite: A grade of "C" or better in MATH 247. Topics include core concepts of probability and statistics, including variability, creation and implementation of surveys, statistical inference, graphical displays, probability, and simulations. Statistical analysis will be introduced through a problem-solving approach. This course will emphasize Standards for Mathematical Practice, mathematical language, procedures, algorithms, applications, and dispositions. Graphing technology is required for this course. (Spring)

258. Algebra for Middle School and Secondary Mathematics Teachers. Credit 3 hours. Prerequisite: A grade of "C" or better in MATH 248. Topics include core concepts of algebra, including notation, expressions, equations, proportional relationships, functions, representations, and patterns of change. This course will emphasize Standards for Mathematical Practice, mathematical language, procedures, algorithms, applications, and dispositions. Graphing technology is required for this course. (Fall)

259. Geometry for Middle School and Secondary Teachers. Credit 3 hours. Prerequisite: A grade of "C" or better in Math 248. Topics include core concepts of geometry, including Euclidean geometry, transformations, congruence, similarity, right triangles, two- and three-dimensional objects, geometric constructions, proof and analytic geometry. This course will emphasize Standards for Mathematical Practice, mathematical language procedures, algorithms, applications, and dispositions. Dynamic geometry software is required for his course. This course may not be used for a major or minor in Mathematics. For the purpose of certification in secondary education, this course is considered below the calculus level. (Fall)

260. Trigonometry and Calculus Concepts for Middle School Mathematics Teachers. Credit 3 hours. Prerequisite: A grade of "C" or better in MATH 258. Topics include core concepts of trigonometry and calculus, including right triangle geometry, periodic phenomena, trigonometric identities, limits, continuity, rates of change, and techniques of differentiation and integration. This course will emphasize Standards for Mathematical Practice, mathematical language, procedures, algorithms, applications, and dispositions. Graphing technology is required for this course. (Spring)

309. College Geometry. Credit 3 hours. Prerequisite: MATH 223. A study of axiomatic systems, advanced Euclidean geometry, hyperbolic geometry, and geometric transformations. (Varies)

311. History of Mathematics. Credit 3 hours. Prerequisite: MATH 200. A survey of the history of mathematics from ancient times. Mathematical topics studied include number bases, Pythagorean triples, figurative numbers, construction of tangent lines to curves, and solutions of cubic and quartic equations. (Varies)

312. Calculus III. Credit 3 hours. Prerequisite: A grade of "C" or better in MATH 201. The third of a standard three-course sequence on calculus. Topics include vectors, vector-valued functions, functions of several variables, partial differentiation, multiple integration, and vector calculus. (Fall, Spring)

350. Ordinary Differential Equations. Credit 3 hours. Prerequisite: MATH 201. An introduction to ordinary differential equations. Topics will include solutions of linear first-order differential equations, higher order equations, linear and nonlinear systems of differential equations, power series solutions, Laplace transform methods, eigenvalue methods for solving linear systems of differential equations, and graphical analysis of solutions. (Fall, Spring)

360. Linear Algebra I. Credit 3 hours. Prerequisites: MATH 201 and MATH 223. An introduction to linear algebra. Topics will include systems of equations, matrices, determinants, vector spaces, linear transformations, eigenvalues/eigenvectors/eigenspaces, diagonalization, and inner product spaces. (Fall, Spring)

370. Abstract Algebra I. Credit 3 hours. Prerequisites: MATH 309 or MATH 360. An introduction to abstract algebra concentrating on elementary group theory. Topics will include properties of groups, subgroups, finite groups, cyclic groups, permutation groups, homomorphisms, isomorphisms, normal subgroups, and factor groups. (Fall)

380. Mathematical Statistics I. Credit 3 hours. Prerequisite: MATH 201. An introductory course in calculus-based statistics. Topics will include the basic rules of probability, commonly used discrete and continuous distributions, random sampling and sampling distributions, regression analysis, parameter estimation, and hypothesis testing. (Fall, Spring)

383. Independent Projects in Mathematics. Credit 1-6 hours. Prerequisites: Junior standing, 2.5 adjusted grade point average, and permission of the Department Head. An opportunity for students to apply mathematics in a specific assignment under the direction of a faculty member of the Department of Mathematics. Specific assignments may include, but are not limited to, projects and/or service learning opportunities in business, industry, commercial, governmental or educational agencies. This course may be taken/repeated for a maximum of 6 hours credit. This course cannot be used to satisfy mathematics requirements for any degree program. (Varies)

391. Internship in Mathematics. Credit 3-12 hours. Prerequisites: Junior standing, 2.5 adjusted grade point average, and permission of the Department Head. Internship in mathematics provides a student with experience in the application of mathematics in an assignment selected and approved by the University with a cooperating business, industry, governmental or educational setting. Credit hours are earned at a rate of one semester hour for each 40 hours of approved work experience. The course may be taken/repeated for a maximum of 12 hours credit. This course cannot be used to satisfy mathematics requirements in any degree program. (Varies)

392. Numerical Methods. Credit 3 hours. Prerequisites: MATH 201 and one of SC 200 or CMPS 280. Computer-oriented methods for scientific programs. Topics include error analysis, Taylor series, solutions of non-linear equations, systems of linear equations, interpolation, differentiation and integration. (Fall, Spring)

402/506. Partial Differential Equations. Credit 3 hours. Prerequisites: MATH 312 and MATH 350. An introduction to partial differential equations. Topics will include solutions to linear first and second order partial differential equations such as the heat and wave equations, the method of characteristics, Fourier series and convergence, Laplace transforms, d'Alembert's solution, the method of separation of variables, and eigenfunctions of Sturm-Liouville's equation. (Varies)

407/507. Topics in Mathematics. Credit 3 hours. Prerequisite: Permission of the Department Head. Contemporary topics in mathematics and mathematics education. Credit for this course may be acquired more than once. Maximum credit six hours. (Varies)

409/509. Linear Algebra II. Credit 3 hours. Prerequisite: MATH 360. A second course on linear algebra. Topics will include complex numbers and polynomials, vector spaces, bases and similarity, block matrices, inner product spaces, orthonormal vectors, unitary matrices, orthogonal complements, orthogonal projections, eigenvalues/eigenvectors, and geometric multiplicity. (Varies)

410/510. Theory of Numbers. Credit 3 hours. Prerequisites: MATH 201 and MATH 223. An introduction to the properties of integers, number congruences, multiplicative functions, primitive roots, and quadratic residues. (Varies)

414/514. Fundamental Concepts of Geometry. Credit 3 hours. Prerequisite: MATH 309 or MATH 360 or MATH 370. Deductive methods in mathematics; origins and development of concepts of geometry including geometric transformations, transformation groups and hyperbolic, elliptical and real projective geometry. (Varies)

415. Mathematical Modeling. Credit 3 hours. Prerequisites: MATH 350 and 360 and CMPS 280. This course covers techniques for advanced mathematical modeling. Students will develop, modify, and analyze models using numerical software such as R, MATLAB, or Python. Topics include solutions to dynamical systems, stability analysis, curve fitting techniques, data interpolation, and modeling with ordinary differential equations. (Varies)

417/517. Probability Theory. Credit 3 hours. Prerequisites: MATH 223 and MATH 312, and MATH 380. A standard course in Probability Theory. Topics will include axioms of probability, counting methods, distribution functions for discrete and continuous random variables, and joint distributions. (Fall)

421/523. Abstract Algebra II. Credit 3 hours. Prerequisite: MATH 370. A second course in abstract algebra. Topics may include Sylow Theorems, symmetry groups, rings, integral domains, ideals, factor rings, ring homomorphisms, field extensions, and Galois theory. (Varies)

425. Applications of Combinatorics and Graph Theory. Credit 3 hours. Prerequisite: MATH 360. An introduction to the fundamentals of combinatorics including algebra of enumeration, algorithms, recurrence relations, graph theory with decision trees, discrete structures, languages and finite state machines, finite fields. (Varies)

427/527. Introduction to Topology. Credit 3 hours. Prerequisites: MATH 312 and MATH 360. An introduction to point-set topology and metric spaces. Topics include topological spaces, topological equivalency, metric spaces, compact spaces, connected spaces, Hausdorff spaces, and separation theorems. (Varies)

431/533. Numerical Analysis. Credit 3 hours. Prerequisites: MATH 350 and CMPS 280. Numerical methods for solving nonlinear equations and systems of linear equations, approximations of functions by polynomial and spline interpolations, and numerical solutions of differential equations. (Varies)

441/544. Introduction to Real Analysis. Credit 3 hours. Prerequisites: MATH 312 and MATH 360. A rigorous study of calculus. Topics include the epsilon and delta approach to limits, sequences, continuity, the derivative, and the Riemann integral. (Spring)

447. Capstone in Mathematics for Middle School Mathematics Teachers. Credit 2 hours. Prerequisite: A grade of "C" or better in MATH 258. This course is designed to expand and strengthen students' understanding of middle school mathematics through the study of numbers, algebra, geometry, and data analysis in preparation for entering the classroom. This course will focus on the key ideas in middle school mathematics through readings, explorations, and activities involving problem solving, modeling, manipulatives, and technology. Graphing technology is required for this course. This course will emphasize Standards for Mathematical Practice, mathematical language, procedures, algorithms, applications, and dispositions. This course may not be used for a major or minor in Mathematics. (Spring)

450/550. Complex Analysis. Credit 3 hours. Prerequisites: MATH 223 and MATH 312. A course on the theory of functions of a single complex variable. Topics may include algebraic operations of complex numbers, elementary functions, limits, analytic functions, Cauchy-Riemann equations, anti-differentiation, contour integrals, Cauchy's theorem, residues, poles, and infinite series. (Varies)

480. Mathematical Statistics II. Credit 3 hours. Prerequisite: MATH 380. A second course in Statistics. Topics will include joint distributions, correlations and regression, multiple linear regression, ANOVA, factorial experiments, and categorical data. (Varies)

486. Capstone in Mathematics for Secondary Teachers. Credit 3 hours. Prerequisites: MATH 311 and MATH 360. This course is designed to expand and strengthen students' understanding of secondary mathematics through the study of algebra, geometry, number theory, measurement, functions, data analysis and probability, and discrete mathematics. The course will help students to connect the key ideas in secondary mathematics with the higher-level mathematics studied in college courses through explorations, activities, and technology. Students majoring or minoring in mathematics in the College of Science and Technology may not use this course as a 400-level mathematics elective. (Varies)

490. Senior Thesis. Credit 3 hours. Prerequisite: Senior standing. Under the direction of a faculty advisor, the student will complete a thesis paper on a mathematical topic agreed upon by the student and advisor. (Varies)

494/594. Introduction to Reading and Research in Mathematics. Credit 1-3 hours. Prerequisite: Permission of the Head of the Department of Mathematics. A course devoted to research in selected areas of mathematics. Course may be repeated for up to six hours total credit. (Varies)

495/595. Introduction to Reading and Research in Mathematics. Credit 1-3 hours. Prerequisite: Permission of Department Head. A course devoted to research in selected areas of mathematics. Course may be repeated for up to six hours total credit. (Varies)

605. Applied Statistics. Credit 3 hours. Prerequisite: MATH 200 or permission of Department Head. Topics include exploratory analysis of data, sample design and experimental design, normal distributions, sampling distributions, quality control charts, confidence intervals and tests of hypotheses for one and two samples, inference for contingency tables, regression and correlation, and one-way analysis of variance. Statistical packages such as SPSS, Minitab, and SAS may be used. (Varies)

615. Coding Theory and Cryptography. Credit 3 hours. Prerequisites: MATH 200 and permission of the Department Head. An introduction to the fundamentals of coding theory, linear codes, and error-correcting codes. Elements of cryptography including cryptosystems such as RSA, DES, and AES, and identification schemes. (Varies)

617. Applications of Combinatorics and Graph Theory. Credit 3 hours. Prerequisites: MATH 201 and MATH 223 or permission of the Department Head. An introduction to the fundamentals of combinatorics including algebra of enumeration and its interrelations with finite structures, graph theory and its applications, interrelations with data structures and methods of optimizations, and groups and finite fields and their applications. (Varies)

635. Linear and Matrix Algebra I. Credit 3 hours. Prerequisite: MATH 360. A course in linear algebra and its applications. Topics may include linear transformation, inner product spaces, similarity and normal operators, systems of equations, orthogonal projections, Gram-Schmidt orthogonalization, eigenvalues and eigenspaces, diagonalizations, and canonical forms. (Varies)

640. Applied Algebra I. Credit 3 hrs. Prerequisite: MATH 370. A course in algebraic structures and their applications. Topics may include lattices, group, rings, fields, semigroups, and Boolean algebras. (Varies)

645. Analysis I. Credit 3 hours. Prerequisite: MATH 441. A course in analysis and its applications. Topics may include derivatives in higher dimensions, types of integration (Riemann-Stieltjes, Darboux, Lebesgue), Fourier series, fast Fourier transforms, Laplace transforms, metric spaces, Banach spaces, and Banach algebras. (Varies)

690. Special Topics in Mathematics. Credit 3 hours. Selected topics in Mathematics that are new or unique and not covered in existing courses. This course may be taken twice for credit if different topics are studied. (Varies)

770. Thesis. Credit 1-6 hours each semester, with 6 hours needed for graduation. The student must enroll in the thesis course each semester the thesis is in progress. The thesis is graded Pass-Fail. (Fall, Spring, Summer)

Microbiology (MIC & MICL)

205. General Microbiology. [LCCN: CBIO 2123, General Microbiology (Science Majors)]. Credit 3 hours. Prerequisites: GBIO 151 and 153 or permission of Department Head, registration for or prior credit for MICL 207, and all prerequisite courses must have a grade of "C" or better. A survey of the fundamental principles and concepts of the biology of microorganisms including biochemistry, cell biology, metabolism, photosynthesis, cell division, reproduction, genetics, molecular biology, development, evolution, ecology, and diversity as well as a survey of microbial infections and immunity to infectious diseases. For students majoring or minoring in Biology, credit toward the degree will not be granted for both MIC 205 and 223. Three hours of lecture per week. (Summer, Fall, Spring)

207. General Microbiology Laboratory. [LCCN: CBIO 2121, General Microbiology Lab (Science Majors)]. Credit 1 hour. Prerequisites: Registration for or prior credit for MIC 205 and all prerequisite courses must have a grade of "C" or better. A survey of laboratory techniques used to study cellular morphology, growth, metabolism, and identification of bacteria. For students majoring or minoring in Biology credit toward the degree will not be granted for both MICL 207 and 224. Two hours of laboratory per week. A laboratory fee is required for this course. (Summer, Fall, Spring)

223. Medical Microbiology. [LCCN: CBIO 2113, Microbiology for Nursing & Allied Health]. Credit 3 hours. Prerequisites: GBIO 151 and BIOL 152 or permission of Department Head, registration in or prior credit for MICL 224, and all prerequisite courses must have a grade of "C" or better. An introductory course in microbiology with emphasis on the medically important microorganisms and their relationship to disease and immunity. This course is designed primarily for students in Nursing and Allied Health curricula. For students majoring or minoring in Biology credit toward the degree will not be granted for both MIC 205 and 223. Additional hours will not be counted toward student's major or in cumulative GPA average. Three hours lecture per week. (Summer, Fall, Spring)

224. Medical Microbiology Laboratory. [LCCN: CBIO 2111, Microbiology Lab for Nursing and Allied Health]. Credit 1 hour. Prerequisites: Registration in or prior credit for MIC 223 and all prerequisite courses must have a grade of "C" or better. A series of laboratory exercises designed to illustrate the material studied in MIC 223. For students majoring or minoring in Biology credit toward the degree will not be granted for both MICL 207 and 224. Two hours of laboratory per week. A laboratory fee is required for this course. (Summer, Fall, Spring)

225. Medical Microbiology Laboratory Simulation. Credit 1 hour. Prerequisites: Registration in or prior credit for MIC 223, eligibility for the CALL program (RN to BSN in Nursing), and permission of the Department of Biological Sciences. A series of virtual laboratory exercises designed to illustrate the material studied in MIC 223. The virtual laboratory portion of the course provides a review of diagnostic and research procedures used to isolate and identify microorganisms, including microscopy and staining, biochemical testing, molecular biology, serological techniques, and epidemiology. This course does not provide practical experience with chemicals and their properties, chemical reactions, laboratory apparatus, safety procedures, or biology laboratory instruments. This course does not satisfy the prerequisites for any Microbiology Laboratory course. This course is exclusively for students in the CALL nursing program and may not be used to substitute for any Biology, Microbiology, or Zoology laboratory or lecture course, nor can it be used to satisfy prerequisites, corequisites, or requirements for any of these courses. A laboratory fee is required for this course. (Summer, Fall, Spring)

313. Microbial Ecology. Credit 3 hours. Prerequisites: MIC 205 or permission of the Department Head and all prerequisite courses must have a grade of "C" or better. A study of the role of microorganisms in the flow of materials and energy through global ecosystems, and in transformation of organic and inorganic materials. The role of microorganisms in the major biogeochemical cycles, carbon, nitrogen, sulfur, and phosphorus will be covered. Three hours of lecture per week. (Varies)

325. Advanced General Microbiology. Credit 4 hours. Prerequisites: MIC/MICL 205-207 or MIC/MICL 223-224 or permission of Department Head and all prerequisite courses must have a grade of "C" or better. Advanced microbiological techniques; practices used in determinative microbiology. Two hours of lecture and four hours of laboratory per week. A laboratory fee is required for this course. (Spring)

423/523. Environmental Microbiology. Credit 4 hours. Prerequisites: MIC 205 or permission of the Department Head and all prerequisite courses must have a grade of "C" or better. A study of the application of modern microbiological concepts to water pollution, contamination of soil and atmosphere with the intent of understanding the complex microbial processes underlying environmental deterioration, its control and prevention. A major emphasis will be placed on water and wastewater management. Two hours of lecture and four hours laboratory per week. A laboratory fee is required for this course. (Spring)

436/536. Pathogenic Bacteria. [LCCN: CBIO 4543, Pathogenic Microbiology (Upper Level)] Credit 4 hours. Prerequisites: MIC/MICL 205-207 or MIC/MICL 223-224 and Junior standing or permission of the Department Head and all prerequisite courses must have a grade of "C" or better.

A study of the major bacterial pathogens and their relationship to disease and immunity. The laboratory stresses techniques used in the isolation and identification of pathogenic bacteria. Two hours of lecture and four hours of laboratory per week. A laboratory fee is required for this course. (Spring)

438/538. Soil Microbiology. Credit 4 hours. Prerequisites: MIC/MICL 205-207 or MIC/MICL 223-224 and Junior standing and all prerequisite courses must have a grade of "C" or better. A study of soil microorganisms, the impact of environmental factors, and survey of the major nutrient transformations occurring in soil. Two hours of lecture and four hours of laboratory per week. A laboratory fee is required for this course. (Varies)

457/557. Dairy and Food Microbiology. Credit 4 hours. Prerequisites: MIC 325 or permission of Department Head and all prerequisite courses must have a grade of "C" or better. A study of beneficial, pathogenic and spoilage microorganisms associated with dairy and food microbiology. Two hours of lecture and four hours of laboratory per week. A laboratory fee is required for this course. (Even Fall Semesters)

460/560. Immunology. [LCCN: CBIO 5423, Immunology (Upper Level)] Credit 4 hours. Prerequisites: MIC/MICL 205-207, GBIO 200, and all prerequisite courses must have a grade of "C" or better. GBIO 312 recommended. An introduction to the biology of the immune system, including the genes, molecules, cells, and mechanisms that mediate immune recognition and response. Topics covered include innate and adaptive immunity, humoral and cellular components, lymphocyte development and activation, and immune effector mechanisms. A portion of the course will be devoted to the immune system in health and disease and will cover immune responses to infection, evasion strategies of various pathogens, vaccination, immune deficiency diseases (including AIDS), autoimmunity, and cancer. Emphasis will be placed on understanding the experimental basis of the field of immunology. Three hours of lecture and three hours of laboratory per week. A laboratory fee is required for this course. (Fall)

461/561. Bacterial Metabolism. Credit 4 hours. Prerequisites: MIC 205 or 223 and CHEM 261 or 265 and Junior standing or permission of Department Head and all prerequisite courses must have a grade of "C" or better. A study of the metabolism as related to growth and energetics of eubacteria and archaeobacteria. Two hours of lecture and four hours of laboratory per week. A laboratory fee is required for this course. (Fall)

463/563. Virology. [LCCN: CBIO 4561, Biology Seminar] Credit 4 hours. Prerequisites: MIC/MICL 205-207, and GBIO 200 and all prerequisite courses must have a grade of "C" or better. Introduction to molecular and cellular mechanisms mediating virus infection in bacteria, animals, and plants. Topics include specific virus life cycles, cellular and immune responses, evasion strategies, sub viral entities, and viral evolution. Seminar component focuses on reading/discussion of classic and current virology research papers. Three hours of lecture and three hours of seminar per week. A laboratory fee is required for this course. (Spring)

610. Industrial Microbiology. Credit 4 hours. Prerequisite: MIC 461/561 or equivalent. The use of microbes in industrial processes such as production of antibiotics, vitamins, and chemicals. Two hours of lecture and four hours of laboratory per week. A lab fee is required for this course. (Varies)

615. Determinative Microbiology. Credit 4 hours. Prerequisite: MIC 461/561 or consent of the Department Head. A study of the classification, identification and nomenclature of the 19 groups of bacteria. One hour of lecture and six hours of laboratory per week. A laboratory fee is required for this course. (Varies)

640. Microbial Physiology. Credit 4 hours. Prerequisite: MIC 461/561 or equivalent. A study of the relationships between structure and function of bacteria and allied organisms. Two hours of lecture and four hours of laboratory per week. A laboratory fee is required for this course. (Varies)

650. Microbial Genetics. Credit 3 hours. Prerequisite: MIC 461/561 or equivalent. The genetics of microorganisms with special emphasis on the molecular level. A laboratory fee is required for this course. (Varies)

Military Science (MS)

111. Learning to Lead I. Credit 2 hours. Must be taken concurrently with MS 112. Introduction to the basic principles of leadership to include case studies of problems junior leaders encounter. The fundamentals of drill and ceremony, military correspondence, the Army Physical Fitness Program. Significance of customs and traditions of the service. Introduction to rifle marksmanship and basic individual and squad tactics. (Fall)

112. Applied Leadership Development Laboratory I. Credit 1 hour. The practical application of skills and knowledge taught during MS 111. Laboratory develops importance of team building and individual contribution to mission accomplishment. (Fall)

113. Learning to Lead II. Credit 2 hours. Discussion of principles of leadership with emphasis on ethical reasoning, analysis of problems, communication with subordinates, issuance of orders, teaching and coaching subordinates and the leader as a counsellor. Explanation of the organization of Department of the Army and its role in defense of the nation. Individual and squad tactics. Introduction to tactical communication procedures. (Spring)

114. Applied Leadership Development Laboratory. Credit 1 hour. The practical application of leadership skills and light infantry squad tactics. (Spring)

211. Basic Leadership Skills Development I. Credit 2 hours. Must be taken concurrently with MS 212. Discussion of leadership and its application to communication skills and human relations. Practical application of military writing--draft and edit military correspondence. Introduction to military briefings. Application of small unit tactics; individual and squad movement techniques--the responsibility of the leader. (Fall)

212. Applied Basic Leadership Skills I. Credit 1 hour. Practical application of the skills and knowledge taught during MS 211. The student will participate in a physical fitness program and employ tactical communications. The student will participate in tactical leadership problems at squad level. (Fall)

213. Basic Leadership Skills Development II. Credit 2 hours. A discussion of leadership relating to a small unit leader's mission analysis and planning to accomplish the selected course of action; supervision to accomplish a task, motivational techniques to influence others and molding a unit as a team. A survey of leadership case studies. The fundamentals of map reading: marginal information, the grid system, the contour system and the method of navigating using a military map and lensatic compass. (Spring)

214. Applied Basic Leadership Skills II. Credit 1 hour. The practical application of the skills and knowledge taught during MS 213. Practical exercise designed to teach the student leadership via light infantry squad and platoon tactics. The leader in the conduct of an ambush patrol. (Spring)

311. Tactical Leadership Development I. Credit 2 hours. Must be taken concurrently with MS 312. A discussion of the role of the non-commissioned officer, how and officer effectively employs the NCO. The discussion of fundamentals of tactical leadership, troop leading procedures in the conduct of an operation, the leader's analysis of terrain, the principles of offensive operations, the preparation of a platoon operations orders, and briefing the order. (Fall)

312. Practical Application of Tactical Leadership I. Credit 1 hour. The practical application of skills and knowledge taught during MS 311, emphasizing the leader in action in various tactical application exercises. (Fall)

313. Tactical Leadership Development II. Credit 2 hours. A comprehensive study of the art of navigating across terrain using a map and compass. Case studies of leadership - emphasis is on leadership traits and principles necessary to complete CLC using actual battle experience from World War II, the Korean Conflict and the Vietnam War. (Spring)

314. Practical Application of Tactical Leadership II. Credit 1 hour. The practical application of skills and knowledge taught during MS 313. Practical exercises using a military map and compass. Leadership as it pertains to organizing a unit for a mission, developing a plan to accomplish the mission and writing the order. (Spring)

Music (MUS)

101. Voice Class. Credit 1 hour. The study and practice of the art of singing. Intended to provide training in the fundamentals of singing. May be taken more than once for credit. (Fall, Spring) **102. Voice Class.** Credit 1 hour. The continuation study and practice of the art of singing. Intended to provide training in the fundamentals of singing. May be taken more than once for credit. Credit toward the degree will not be granted for the Music major. (Fall, Spring)

103/104. Class Piano. Credit 1 hour, each semester. Two one-hour class meetings per week. Intended to train music majors in fundamentals of piano techniques and repertoire. Courses must be taken concurrently with MUS 111-112, or with permission of the Department Head. Non-music majors accepted by audition. (103-Fall/104-Spring)

105/405/505. Music Theatre Performance. Credit 1 hour each course. Study and performance of standard literature of opera, musical comedy, and other dramatic musical forms. Open to all students of the University with approval of the Music Theatre director. May be repeated for credit. (Fall, Spring)

109. Class Piano for Non-Music Majors. Credit 1 hour. An introductory course intended for the non-music major with no prior piano study, or only a negligible amount. Music reading, improvisation, harmonizing melodies, and a variety of repertoire will be covered. (Fall, Spring)

111. Music Theory. Credit 3 hours. Prerequisite: Successful completion of entrance exam or MUS 130 or permission of the Department Head. Beginning study of the basic elements of music: Rhythmic, melodic, harmonic materials, chord inversions, and non-harmonic tones, with critical listening, singing, and dictation using materials studied. Three hours of lecture and two hours of laboratory per week. (Fall)

112. Music Theory. Credit 3 hours. Prerequisite: MUS 111. Continuation of MUS 111. Primary and secondary triads and seventh chords, with harmonic analysis and creative writing, critical listening, singing, and dictation using materials studied. Three hours of lecture and two hours of laboratory per week. (Spring)

115. Diction: English and Italian. Credit 1 hour. Use of international phonetic alphabet, employing rules for correct pronunciation of the English and Italian languages in singing. (Fall)

119. Diction: German. Credit 1 hour. Use of international phonetic alphabet, employing rules for correct pronunciation of the German language in singing. (Spring Odd Year Semesters)

120. Diction: French. Credit 1 hour. Use of international phonetic alphabet, employing rules for correct pronunciation of the French language in singing. (Spring Even Year Semesters)

121/421/521. Orchestra. Credit 1 hour each course. A minimum of 3 hours of rehearsal a week. Open to all qualified persons by audition. Qualified music majors must fulfill the course requirements by performance in a professional orchestra such as the Baton Rouge Symphony, the Acadiana Symphony, the Louisiana Sinfonietta, or the Louisiana Philharmonic. May be repeated for credit. (Fall, Spring)

123/423/523. Jazz Ensemble. Credit 1 hour. Minimum of two meetings per week. Open to all qualified students by audition. May be repeated for credit. (Fall, Spring)

125/425/525. Southeastern Wind Symphony. Credit 1 hour. Open to all students by audition. Wind Symphony members who are undergraduate music majors and whose primary applied music course is in a wind or percussion instrument are required to participate in the Marching Band during the fall semester. The Wind Symphony meets five hours per week. May be repeated for credit. (Fall, Spring)

127/427/527. Athletic Bands. Credit 1 hour. Open to all students by audition. Marching Band will perform during the fall semester. Basketball Band will perform during the late fall and spring semester. A minimum of five hours of rehearsal a week. May be repeated for credit. (Fall, Spring)

129/449. Recital Hour. No Credit. Graded pass/fail. A weekly recital seminar consisting of student performances, lectures and discussions on topical music concerns. The department expects all undergraduate music students in each semester of full-time residence (to a maximum of eight semesters) to attend, and document, eighteen scheduled and designated recital hour seminars, faculty recitals, and/or other concerts. (Fall, Spring)

130. Fundamentals of Music Theory. Credit 3 hours. Prerequisite: A score of less than 70% on the MUS 111 entrance exam as verified by the Department Head. Introductory study of the basic elements of music with emphasis on musical notation, pitch (including scales and key signatures), meter and rhythm, and harmony (including intervals, triads and basic seventh chords) with creative applications and study of examples from music literature. Introductory concepts in sight singing and ear training. (Fall)

131/431/531. Chorus. Credit 1 hour each course. Three hours of rehearsal a week. Open to all students. May be repeated for credit. (Fall, Spring)

135/435/538. Concert Choir. Credit 1 hour each course. A select choir open to all students by audition. Five hours rehearsal a week. May be repeated for credit. (Fall, Spring)

137/437/539. Bella Voce. Credit 1 hour. Open to all treble voices. Study and performance of the entire body of choral music for treble voices including both serious and popular selections. Emphasis on attaining high musical standards and levels of choral-vocal proficiency. Includes several performances and concerts. May be repeated for credit. (Fall, Spring)

143/443/543. Symphonic Band. Credit 1 hour. Open to all students by audition. Symphonic Band will perform during the spring semester. A minimum of three hours of rehearsal a week. May be repeated for credit. (Spring)

145/445/545. Chamber Ensemble. Credit 1 hour each course; minimum of two meetings per week. Each ensemble scheduled separately, including Collegium Musicum, brass, wind, percussion, woodwind, clarinet, saxophone, vocal, guitar, and mixed. Open to all qualified persons by permission of the Department Head. May be repeated for credit. (Fall, Spring)

150. Contemporary Guitar Class. Credit 1 hour. Instruction in beginning and intermediate level popular guitar styles. (Fall, Spring)

151. Introduction to Music. [LCCN: CMUS 1013, Music Appreciation]. Credit 3 hours. A non-technical course open to all interested persons. Designed to increase the response to music through a knowledge of the art and development of perceptive listening skills. Opportunities provided to attend concerts and recitals. Credit hours earned cannot be used for graduation in a music curriculum. (Summer, Fall, Spring)

152. Introduction to Music Literature. Credit 2 hours. A survey of the Western art music from antiquity to the present, to provide context and foundation for future detailed study of music history. (Spring)

154/454/552. Southeastern Contemporary Music Ensemble. Credit 1 hour. Open to all music majors by audition. The Southeastern Contemporary Music Ensemble (SoCoMuE) meets a minimum of two and a half hours per week. May be repeated for credit. (Fall, Spring)

171. History of Rock and Roll. Credit 3 hours. An exploration of the history of rock and roll including its significant performers, producers, recordings, performances, and overall cultural identity in the United States. (Summer, Fall, Spring)

172. History of Country Music. Credit 3 hours. An exploration of the history of the country music genre, its significant performers, songwriters, song, and cultural identity from 1922 to the present. (Summer, Fall, Spring)

- 176. Classical Guitar Class.** Credit 1 hour. Beginning instruction in classical guitar. (As Needed)
- 209/210. Class Piano.** Credit 1 hour each semester. Two class meetings per week. Continuation of Class Piano 103-104 to provide more advanced training in piano technique and repertoire. Prerequisite: MUS 111-112 or permission of the Department Head. (209-Fall/210-Spring)
- 211. Music Theory.** Credit 3 hours. Prerequisite: MUS 112. Study of modulation, chromatic harmony, and the expansion of rhythmic and melodic concepts; analysis and creative writing as related to the structural organization of music, with critical listening, singing, and dictation using materials studied. Three hours of class and two hours of laboratory per week. (Fall)
- 212. Music Theory.** Credit 3 hours. Prerequisite: MUS 211. Continuation of MUS 211. Further study of chromatic harmony with an introduction to contemporary practices and techniques, continued analysis, creative writing, critical listening, singing, and dictation. Three hours of lecture and two hours of laboratory per week. (Spring)
- 215. Fundamentals of Jazz Improvisation.** Credit 1 hour. A study of selected basic theoretical principles of improvisation. Use of scales and chord progressions. Two hours of laboratory a week. (Fall, Spring)
- 217. Computer Applications for Music Majors.** Credit 2 hours. Topics include basic computer skills, Musical Instrument Digital Interface (MIDI), and a survey of available software for computer assisted music instruction. (Fall, Spring)
- 218. Introduction to Music Technology.** Credit 3 hours. A study of basic approaches to music creation using musical instrument digital interface (MIDI). Topics will include sequencing, synthesis, music composition, and the use of notation software. A laboratory fee is required for this course. (Fall, Spring)
- 251. History and Appreciation of Jazz.** Credit 3 hours. The study of the history of jazz from its development in America at the turn of the 20th century through the present. Not a substitute for MUS 151. (Spring)
- 291. Fundamentals of Music.** Credit 3 hours. Designed to give elementary-school teachers a knowledge of the elements of music and techniques of performing, creating, and listening to music. (Fall, Spring)
- 303. Introduction to Music Education.** Credit 3 hours. Prerequisites: EDUC 202; concurrent enrollment in MUS 304. An introduction to the role of a school music teacher, various models of school music programs, K-12 music curriculum, and current pedagogical approaches for teaching music. Class discussions, assignments, guided observations of school music classrooms, and beginning competency-based clinical practice in school settings. (Fall)
- 304. Clinical Practice in Music Education.** Credit 1 hour. Prerequisites: EDUC 202; concurrent enrollment in MUS 303. Students observe and assist in school in school music classrooms at elementary and secondary levels representing diverse school populations, and teach mini-lessons to small groups of students. (Fall)
- 309. Basic Jazz Piano.** Credit 1 hour. Introduction to the basic harmonic and melodic techniques used in playing improvised jazz piano. (Varies)
- 310. Instrumental Conducting I.** Credit 2 hours. Prerequisites: MUS 152 and 212. Basic conducting, orchestration, and band literature. (Fall)
- 311. Instrumental Conducting II.** Credit 2 hours. Prerequisite: MUS 310. Advanced conducting, orchestration, and band literature. (Spring)
- 314. Jazz Improvisation II.** Credit 1 hour. Prerequisite: MUS 215. This course will explore and perform intermediate and advanced improvisational techniques. (Spring)
- 318. Digital Music Production.** Credit 3 hours. Prerequisite: MUS 212 or permission of Department Head. An exploration of sound recording, editing, mixing and mastering in the digital studio. Essential recording skills for digital production will be explored. Students will produce small to large field and studio recording projects. A laboratory fee is required for this course. (Fall, Spring)
- 329. Choral Conducting I.** Credit 2 hours. Prerequisites: MUS 152 and 212. Basic choral conducting, choral literature, choral arranging, and instrumental arranging. (Fall)
- 330. Choral Conducting II.** Credit 2 hours. Prerequisite: MUS 329. Advanced choral conducting, choral literature, choral arranging, and instrumental arranging. (Spring)
- 345. Jazz Theory/Composition.** Credit 2 hours. Prerequisite: MUS 212. Study of chord symbols, chord voicing practices, chord progressions, analysis, reharmonization, scale/chord relationships, and bass line construction as applied to jazz composition, arranging, and improvisation practice. (Spring)
- 353. Individual Study.** Credit 1, 2, or 3 hours, amount of credit to be stated at time of registration. Prerequisite: Junior standing or permission of the Department Head. A written proposal of the subject area and procedures is required, to be approved by the instructor and Department Head. Not intended for subjects or courses offered on a regular basis. May be repeated for credit. (Summer, Fall, Spring)
- 354. Music History I.** Credit 3 hours. Prerequisite: MUS 152 or permission of the Department Head. Classical, Romantic and Modern periods. (Spring)
- 355. Music History II.** Credit 3 hours. Prerequisite: MUS 152 or permission of the Department Head. Medieval, Renaissance, Baroque and Pre-Classical periods. (Fall)
- 357. Introduction to World Music.** Credit 2 hours. Prerequisites: MUS 111/112 or permission of Department Head. Introduction to Music in various world cultures. (Spring)
- 361. Composition.** Credit 2 hours. Prerequisites: MUS 371 and 372 or permission of Department Head. Composition in the smaller forms. May be repeated for credit. (Fall, Spring)
- 371. Form and Analysis.** Credit 2 hours. Prerequisite: A grade of "C" or better in MUS 211 and 212. Study of eighteenth- and nineteenth-century forms. Analysis of style from Beethoven through the late Romantic era (Wagner, Brahms, Bruckner). Composition in the styles analyzed. (Fall)
- 372. Form and Analysis.** Credit 2 hours. Prerequisite: Grade of "C" or better in MUS 211 and 212. Twentieth century forms. Style from Debussy to the present with student compositions in each style. Significant twentieth-century trends. (Spring)
- 378. String Methods.** Credit 1 hour. Study of basic techniques in the pedagogy of the violin, viola, cello, and string bass. (Spring)
- 381. Counterpoint.** Credit 2 hours. Prerequisite: A grade of "C" or better in MUS 212. Survey of contrapuntal procedures from fifteenth to twentieth century with emphasis upon the eighteenth century. (Fall)
- 382/583. Counterpoint.** Credit 2 hours. Prerequisites: Junior standing and a grade of "C" or better in MUS 381. Fugue from the eighteenth to the twentieth century. (Spring semester of odd-numbered years)
- 393. Woodwinds I.** Credit 1 hour. Study of basic techniques in the pedagogy of the oboe, bassoon, and flute. (Fall)
- 394. Woodwinds II.** Credit 1 hour. Study of basic techniques in the pedagogy of the clarinet and saxophone. (Spring)
- 395. Brass Class.** Credit 1 hour. Study of basic techniques in the pedagogy of the trombone, euphonium, and tuba, trumpet, cornet, and French horn. Three hours of laboratory per week. (Spring)
- 397. Percussion Class.** Credit 1 hour. Study of basic techniques in the pedagogy of band percussion instruments. (Fall)
- 403/511. Piano Literature and Pedagogy.** Credit 2 hours. A survey of piano teaching literature of all levels; observations, methods of teaching. (Varies)

404/512. Class Piano Pedagogy. Credit 2 hours. A specialized course in piano class materials and techniques involving observation and application of methods. (Varies)

411/510. Voice Materials and Methods. Credit 3 hours. Voice pedagogy. Exploration of methods of voice training, and a study of suitable materials for young singers. Emphasis upon class instructional methods. Offered in alternate years. (Even Year Spring Semesters)

413/513. Double Reed Making. Credit 1 hour. A practical course in the techniques of making and adjusting reeds for the oboe and bassoon. (Varies)

414/514. Percussion Pedagogy, Materials and Lab. Credit 3 hours. Prerequisites: MUS 211, 212, and 152, or permission of the Department Head. Study concert/marching tunable and non-tunable percussion instruments, pedagogy, literature and performance skills. (Varies)

416/516. Brass Pedagogy, Materials and Lab. Credit 3 hours. Prerequisites: MUS 211, 212, and 152, or permission of the Department Head. Study all high and low brass instruments, pedagogy, literature and performance skills, with an emphasis on the student's primary instrument. (Varies)

417/517. Woodwind Pedagogy, Materials and Lab. Credit 3 hours. Prerequisites: MUS 211, 212, and 152, or permission of the Department Head. Study single and double reed woodwind instruments, pedagogy, literature and performance skills, with an emphasis on the student's primary instrument. (Varies)

418/518. String Pedagogy, Materials and Lab. Credit 3 hours. Prerequisites: MUS 211, 212, and 152, or permission of the Department Head. Study high and low string instruments (or guitar), pedagogy, literature and performance skills, with an emphasis on the student's primary instrument. (Varies)

419/519. Marching Band Techniques. Credit 1 hour. The planning, execution and teaching of marching band, performance. Elements of showmanship. (Varies)

420/520. Woodwind Repair. Credit 1 hour. The study of preventive maintenance and the repair of woodwind instruments. Laboratory experience. (Varies)

429/529. Piano Literature. Credit 3 hours. A survey of piano literature from 1700 to 1950. (Varies)

430. Keyboard Skills for Pianists. Credit 1 hour. Prerequisites: MUS 111, 112, 211, and 212, or permission of the Department Head. Study of the functional keyboard skills of harmonization, transposition, improvisation, keyboard harmony, and sight-reading. (Varies)

433. Jazz Arranging I. Credit 1 hour. Prerequisite: MUS 345. Basic arranging and composition skills with emphasis on small jazz ensembles. Study of notation, score layout, instrumentation/orchestration, transpositions, basic harmonic/melodic analysis and chord voicings. Use of notation software such as Finale or Sibelius. (Fall)

434. Jazz Arranging II. Credit 1 hour. Prerequisite: MUS 433. Advanced arranging and composition with emphasis on large jazz ensembles. Advanced harmonic/melodic analysis and chord voicings, reharmonization, one to five-part density and voicing techniques. Use of notation software such as Finale or Sibelius. (Spring)

438. Song Literature. Credit 2 hours. Survey of solo vocal literature from the late eighteenth century to the present. Emphasis upon style, interpretation, and presentation of solo and chamber ensemble materials for all voice classifications. (Even Year Fall Semesters)

440. Instrumental Techniques I. Credit 3 hours. Prerequisites: MUS 211, 212, and 152. Basic conducting, orchestration, and band literature. (Fall)

446/546. Instrumental Techniques II. Credit 3 hours. Prerequisite: MUS 440. Advanced conducting, orchestration, and band literature. (Spring)

447. Choral Methods I. Credit 3 hours. Prerequisites: MUS 211, 212, and 152. Basic choral conducting, choral literature, choral arranging, and basic instrumental arranging. (Fall)

448/548. Choral Methods II. Credit 3 hours. Prerequisite: MUS 447. Advanced choral conducting, choral literature, choral arranging, and instrumental arranging. (Spring)

453/553. Seminar in Music History. Credit 3 hours. Selected topics. May be repeated. (Fall)

455/555. Research in Music. Credit 3 hours. Prerequisite: Grade of "C" or better in all of the following courses, MUS 354, 355, 371, 372, 381, or equivalent courses at other institutions. A study of research techniques: experimental, statistical, historical, and music theory. Preparation of research papers. (Even Year Fall Semesters)

456/556. Band Arranging. Credit 2 hours. Introduction to arranging musical scores and parts for both large and small instrumental ensembles. (Varies)

458. Jazz Pedagogy. Credit 2 hours. Prerequisite: MUS 310. Methods and materials relating to the teaching of jazz; conducting and rehearsal techniques for jazz ensembles; survey of performance literature and concert programming. (Spring)

471/571. Choral Literature and Interpretation. Credit 3 hours. Interpretive choral conducting, rehearsal routine, and program building. Survey of choral materials; practical conducting experience. (Offered in alternate years.) (Varies)

500. Music Theory Review for Graduate Students. Credit 3 hours. May not be applied toward degree. A review of music theory fundamentals, common practice harmony, ear training, theoretical terms, and basic form and analysis. (Fall)

554. Music History I Review for Graduate Students. Credit 3 hours. Prerequisite: A score of less than 70% on the Graduate Placement exam in Music History I as verified by the Department Head. A review of the styles, practices and composers of the Medieval, Renaissance, Baroque and Pre-Classical periods. (Fall)

558. Music History II Review for Graduate Students. Credit 3 hours. Prerequisite: A score of less than 70% on the Graduate Placement exam in Music History II as verified by the Department Head. A review of the styles, practices and composers of the Classical, Romantic and Modern periods. (Spring)

641. Seminar in Music History and Literature. Credit 3 hours. Selected topics. May be repeated. (Spring)

642. Directed Individual Study. Credit 3 hours. Prerequisite: A written proposal of the subject area and procedures, to be approved by the Department Head and the instructor. In fields of Theory, Music History and Literature, Applied Literature, and Music Education. May be Repeated for credit. (Summer, Fall, Spring)

643. Graduate Performance Practicum. Credit 1-3 hours. Performance as a leader, teacher, and organizer. May include serving as assistant conductor of a major ensemble, conducting a public performance of the student's original composition, coaching and accompanying a recital, coaching and performing in a chamber ensemble. Practicum will include seminar experiences. Specific needs of the student will be determined by the advisor. (Summer, Fall, Spring)

650. Score Study and Analysis – Instrumental. Credit 3 hours. Advanced study in score analysis and preparation with focus on works for instrumental/wind band forces. Historical and theoretical study of works from diverse time periods and styles. May be repeated once for credit. (Varies)

651. Score Study and Analysis – Choral. Credit 3 hours. Advanced historical and analytical study of the musical score, which prepare the conductor for both rehearsal and performance. May be repeated once for credit. (Varies)

652. Wind Band Literature. Credit 3 hours. Comprehensive survey of wind band literature from the Baroque, Classical, Romantic, and contemporary periods, with extensive study of repertoire from 1900-present. The course will explore the development of the 20th century public school band literature and examine masterworks of the repertoire. May be repeated once for credit. (Varies)

653. Choral Literature. Credit 3 hours. Study of the art and techniques of choral conducting as related to the study of the score. Major works from the choral and choral/orchestral literature are conducted. Repertoire studied varies from Gregorian Chant through the present. May be repeated once for credit. (Varies)

654. Advanced Instrumental Conducting I. Credit 3 hours. Study of the art and technique of instrumental conducting, with emphasis on application of gesture, non-verbal communication, and application in the rehearsal environment. Significant works of the instrumental literature will be studied and conducted. (Varies)

655. Advanced Choral Conducting I. Credit 3 hours. Study of the techniques required to conduct choral music from Gregorian Chant through the Baroque period with an emphasis on score analysis and performance practice. (Varies)

656. Advanced Instrumental Conducting II. Credit 3 hours. Prerequisite: MUS 654. Study of the art and technique of instrumental conducting, with emphasis on application of gesture, non-verbal communication, aesthetics, and application in the rehearsal environment. Significant works of the instrumental literature will be studied. (Varies)

657. Advanced Choral Conducting II. Credit 3 hours. Prerequisite: MUS 655. Study of the art and techniques of choral conducting as related to a study of the score. Major works from the choral and choral/orchestral literature are conducted. Repertoire studied varies from Classical to the present. (Varies)

661. Styles and Analysis. Credit 3 hours. Comparative analysis of historical styles. Study of significant and representative works. Composition in each style. (Fall)

662. Styles and Analysis. Credit 3 hours. Prerequisite: MUS 661. (Fall)

665. Composition. Credit 3 hours. May be repeated for credit. (Summer, Fall, Spring)

673. Vocal Literature. Credit 3 hours. A survey of literature for the solo voice, with secondary attention to literature for small ensembles such as duets and trios. (Varies)

770. Thesis Research and Thesis. Credit 1-6 hours each semester, with six hours needed for graduation. The student must enroll in the thesis course each semester the thesis is in progress. The thesis is graded Pass/Fail. (Summer, Fall, Spring)

Applied Music (MUSA)

Applied courses are identified by 3-digit sequences, each digit coded for content. First digits are 1 for freshman and sophomore level courses, 4 for junior and senior levels, 5 for graduate level electives, and 6 for graduate level degree credit. The middle digit indicates the applied area: Brass 2, Woodwind 3, Percussion 4, Strings 5, Keyboard 6, and Voice 7. All courses may be repeated as necessary to fit curricula. An examining board of appropriate faculty members in each applied area (voice, keyboard or other instruments) will determine the eligibility of a student in the respective area to register for the succeeding applied music course carrying more than one credit hour. A maximum of one three-hour course in any single applied instrument, voice, or recitals may be scheduled concurrently when appropriate. Approval of the Department Head is required for enrollment in applied music. Priorities for allowing enrollment are: 1) a full-time student whose curriculum specifies the course, 2) a student whose performance will contribute to the music department activities, 3) other students for whom there may be a space available.

121, 131, 141, 151, 161, 171, 421, 431, 441, 451, 461, 471. Applied Music. Credit 1 hour each course. One-hour class lesson or 30-minute private lesson a week in voice or an instrument with a minimum of five hours a week of practice. Music Education majors for whom the course is their major instrument will receive a one-hour private lesson each week. May be repeated for credit. A laboratory fee is required for this course. (Fall, Spring)

122, 132, 142, 152, 162, 172, 422, 432, 442, 452, 462, 472. Applied Music Major. Credit 2 hours each course. One hour of private instruction or one and one-half hours of class and private instruction a week in voice or an instrument, to include ensemble experiences. A minimum of seven and one-half hours of practice a week is expected. A solo performance and a board examination each semester. Attendance at recitals and other performances. May be repeated for credit. A laboratory fee is required for this course. (Fall, Spring)

123, 133, 143, 153, 163, 173, 423, 433, 443, 453, 463, 473. Applied Music Major. Credit 3 hours each course. One hour of private instruction or one and one-half hours of class and private instruction a week in voice or an instrument, to include ensemble experiences. A minimum of ten hours of practice a week is expected. A solo performance and a board examination each semester. Major recitals may be required at certain times in the courses of study. Attendance at recitals and other performances. May be repeated for credit. A laboratory fee is required for this course. (Fall, Spring)

350. Junior Recital. No Credit. Graded Pass/Fail. Prerequisites: Junior standing and permission of the Department Head. Preparation and performance of a recital, approximately 30 minutes in length. May be repeated. (Fall, Spring)

450. Senior Recital. No credit. Graded Pass/Fail. Prerequisites: Senior standing, advanced technical proficiency, musical maturity, and approval of Department Head. The preparation and performance of a recital, approximately one hour in length. May be repeated. (Varies)

523, 533, 543, 553, 563, 573. Applied Music. Credit 3 hours. One hour or two half-hour lessons each week, with a minimum of ten hours practice per week. The student is required to appear before an examining board at the end of each semester. May be repeated for credit. A laboratory fee is required for this course. (Fall, Spring)

621, 631, 641, 651, 661, 671. Applied Music and Pedagogy. Credit 1 hour. A 30-minute private lesson or one-hour class lesson per week. Intended for the active teacher who has identified the need to develop teaching techniques related to the primary performing medium. If the course is repeated, different instruments will be studied, though the Department Head might grant approval to repeat an instrument. Not applicable in meeting minimum applied music requirements for the Master of Music degree. May be repeated for credit. A laboratory fee is required for this course. (Fall, Spring)

623, 633, 643, 653, 663, 673. Applied Music Major. Credit 3 hours. One hour or two half-hour lessons each week, with a minimum of ten hours of practice per week. The student is required to appear before an examining board at the end of each semester. At the discretion of the teacher, a solo performance on a portion of a recital may be substituted for the examination requirement. A laboratory fee is required for this course. May be repeated for credit. (Fall, Spring)

650. Graduate Recital. Credit 3 hours. Prerequisites: Graduate standing, demonstration of highly advanced technical proficiency, musical mastery and approval of instructor. The preparation and performance of a recital approximately one to one and a half hours in length. (Fall, Spring)

Mythology (MYTH)

201. Greek and Roman Mythology. Credit 3 hours. A comprehensive survey of Greek and Roman Mythology for students with little or no background of classical knowledge. Taught in English; knowledge of Greek or Latin is not required. (Fall, Spring)

202. Viking Mythology. Credit 3 hours. The mythology of the Germanic people in relation to literature, art, music, and religion. Taught in English; knowledge of German is not required. (Varies)

204. Mesoamerican Mythology. Credit 3 hours. An overview of the mythology and cosmologies of Mesoamerican cultures, including the Olmecs, the Aztecs, the Maya and other Mesoamerican groups. Taught in English; knowledge of Spanish not required. (Varies)

205. South American Mythology. Credit 3 hours. A survey of the myths and cosmologies of South American peoples. The differences and similarities among highland and lowland cultures will be explored. Taught in English; knowledge of Spanish not required. (Varies)

423. Special Topics in Mythology. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A special topics course that offers a detailed analysis of a particular genre, movement, author or topic. May be repeated for credit up to 6 hours as topics vary. (Varies)

Nursing (NURS & NLAB)

213. First Aid for Rural Medical Emergencies (F.A.R.M.E.). Credit 3 hours. The course emphasizes the training and education of students to appropriately teach community members risk factor recognition, first responder care, and injury prevention of rural and/or farm-related injuries, with emphasis on application of C.A.R.E. Model for emergency response. (Varies)

214. Medical Terminology. Credit 3 hours. Focuses on the meaning of medical terms in specific context and their use in health-related practice. Provides a base upon which to build a larger vocabulary. (Fall, Spring)

215. Death, Dying and the Grieving Process. Credit 3 hours. Prerequisite: Permission of the Department Head. The course focuses on identifying the student's feelings about death and about caring for terminally ill individuals. It explores ways of coping with feelings experienced by persons caring for dying patients. The student would explore approaches to be used in assisting individuals to a peaceful death as well as assisting families of dying patients. (Varies)

216. Prior Learning Assessment in Nursing. Credit 3 hours. Prerequisite: ENGL 102. Utilizes learning theories and reflection techniques to assist students to identify and evaluate previous learning outside the traditional classroom such as work, volunteer or military experiences. Students will create a professional portfolio to document college-level experiential learning. (Fall, Spring)

217. Dosage Calculations for Nursing. Credit 1 hour. Prerequisites: ENGL 102, MATH 161, CHEM 107 with a grade of "C" or better, and Sophomore standing. This course focuses on learning drug calculations necessary for nursing practice. Topics include systems of measurement, routes of administration, calculation formulas, medication symbols and abbreviations, IV flow rates, and calculations for special populations. Strong math skills are necessary and emphasized. This course will be graded Pass/Fail only. (Fall, Spring)

233. Introduction to Pharmacology. Credit 3 hours. Prerequisites: Zoology 250, 251, Chemistry 101 or 121, or permission of the Dean. Introduces principles of drug therapy for individuals across the life span. Focuses on pharmacological agents in relation to pharmacokinetic effects on body systems and therapeutic usage. (Varies)

300. Topics in Nursing. Credit 1-3 hours. Prerequisite: Completion of Nursing 334, Registered Nurse status or permission of the Department Head. The study of selected issues in Nursing. Topics will be determined each semester based on current issues and trends in nursing. May be repeated for a maximum of 6 hours credit if different topics are studied. One to three hours of class a week, variable. (Varies)

304. Healthcare Informatics. Credit 3 hours. Prerequisite: Junior level standing in nursing major curriculum or permission of the Department Head. An online instructional offering that allows students to develop and evaluate applications, tools, processes, and structures which assist nurses with the management of data in taking care of patients and supports the practice of professional nursing. (Fall, Spring)

305. Clinical Practice Competency I. Credit 1 hour. Prerequisite: Concurrent enrollment in or prior credit for Nursing 315. Guides students in the application of theory to clinical practice in the development of cognitive, psychomotor, communication, and affective skills necessary for the implementation of therapeutic interventions, using safe, effective, and financially responsible practices to promote, maintain, and restore the health of individuals, families, groups, and communities. Provides opportunities to develop and refine clinical practice skills related to hygiene, safety, body mechanics, oral/topical/intravenous medications, obtaining vital signs, injections, sterile technique, oxygenation, nasogastric tubes, catheterization, and bowel elimination. Three hours of laboratory a week. This course will be graded Pass/Fail only. A laboratory fee is required for this course. (Fall, Spring)

309. Camp Nursing. Credit 3 hours. Prerequisites: Completion of all 300-level required Nursing courses or permission of the Department Head. Provides opportunities to explore the role and scope of nursing practice in residential camp settings and the diversity of camp opportunities for nursing practice. Students collaborate with other health professionals to develop interprofessional communication and teambuilding to provide nursing care to children in a camp setting. Students learn to identify health issues for this setting and the nursing skills needed to implement nursing interventions. Students will attend an off-campus, overnight camp for the clinical practicum portion of the course. Seminar and clinical hours equal 162 contact hours. (Summer)

313. Study of Human Diseases. Credit 3 hours. Prerequisites: GBIO151, BIOL 152, ZOO 250/252, ZOO 251/253, HS 132 or 133. The course builds upon a student's understanding of human anatomy and integrates the study of human disease with focus on the risk factors, clinical manifestations, pathology, and prevention. Common disease states in the adult population will be studied. The intent of the course is to prepare health educators to identify, screen, and teach populations at risk. (Varies)

314. Health Assessment of the Individual. Credit 2 hours. Formal acceptance for progression in the nursing curriculum required. Concurrent enrollment in Nursing 305 and 315 encouraged but not required. Focuses on skills necessary to assess the individual as a multidimensional, balanced expression of bio-psycho-social-cultural-spiritual well-being. Emphasizes theory-based approaches and techniques for data collection from persons across the life span. (Fall, Spring)

315. Health Assessment of the Individual Lab. Credit 1 hour. Prerequisite: Concurrent enrollment in or prior credit for Nursing 305 and 314. Develops assessment skills using theory-based approaches and techniques for data collection from persons across the life span. Three hours laboratory a week. A laboratory fee is required for this course. (Fall, Spring)

319. Pathophysiology and Pharmacology I. Credit 3 hours. Prerequisite: Formal acceptance for progression in nursing curriculum. Introduces the basics of pharmacology and focuses on specific pharmacological agents in relation to pharmacokinetic effects on body systems. Examines selected diseases and recommended drug therapies. The course builds on the student's understanding of human anatomy and other sciences which contribute to the scientific basis for professional nursing practice. (Summer, Fall, Spring)

331. Pathophysiology and Pharmacology II. Credit 3 hours. Prerequisites: Nursing 319 and 339. Examines selected disease processes and related drug treatment modalities. Builds on the student's understanding of the principles of pharmacology and pathophysiology, the nursing process, and the biological sciences. (Summer, Fall, Spring)

332. Health Assessment of Families/Groups/Communities. Credit 1 hour. Prerequisites: Nursing 314, 315, and 339. Concurrent enrollment in Nursing 334 is encouraged but not required. Focuses on families and communities as clients. Provides learning opportunities that will enable the student to view persons as members of large social systems. (Summer, Fall, Spring)

333. Orientation to the Roles of the Professional Nurse. Credit 3 hours. Prerequisites: ENGL 102 with a "C" or better and Sophomore standing. Focuses on socializing students to the discipline of nursing. Provides an overview of the mission of the School of Nursing, organizing concepts and desired outcomes of the baccalaureate-nursing program. Explores theories of nursing which serve as models for nursing practice. Describes the dimensions of the various roles of the professional nurse. Stresses the role of the professional nurse as an advocate in ethical, legal, and political health care trends and issues. Assists students in examining personal values and career goals and in developing an appreciation for persons with varying cultural backgrounds within the context of the professional nurse role. (Fall, Spring)

334. Health Assessment of Families/Groups/Communities Lab. Credit 1 hour. Prerequisite: Concurrent enrollment in or prior credit for Nursing 332. Using recognized community and family assessment tools, the student will gather and analyze data leading to recognition of population focused problems and their impact on individual, family and community. Three hours laboratory a week. A laboratory fee is required for this course. (Fall, Spring)

335. Clinical Practice Competency Lab II. Credit 1 hour. Prerequisites: Nursing 305 and concurrent enrollment in or prior credit for Nursing 372 and 375. Guides students in the application of theory to clinical practice and in the development of cognitive, psychomotor, and interpersonal communication skills necessary for the implementation of safe and cost-effective interventions to promote, maintain, and restore the health of individuals, families, groups, and communities. Provides opportunities to develop and refine previously learned and new clinical practice skills related to intravenous therapy, surgical asepsis, oxygenation, and cardiovascular monitoring. Three hours of laboratory a week. This course will be graded Pass/Fail only. A laboratory fee is required for this course. (Fall, Spring)

339. Medication Math for Nursing. Credit 2 hours. Prerequisites: Prior credit for ENGL 102, MATH 161, and CHEM 107 with a grade of "C" or better. This course focuses on drug calculations necessary for nursing practice. Topics include: systems of measurement, routes of administration, calculation formulas, medication symbols and abbreviations, intravenous flow rate, and calculations for special populations. Strong math skills are necessary and emphasized. (Summer, Fall, Spring)

341. Integrated Spirituality, Health and Nursing. Credit 3 hours. Prerequisite: NURS 371 or permission of the Department Head. This course uses the nursing process as a framework for integrating spiritual care into nursing practice with an emphasis on a variety of cultures, religions, and populations. This course explores the concept of spirituality as it relates to healthcare, as well as strategies for promoting spiritual care of clients. The course also examines the role of spiritual self-awareness and self-care as a component of the spirituality and health connection. (Varies)

360. Essentials of Cultural Competence in Nursing Care. Credit 3 hours. Prerequisite: Completion of Nursing 334. Designed to develop competence in providing culturally congruent nursing care to individuals and families from diverse cultural groups. Examines several theoretical frameworks for assessing beliefs, values, and practices pertaining to health. Emphasizes essential knowledge and skills required to plan and implement culturally competent nursing care across the life span. (Varies)

371. Foundations of Nursing Practice. Credit 2 hours. Prerequisites: Nursing 305, 314, 315, 319, 333, and 339. Concurrent enrollment in Nursing 373 encouraged but not required. Explores the nursing process as a problem-solving tool utilized in communicating, gathering data, interpreting evidence, analyzing viewpoints, and forming judgments in clinical situations. Introduces concepts that are essential in developing foundational principles of nursing. Builds on the student's understanding of nursing assessment and pathopharmacology for a variety of clients. A laboratory fee is required for this course. (Summer, Fall, Spring)

372. Adult Health Nursing. Credit 2 hours. Prerequisite: Nursing 373. Concurrent enrollment in or prior credit for Nursing 335, 375, 382, and 383 are encouraged but not required. Focuses on the nursing care of young and middle-aged adults to promote, maintain and restore health and prevent disease. Emphasizes the nursing process to examine biological and psychosocial parameters, cultural influences and current, evidence-based practice affecting the healthcare needs of individuals, families, groups, and communities. Focuses on collaboration between the patient, family, and healthcare professionals to provide high quality, safe patient care across the continuum of healthcare environments. (Fall, Spring)

373. Foundations of Nursing Practice Lab. Credit 3 hours. Prerequisites: NLAB 305, 315, 333, and 339; concurrent enrollment in or prior credit for Nursing 331 and 371. Focuses on foundational nursing principles by utilizing the nursing process to gather data, interpret evidence, analyze viewpoints, communicate and collaborate, and form judgments in clinical situations to promote, maintain and restore health by providing evidence-based, patient-centered care. Nine hours laboratory a week. A laboratory fee is required for this course. (Summer, Fall, Spring)

375. Gerontological Nursing. Credit 2 hours. Prerequisites: Nursing 331, 332, 334, 371, 373, and 378. Focuses on the nursing care of older adults to promote, maintain and restore health and prevent disease. Emphasizes the nursing process to examine biological and psychosocial parameters, cultural influences and current evidence-based practice affecting the healthcare needs of individuals, families, groups and communities. Focuses on collaboration with the patient, the patient's family and the healthcare professional to provide high quality and safe patient care across the continuum of healthcare environments. (Fall, Spring)

378. Research in Nursing. Credit 2 hours. Prerequisites: Nursing 315 and 333 or permission of the Department Head. Focuses on fundamental concepts and progress of nursing research. Emphasizes nursing research as a basis for evidence-based practice. Students will examine major steps in the research process, formulate research questions relevant to clinical nursing, practice, and critique nursing research reports. (Fall, Spring)

382. Adult and Gerontological Nursing Lab. Credit 6 hours. Prerequisites: Nursing 373 and concurrent enrollment in or prior credit for Nursing 335, 372, 375, and 383 or permission of the Department Head. Course focuses on the clinical application of the nursing process to promote, maintain, and restore health in young, middle aged, and older adult clients, with a variety of health care needs. This course integrates knowledge of the biological and psychosocial sciences, legal and ethical dimensions, resources, cultural influences, and current evidenced-based practice affecting nursing care strategies for the adult client. This course provides clinical experiences in a variety of health care settings, enabling students to develop clinical reasoning, decision making, and professional communication skills and practice using patient care technologies and information systems. Eighteen hours of laboratory a week. A laboratory fee is required for this course. (Fall, Spring)

383. Psychiatric Mental Health Nursing. Credit 2 hours. Prerequisites: Nursing 331, 332, 334, 371, 373, and 378 or permission of the Department Head. The focus of this course is on the acquisition of knowledge necessary to meet the standards of psychiatric/mental health nursing practice in the care of patients across the life span. It also provides students the opportunity to develop a foundation for clinical decision making, which encompasses significant nursing interventions in providing developmentally appropriate and culturally relevant psychiatric/mental health nursing care. (Fall, Spring)

384. Pain Management in Diverse Populations. Credit 3 hours. Prerequisite: Completion of NLAB 382, RN status or with permission of the Department Head. This course focuses on the existence and scope of suffering that is caused by various types of pain. Standards of client care in

the clinical management of pain will be introduced. The physiology, causes, measurement and treatment of pain will be discussed. Pharmacological and non-pharmacological treatment of pain, including invasive and non-invasive measures, and multi-disciplinary management will be addressed. The management of pain in special populations will be emphasized. (Varies)

385. Preparing Nurses for Disaster Management. Credit 3 hours. Prerequisite: Concurrent enrollment in or prior credit for Nursing 334 or permission of the Department Head. A component of this course is a product of the U.S. Department of Homeland Security's Office of Grants and Training and was developed by the National Domestic Preparedness Consortium. It standardizes the minimum Weapons of Mass Destruction (WMD) awareness level learning objectives and establishes a common baseline to ensure nationwide consistency in WMD education and training. Additionally, this course expands upon WMD awareness level learning to include disaster management preparation for vulnerable populations and interventions at the local level. (Varies)

390. NCLEX-RN Review Course. Credit 3 hours. Prerequisites: NLAB 473 and 477 or permission of the Dean. Facilitates review of systems, synthesis, of knowledge, and application of standards of care in nursing practice. Emphasis is placed on the framework of client needs as selected for the NCLEX-RN exam. Client needs provide universal structure for defining nursing actions and competencies across all setting for all clients. (Varies)

403. Clinical Competency Lab III. Credit 1 hour. Prerequisites: Nursing 335, 372, 375, 382, 383 and concurrent enrollment in or prior credit for Nursing 471 and 475. Guides students in the application of theory to clinical practice and in the development of cognitive, psychomotor, communication, and therapeutic interventions necessary for health promotion, maintenance, and restoration of individuals, families/groups in a community. Provides opportunities to develop and refine clinical practice skills for newborns, neonates, children, adolescents, and childbearing families. Three laboratory hours per week. This course will be graded Pass/Fail only. A laboratory fee is required for this course. (Summer, Fall, Spring)

428/528. The Management of Health Services Organizations. Credit 3 hours. Prerequisite: Graduate level standing or permission of the Department Head. Designed for the Registered Nurse. Examines leadership and management concepts, principles, and function in relation to managerial roles, health services organizations and patient care delivery system issues. Designed for students who wish to supplement their knowledge of health services organizations. An additional research assignment is required for graduate students. (Varies)

451/561. International Nursing: Roles and Issues. Credit 3 hours. Prerequisite: Completion of all 300 level courses. Focuses on recognition of professional nursing roles and healthcare issues in countries worldwide. Topics include the impact of international and governmental developments upon healthcare systems, healthcare consumers, and professional nurses' practice environments. Three classroom hours per week. (Varies)

471. Nursing Care of the Childbearing Family. Credit 2 hours. Prerequisites: Nursing 335, 372, 375, 382, and 383. Concurrent enrollment in Nursing 403 and 473 encouraged but not required. Focuses on the care of neonates and childbearing families throughout the life cycle. Enables students to provide nursing care to the childbearing family during the antepartal, intrapartal, postpartal, neonatal, and menopausal time periods. Content reflects both normal and high-risk care of the family throughout the life cycle. Emphasizes the use of the nursing process, concepts of individual, environment, and health as they pertain to the care of the family. A laboratory fee is required for this course. (Summer, Fall, Spring)

473. Nursing Care of the Childbearing Family Lab. Credit 3 hours. Prerequisites: Nursing 382 and concurrent enrollment in or prior credit for Nursing 403 and 471. Provides clinical practice opportunities to synthesize nursing knowledge, use of the nursing process, and to reflect on learning experiences during the care of childbearing families and neonates. Focuses on therapeutic nursing interventions including patient care technologies, information systems and communication devices to promote, maintain, and restore families' health during the childbearing period. Provides activities for students to further develop critical thinking, decision-making, and communication skills. Includes learning experiences in a variety of health care settings with attention to existing health care policies and regulatory guidelines. Nine hours of laboratory per week. A laboratory fee is required for this course. (Summer, Fall, Spring)

475. Nursing Care of Infants, Children, and Adolescents. Credit 2 hours. Prerequisites: Nursing 335, 372, 375, 382, and 383. Concurrent enrollment in Nursing 403 and 477 is encouraged, but not required. Focuses on the nursing care of infants, children, and adolescents to promote, maintain, and restore health. Synthesizes knowledge of child development and family dynamics to examine the biological and psychosocial parameters, legal and ethical dimensions, resources, cultural influences and current evidence-based practice affecting nursing care strategies for infants, children and adolescents. (Summer, Fall, Spring)

477. Nursing Care of Infants, Children, and Adolescents Lab. Credit 3 hours. Prerequisites: Nursing 382 and concurrent enrollment in or prior credit for Nursing 403 and 475. Provides clinical practice opportunities to synthesize nursing knowledge, evaluate use of nursing process, and reflect on learning experiences during the care of infants, children, and adolescents. Focuses on therapeutic nursing interventions to promote maintain, and restore health. Provides activities for students to further develop critical thinking skills, decision making skills, and communication skills. Includes clinical learning experiences in a variety of health care settings. Nine laboratory hours a week. A laboratory fee is required for this course. (Summer, Fall, Spring)

479. Professional Nurse Role: Manager. Credit 2 hours. Prerequisite: Permission of Department Head. Focuses on the knowledge and skills in basic organizational systems leadership for the professional nurse. Presents theories, concepts and models of healthcare delivery. Students explore creative roles for managing and leading in nursing. Provides theoretical knowledge and skills to understand organizations, identify leadership theories and utilize critical thinking in reaching nursing management decisions. (Summer, Fall, Spring)

482. Promoting a Healthy Community. Credit 1 hour. Prerequisites: Nursing 403, 471, 473, 475, and 477. Focuses on the caregiver/manager role of the professional nurse in working with groups, communities and populations with emphasis on strategies for developing, implementing, and evaluating health promotion and disease prevention interventions for target populations in a community. Explores the impact of environmental, socioeconomic, political and legislative influences on health of communities. (Summer, Fall, Spring)

485. Professional Nursing: Transition and Trends. Credit 1 hour. Prerequisite: Completion of all 300-level Nursing courses. Facilitates transitions from the student role to that of beginning professional nurse. Emphasizes key elements needed by the beginning professional nurse in order to assume an effective role in delivering quality care. Students explore ethical principles and core values that contribute to the development of professionalism in nursing. Opportunities for continued contributions to and advancement of the profession of nursing are investigate and reviewed. (Fall, Spring)

486/586. Entrepreneurship in Nursing. Credit 3 hours. Prerequisite: Junior standing or permission of the Dean. A practical approach for nurses to develop entrepreneurial skills that foster holistic patient care. Presents business opportunities in the changing health care reform era and introduces marketing skills, conflict resolution, financial and legal issues. Three hours of lecture per week. (Varies)

487. Advanced Concepts in Nursing Practice. Credit 3 hours. Prerequisites: Nursing 403, 471, 473, 475, and 477. Provides the student with opportunities to synthesize nursing knowledge with complex patient healthcare situations. Emphasizes principles of management of: Multidimensional patient problems, quality improvement, health care economics, evidence-based practice, professional competency, and accountability. A laboratory fee is required for this course. (Summer, Fall, Spring)

488. Promoting a Healthy Community Lab. Credit 1 hour. Prerequisites: Nursing 403, 471, 473, 475, 477, and concurrent or prior credit for Nursing 482. Provides opportunities to develop, implement and evaluate health promotion and disease prevention interventions for target populations such as individuals, families, groups or populations throughout the lifespan with a community. Collaborates with other health

professionals and members of the community to implement all phases of the nursing process within the community context to provide population-focused interventions. Uses evidence-based practices to obtain assessment data, sociocultural characteristics, environmental and political influences on determinants of health. Functional as a manager and provider of nursing services to a target population within a community, documenting all phases of care and disseminating outcomes of planned population interventions. Three hours of laboratory per week. A laboratory fee is required for this course. (Summer, Fall, Spring)

489. Advanced Concepts in Nursing Practice Lab. Credit 5 hours. Prerequisites: Nursing 403, 471, 473, 475, 477, and concurrent enrollment in or prior credit for Nursing 479 and 487. Provides opportunities to refine critical thinking, decision-making and communication skills in nursing care of diverse populations across the lifespan in an ever-changing and complex healthcare environment. Supports activities to synthesize nursing knowledge, apply appropriate nursing interventions and evaluate the use of phases of the nursing process. Integrates safety, quality improvement and healthcare policies throughout the course to reflect current standards of professional practice. Prepares each student to function effectively and efficiently in entry-level caregiver, manager and team member nursing roles. Fifteen hours of laboratory a week. A laboratory fee is required for this course. (Summer, Fall, Spring)

600. Theoretical Foundations of Advanced Nursing. Credit 3 hours. Focus on examination of the theoretical foundations of nursing, including analysis of major theories of nursing and supporting theories as the basis for advanced practice nursing in a variety of healthcare settings and the development of a personal philosophy of nursing. (Varies)

602. Generating Evidence for Nursing Practice. Credit 3 hours. Prerequisites: NURS 600 and 605. Presents the logic, methods, and techniques of scientific research, using an evidence-based approach. Emphasis will be placed on critical appraisal of existing evidence, design decisions, psychometrics and appropriate statistical analyses. Students will design a research proposal applicable to nursing practice. (Varies)

605. Applied Statistics for the Health Sciences. Credit 3 hours. Review of research techniques and statistical concepts. Application and interpretation of commonly used statistical tests and analysis utilized in health sciences research. (Summer, Fall, Spring)

607. Health Assessment and Diagnostic Reasoning for Advanced Practice. Credit 3 hours. Diagnostic reasoning models and theories utilizing knowledge of advanced health assessment and development of individuals and families across the lifespan. Emphasis on multi-generational, gender, and cultural/ethnic issues. Two class hours and 4 laboratory hours per week. A laboratory fee is required for this course. (Fall, Spring)

608. Diagnostic Considerations and Psychopharmacology for Psychiatric Disorders. Credit 3 hours. Prerequisite: NURS 617 or NURS 800 or NURS 830. Diagnostic criteria within the current Diagnostic and Statistical Manual (DSM) for Psychiatric Disorders are examined. Functional brain anatomy and physiology are studied with emphasis given to those disruptions which lead to mental illness, including environmental, developmental and genomic influences. Psychopharmacological and therapies currently utilized to treat specific mental illnesses based on current science and practice standards are detailed with emphasis on optimal outcomes and primary, secondary and tertiary prevention. (Fall, Spring)

609. Population Based Primary Care. Credit 3 hours. Prerequisite: NURS 600. Analysis and synthesis of major theoretical, empirical, and clinical foundations of population-based health care. Populations-at-risk in culturally diverse community settings are examined with an emphasis on building advanced practice nursing competencies to assess and address unmet care and health service needs. Focus is also placed on epidemiological techniques for community assessment and program planning, implementation, and evaluation. (Summer, Fall, Spring)

617. Pharmacotherapeutics for Advanced Practice. Credit 3 hours. Application of pharmacotherapeutics to management of clients across the life span. Includes natural/alternative health care, educative management strategies and expected outcomes. (Varies)

618. Pathophysiology for Advanced Practice. Credit 3 hours. Advanced physiological, pathological and psychosocial practices in health promotion and disease prevention among individuals and families of diverse cultural and ethnic backgrounds, across the lifespan. (Varies)

624. Independent Study. Credit 1-3 hours. Prerequisite: Graduate standing and permission of the Department Head. Student works with faculty on a one-to-one basis to advance specialized knowledge and competence related to an approved area of nursing research, practice, or professional certification. May be repeated for a maximum of six credit hours if different topic areas are studied. (Varies)

630. Special Topics in Advanced Nursing Practice. Credit 3 hours. Prerequisite: Graduate standing. A seminar course focusing on selected issues in advanced nursing practice. This course may be repeated once for a total of six credit hours if different topics are studied. (Varies)

634. Nursing Education: Roles, Issues, and Foundations. Credit 3 hours. Introduction to contemporary nursing education. (Fall)

635. Curriculum and Program Development. Credit 3 hours. Introduction to program and curriculum development, implementation, and evaluation. (Spring)

636. Teaching Methodologies and Technologies. Credit 3 hours. Prerequisites: NURS 634 and NURS 635. Analysis and synthesis of evidence-based teaching methods and technologies. (Fall)

644. Advanced Clinical Practicum in Nursing Practice. Credit 1 hour. Prerequisites: NURS 607 and NURS 634. Development of advanced clinical nursing practice by synthesizing current clinical and empirical information to form a foundation for evidence-based nursing practice in a selected clinical focus area. One-hour class and 4 hours of practicum per week. (Fall)

646. Policy, Organization, and Structure in Health Care Systems. Credit 3 hours. Prepares nurse leaders for active participation in policy making for health care organizations, professional associations, and governmental agencies. Focuses on managerial decisions and influences that contribute to policy at the organizational, local, national, and international levels. (Fall)

648. Nurse Leadership/Management in Health Care Organizations. Credit 3 hours. Prerequisite: NURS 600. Emphasizes key skills employed by successful nurse leaders/managers; critical thinking, effective communication, conflict resolution, delegation, team building, resource management, quality improvement, stress management, and leading change. (Spring)

649. Health Care Workforce Management. Credit 3 hours. Prerequisite: NURS 600. Examination of employment relationships in the work organization, including the Human Resource Management (HRM) model for health care settings. Includes employee's recruitment and selection, appraisal, reward systems, training and development, and international aspects of HRM. (Spring)

654. Nurse Leadership and Administration Field Study I. Credit 2 hours. Prerequisites: NURS 600, 605, and 646. Development of the nurse leader role in a practicum experience under the guidance of faculty-supervised preceptors. Focus is placed on the development of a philosophy and framework for the practice of nursing administration that promotes delivery of effective and efficient services in a multi-discipline setting. One-hour class and 5 practicum hours per week. A laboratory fee is required for this course. (Spring)

655. Nurse Leadership and Administration Field Study II. Credit 2 hours. Prerequisite: NURS 654. Development of the nurse leader role in a practicum experience under the guidance of faculty-supervised preceptors. Focus is placed on formulating a philosophy, framework, and strategy for the practice of nursing administration that promotes delivery of effective and efficient services in a multi-disciplinary setting. One-hour class and 5 practicum hours per week. A laboratory fee is required for this course. (Fall)

656. Legal and Regulatory Issues in Nursing Administration. Credit 3 hours. Prerequisites: NURS 600 and NURS 602. Exploration of laws, legislative processes, accrediting agencies, and ethical issues, which influence decision-making and operation of health care systems. (Fall)

657. Nursing Education Practicum. Credit 3 hours. Prerequisite: NURS 670. Implementation of the nurse educator roles in selected precepted class, lab, and clinical settings. One-hour class and 12 hours of practicum per week. (Spring)

658. Fiscal and Economic Principles for Nurse Leaders. Credit 4 hours. Prerequisites: NURS 600 and NURS 602. Examination and application of principles of budget preparation, presentation, analysis, and management in health care organization, and introduction of principles of applied health care economics. (Fall)

659. Nurse Leadership and Administration Internship. Credit 3 hours. Prerequisites: NURS 654 and NURS 655. Development of the nurse leader role in a practicum experience under the guidance of faculty supervised preceptors. Focus is placed on the application and evaluation of a philosophy, framework and strategy for the practice of nursing administration that promotes delivery of effective and efficient services in a multi-disciplinary setting. Ten hours practicum per week. A laboratory fee is required for this course. (Spring)

670. Measuring Outcomes in Nursing Education. Credit 3 hours. Prerequisites: NURS 634 and NURS 635. Focuses on identifying and measuring outcomes germane to nursing education at the learner and program levels. (Fall)

681. Business, Leadership and Health Policy for Nurse Practitioners. Credit 3 hours. Prerequisite: NURS 682 (FNP students); NURS 691 (PMHNP students). Application of business management concepts, organizational and systems leadership, legal, political, economic and policy influences in the delivery of health care services. (Fall, Spring)

682. Advanced Practice Nursing: Family Health I. Credit 5 hours. Prerequisites: NURS 600 or 830 and NURS 602, 605, 607, 617 and 618. Course is designed to develop the role and competencies for primary care family nurse practitioners. Clinical experiences will focus on the care of individuals and families in the pediatrics and child-bearing women populations. Three didactic hours and 16 practicum hours per week. A laboratory fee is required for this course. (Summer, Fall, Spring)

683. Advanced Practice Nursing: Family Health II. Credit 5 hours. Prerequisite: NURS 682. Course is designed to develop the role and competencies for primary care family nurse practitioners. Clinical experiences will focus on the care of individuals and families in the adolescent and adult populations. Three didactic hours and 14 practicum hours per week. (Fall, Spring)

684. Advanced Practice Nursing: Family Health III. Credit 5 hours. Prerequisite: NURS 683. Provides advanced practice nursing students with content to develop the role and competencies for primary care family nurse practitioners. Clinical experiences are designed to focus on the care of individuals and families in the adult and geriatric population. Three didactic hours and 14 practicum hours per week. A laboratory fee is required for this course. (Fall, Spring)

690. Psychotherapy for Advanced Practice Psychiatric Nursing. Credit 3 hours. Prerequisites: NURS 600 and 602 or permission of the Department Head. Analysis and synthesis of major theoretical, empirical, and clinical foundations of various psychotherapeutic approaches in mental health care. Three didactic hours per week and 60 practicum hours of observation per semester. (Fall, Spring)

691. Advanced Practice Nursing: Psychiatric/Mental Health I. Credit 5 hours. Prerequisite: NURS 600, 602, 605, 608, 617, 618, and 690, and previous credit or current enrollment in 609 or permission of the Department Head. Course is designed for introduction to initial diagnostic assessment, basic individual and family psychotherapeutic processes, interventions, and modalities with focus on differential diagnosis, risk-analysis and clinical management of clients with common psychiatric disorders. Three didactic hours and 180 practicum hours per semester. A laboratory fee is required for this course. (Fall, Spring)

692. Advanced Practice Nursing: Psychiatric/Mental Health II. Credit 5 hours. Prerequisite: NURS 691. Course addresses advanced Psychiatric Mental Health Nursing competencies with a focus on different diagnosis, clinical management, interventions, basic group/family therapies, risk analysis and evaluation of outcomes for clients with common and complex psychiatric disorders across the lifespan with emphasis on children and adolescents. Three didactic hours and 14 practicum hours per week. A laboratory fee is required for this course. (Fall, Spring)

693. Advanced Practice Nursing: Psychiatric/Mental Health III. Credit 5 hours. Prerequisite: NURS 692. Focus is on professional role development in advanced practice. Clinical experiences are designed to focus on continued development of advanced clinical competencies for provision of care to the psychiatric patient across the lifespan, family and community with emphasis on the older adult. Five didactic hours per week and 210 practicum hours per semester. A laboratory fee is required for this course. (Fall, Spring)

695. Focused Scholarly Project. Credit 3 hours. Prerequisite: NURS 602. An independent focused scholarly project supervised by a graduate faculty member. The focused scholarly project creatively employs scientific inquiry to systematically advance the practice, teaching, or research of nursing. Emphasis is on a focused project that has tangible application to the practice setting. (Varies)

697. Advanced Practice Nursing: Psychiatric / Mental Health (PMH) III for Post-Master's Certificate Students. Credit 4 hours. Prerequisite: NURS 692. Focus is on professional role of development in advanced practice (for Post-Master's Certificate students). Clinical experiences are designed to focus on continued development of advanced clinical competencies for provision of care to the psychiatric client across the lifespan, family, and community with emphasis on the older adult. 120 practicum hours per semester. (Fall, Spring)

699. Thesis. Credit 1-6 hours each semester, with six hours needed for graduation. Prerequisite: Nursing 602. The student must enroll in the thesis course each semester the thesis is in progress. The thesis is graded Pass-Fail. Independent study of a selected topic in nursing requiring a written proposal, data collection and analyses, and resulting in a written thesis under the guidance of graduate nursing faculty. An oral defense of thesis is required. (Varies)

800. Scholarly Foundations for Advanced Practice. Credit 3 hours. Integrative study of theories, frameworks, and concepts which provide the basis for advanced nursing practice. (Fall)

801. Biostatistics. Credit 3 hours. Prerequisite: Graduate level statistics course approved by DNP Program Coordinator. Addresses biostatistical methods necessary to interpret data for Evidence-Based Practice (EBP) in the Health Sciences. Topics include critical appraisal of evidence, variation and variables, levels of data measurement, descriptive statistics and data display, probability, statistical and clinical significance, confidence intervals, statistical power analysis, hypothesis testing, and inferential statistics. (Fall)

802. Epidemiology. Credit 3 hours. Prerequisite: Registration in or prior credit for NURS 800. Study of risk for and prevention of disease using principles and methods of epidemiologic investigation. Analysis of distribution of disease in populations. (Spring)

803. Project Planning. Credit 3 hours. Prerequisite: Registration in or prior credit for NURS 800 or NURS 830. Addresses project planning and development related to the selection of a topic or area of interest for the DNP synthesis project. The planning process incorporates a needs assessment, analysis of relationships between evidence-based interventions and outcomes for communities and/or aggregates. (Fall, Spring)

804. Clinical Scholarship and Analytic Methods for Evidence Based Practice. Credit 3 hours. Prerequisites: NURS 800 and NURS 801, or NURS 830. Integration and application of knowledge to solve practice problems. Focuses on quantitative methodologies, study design, data analysis, and evaluation of research applicable to an advanced practice context. (Fall, Spring)

805. Preventive Care for Populations. Credit 3 hours. Prerequisites: Registration in or prior credit for NURS 800 and NURS 802. Examines concepts relevant to population health including epidemiological, environmental, and occupational issues; infectious diseases/emergency preparedness, and determinants of health are also investigated. Emphasis on the development of cultural competence to guide health promotion and preventive care. (Fall)

806. Health Care Informatics. Credit 3 hours. Prerequisite: NURS 800 or NURS 830. Analyzes the role of information systems and technology in supporting and improving outcomes of patient care and the care of populations. Design and use of health care databases will be incorporated. (Fall, Spring)

807. Organizational and Systems Leadership. Credit 4 hours. Prerequisite: Registration in or prior credit for NURS 800 or NURS 830. Investigation of organizational and system processes, including safety, quality, financial, and human resource issues, which impact practice delivery. Emphasizes leadership role of the DNP and interprofessional opportunities for collaboration to improve care. (Fall, Spring)

808. Ethics and Health Care Policy. Credit 4 hours. Prerequisite: NURS 800 or NURS 830. Examination of health care policy at the organizational and governmental levels and the influence of policy on ethical practice, advocacy, social justice and equity. (Summer, Spring)

809. Advanced Directed Studies. Credit 3 hours. Prerequisite: Registered in or prior credit for NURS 803. Individualized learning activities guided by faculty for students requiring additional residency hours to meet DNP program requirements of 1000 total residency hours including post-baccalaureate work. A written proposal describing learning outcomes must be submitted to faculty prior to enrollment in the course. Three didactic hours and 135 residency hours per semester. Course may be repeated twice. (Varies)

821. Residency I. Credit 2 hours. Prerequisite: NURS 803. Validates project planning in a clinical, organizational, or systems context; creates a structure for implementation and evaluation. Student is expected to secure IRB approval during this course. Two didactic hours and 90 residency hours per semester. (Fall, Spring, Summer)

822. Residency II. Credit 4 hours. Prerequisite: NURS 821. Implementation of an evidence-based intervention in collaboration with residency mentor and faculty advisor which reflects knowledge assimilation for advanced specialty practice at a high level of complexity. Four didactic hours and 180 residency hours per semester. (Fall, Spring)

823. Residency III. Credit 4 hours. Prerequisite: NURS 822. Requires completion and evaluation of intervention generated in Residency II. Incorporates data collection, analysis, interpretation, evaluation and outcomes dissemination. Four didactic hours and 180 residency hours per semester. (Fall, Spring)

830. Advanced Practice Scholarly and Theoretical Foundations. Credit 3 hours. Integrative study and application of theories, frameworks, and concepts which provide the basis for advanced nursing practice in a variety of health care settings. (Fall)

831. Epidemiology and Preventative Care for Populations. Credit 4 hours. Prerequisites: NURS 801 and 830. Examines concepts germane to the provision of population health including epidemiological, environmental, occupational and cultural issues. Infectious diseases, disaster/emergency preparedness, and determinants of health are also investigated. (Fall)

Nutrition Education and Promotion (NUTR)

100. Orientation to Nutrition Education and Promotion. Credit 1 hour. Orientation to the Nutrition Education and Promotion concentration with emphasis on academic advising and career paths. (Fall, Spring)

251. Nutrition and Diet Therapy. [FCS] Credit 3 hours. Prerequisite: Nursing majors only. Principles of nutrition and their application in maintaining health and providing therapy during illness. Credit toward a degree can be given for only one beginning course in nutrition: NUTR 251 or NUTR 342. (Summer, Fall, Spring)

253. Introduction to Food Principles and Preparation. [FCS] Credit 3 hours. Prerequisite: HUSC majors only. An introduction to the principles of food preparation and meal planning, with an emphasis on nutrition and health. (Fall)

342. Nutrition. [FCS] Credit 3 hours. The principles of normal nutrition and their application in daily life. Credit toward a degree can be given for only one beginning course in nutrition: NUTR 251 or NUTR 342. (Fall, Spring)

344. Child Nutrition. Credit 3 hours. Prerequisite: NUTR 342. A study of the nutritional needs of women during pre-conception and pregnancy; and children from infancy through adolescence. (Summer, Fall, Spring)

345. Nutrition Through the Lifecycle. [FCS] Credit 3 hours. Prerequisite: NUTR 251 or NUTR 342. Nutritional needs and health concerns during different stages of life: preconception, pregnancy, lactation, infancy, childhood, adolescence, adulthood, and elderly. (Summer, Fall, Spring)

411. Nutrition and Lifestyle Diseases. [FCS] Credit 3 hours. Prerequisite: NUTR 251 or NUTR 342. The role of nutrition in the prevention and treatment of lifestyle diseases. (Fall, Spring)

421. Weight Management Principles. [FCS] Credit 3 hours. Prerequisite: NUTR 251 or NUTR 342. Applications of the principles of weight management with emphasis on diet, exercise, and behavior modification. (Fall, Spring)

424. Nutrition for Sport and Fitness. [FCS] Credit 3 hours. Prerequisite: NUTR 251 or NUTR 342. An advanced study of nutrition as it relates to health, fitness, and athletic performance with an emphasis on nutrition before, during, and after sports-related activities and competitions. (Summer, Fall, Spring)

425. Nutrition Presentations and Demonstrations. [FCS] Credit 3 hours. Prerequisites: COMM 210 or 211, and NUTR 251 or NUTR 342. A study of organization, development, delivery, and evaluation of effective presentations and demonstrations in the field of nutrition. Food safety practices, basic cooking techniques, terms, and utensils will be addressed. Five hours of laboratory each week. (Spring)

426. Food Principles and Preparation. [FCS] Credit 3 hours. Prerequisites: NUTR 251 or NUTR 342, and COMM 210 or 211. Application of food preparation and meal planning principles, with an emphasis on nutrition and health. Five hours of laboratory each week. (Fall)

433. Current Trends and Issues in Nutrition. [FCS] Credit 3 hours. Prerequisite: NUTR 251 or NUTR 342. A study of current trends and issues in the field of food and nutrition and how they apply to normal diets. (Fall, Spring)

488. Field Experience in Nutrition Education and Promotion. [FCS] Credit 3 hours. Prerequisites: NUTR 342, HUSC 346, HUSC major, a cumulative GPA of 2.0 or higher, and permission of the department head. Understanding the operation and management of Human Sciences career activities through supervised work experience in the area of Nutrition Education and Promotion. May be repeated for up to nine credit hours. (Varies)

Occupational Safety, Health, and Environment (OSHE)

111. Introduction to Occupational Safety and Health, and Environment. Credit 3 hours. This course introduces general safety and health concepts. Major topics include occupational safety, health and environmental terms, historical developments, program concepts and terms, legislative overview, including worker's compensation law, problem identification, hazard recognition, evaluation and control concepts, and an introduction to measurement and evaluation. (Summer, Fall, Spring)

112. Design of Hazard Controls. Credit 3 hours. Prerequisite: Current enrollment in or prior credit for OSHE 111. This course studies the application of scientific and engineering principles and methods to achieve optimum safety and health conditions through the analysis and design of process, equipment, products, facilities, operations, and environments. Major topics include product design, plant layout, construction, maintenance, pressure vessels and piping, mechanical systems, materials handling and storage, ventilation, power tools, electrical equipment, and transportation vehicles and systems. (Fall, Spring)

121. Safety and Health Program Management and Administration. Credit 3 hours. Prerequisite: Enrollment in or prior credit for OSHE 111. This course studies the application of proven management principles and techniques to the management of safety and health and loss control programs. Major topics will include; planning, organizing, budgeting, resourcing, operating, implementing, and evaluating safety functions. (Fall, Spring)

141. Principles of Industrial Hygiene and Toxicology. Credit 3 hours. This course introduces the basic industrial hygiene principles of anticipation, recognition, evaluation, and control of workplace conditions as they relate to occupational health. Major topics include: a variety of occupational hazards including air contaminants, chemical hazards, biological hazards, and physical hazards. (Fall, Spring)

231. Safety Laws, Regulations, and Standards. Credit 3 hours. Prerequisite: OSHE 111. This course studies the development processes, sources, and applications for minimum safety requirements established by laws, regulations, standards, and codes. Major topics will include OSHA General Industry and Construction Standards, the enforcement of safety standards, and the role of NIOSH and ACGIH in the safety movement. (Fall, Spring)

242. Ergonomics. Credit 3 hours. Prerequisites: Enrollment in or prior credit for MATH 241 and OSHE 141. This course explores ergonomic design principles which involve the planning and adapting of equipment and tasks to promote the comfort and efficiency of workers. Major topics include: human characteristics, physiology, and anthropometry and the application of these principles to workstations, tool design, and material handling procedures. (Fall, Spring)

251. Environmental Laws and Regulations. Credit 3 hours. This course is an introduction to federal and state environmental regulations which impact industry. Major topics include hazardous waste management, disposal and cleanup, prevention of air, water, and soil contamination and environmental program management. (Fall, Spring)

261. Fire Protection and Prevention. Credit 3 hours. Prerequisite: OSHE 111. This course introduces the basic principles of fire and fire prevention in the work place. Major topics include: evaluating existing and planned facilities from a fire and explosion standpoint, and applying the basic principles of hazard recognition, evaluation, and control when developing fire prevention and emergency response activities. (Fall, Spring)

291. Internship. Credit 3 hours. Prerequisites: Sophomore standing and permission of Department Head. Students receive on-the-job work experience related to occupational safety, health, and environment with selected and approved industrial firms or other organizations. For three hours credit, a student must be employed a minimum of 20 hours per week during a regular semester and a minimum of 40 hours per week during the summer semester. Grades assigned on a Pass/Fail basis. (Varies)

311. Safety and Health Program Development. Credit 3 hours. Prerequisite: OSHE 111. This course presents the key elements necessary to develop or to assess occupational safety and health programs. Major topics include management commitment and employee involvement; worksite analysis, hazard correction and control; training, and evaluation. (Spring)

322. Behavioral Aspects of Safety. Credit 3 hours. Prerequisite: PSYC 101. This course will introduce students to the application of scientific research-based principles and methods to bring about change in the work culture through attitude, behavior, and environmental conditions. Specific topics will include traditional approaches and philosophies for improving safety, environmental effects, incentives, developing and building cultural change, identifying critical behavior, developing checklists, giving and receiving recognition and measuring performance. (Fall)

323. Product Safety and Liability. Credit 3 hours. Prerequisite: OSHE 111. This course examines the importance of considering the safety of a product in its ultimate use. Major topics include: aspects of product design, intended and improper use, and potential injury mechanisms. It uses classic product liability case studies to provide practical application of the principles learned. It also studies manufacturer liabilities through injury tort actions. (Fall)

341. Field Methods of Industrial Hygiene and Toxicology. Credit 3 hours. Prerequisites: MATH 241, PHYS 191, CHEM 101, and OSHE 141. This course presents an examination of the methods used by the industrial hygienist for the identification and assessment of health hazards in the workplace. Major topics include: establishment and use of methodologies to sample and evaluate exposures to air contaminants (gases, vapors, aerosols, and particulates), microorganisms and allergens, noise, heat, and cold stress, electrical and magnetic radiation, and ionizing and ultraviolet radiation. The course also includes equipment use, maintenance, and calibration. A laboratory fee is required for this course. (Fall, Spring)

381. Safety in Chemical and Process Industries. Credit 3 hours. Prerequisites: Enrollment in or prior credit for CHEM 101 and PHYS 191. The course introduces the fundamentals of chemical and process industry safety. Major topics include: toxic, fire, and pressure hazards inherent in chemical plants and petroleum refineries, and the methods used to identify, assess, and eliminate those hazards. It also introduces students to federal safety regulations for process safety management. (Fall, Spring)

382. Construction Safety. Credit 3 hours. Prerequisites: Enrollment in or prior credit for OSHE 111 and OSHE 121. The course studies the application of management principles, communication and human relations factors, safety/health rules, industry and federal standards, accident investigation, and the job planning phases in the construction environment. (Fall, Spring)

391. Internship. Credit 3-12 hours. Prerequisite: Permission of Department Head. Students receive on-the-job work experience with selected and approved industrial firms. Completion of all 100- and 200-level OSHE courses are required before internship is taken. OSHE 391 must be taken in the last semester of the study, or after most if not all of the OSHE major courses have been completed. For three hours credit, a student must be employed a minimum of 20 hours per week during a regular semester and a minimum of 40 hours per week during the summer semester. Course may be repeated for a maximum of 12 credit hours. Grades assigned on a Pass/Fail basis only. (Summer, Fall, Spring)

421. Measurement of Safety Performance and Accident Investigation and Analysis. Credit 3 hours. Prerequisite: Enrollment in or prior credit for MATH 241. This course presents methods to objectively evaluate a company's safety progress. The course covers two distinct topics: (1) measuring safety performance, and (2) incident investigation and analysis. The first segment of the course addresses ways of measuring safety performance objectively and subjectively using safety audits, inspections, observations, performance appraisal systems, and injury/illness statistics. The second segment of the course addresses the causes of accidents, systematic ways of conducting investigations, documenting the findings, causes and other significant data, and drafting recommendations. (Fall, Spring)

423. Insurance – Worker's Compensation, Loss Control, and Risk Management. Credit 3 hours. Prerequisite: OSHE 111. This course discusses the different aspects of workers' compensation, loss control, and risk management and how they interface to produce a comprehensive approach to controlling hazards, risks, and worker losses in a proactive plan for management of business/entity. (Varies)

424. System Safety Methodologies. Credit 3 hours. Prerequisites: MATH 241, OSHE 111, and OSHE 121. The course presents the concepts of Risk Management and Loss Control through the use of systematic approaches to hazard anticipation, identification, evaluation and control. Major topics include: an introduction to qualitative methods of evaluating the hazards and risks associated with systems, processes, equipment, and other entities. It also includes a review of techniques for mitigating or managing identified risks. (Fall, Spring)

441. Industrial Toxicology. Credit 3 hours. Prerequisites: GBIO 151, ZOO 241, and OSHE 141. This course examines the effects of industrial toxicants on the human body. Major topics include: the discipline of toxicology, acute and chronic exposures and effects, routes and characteristics of exposures, target organs and systems, dose and response, and carcinogenesis. It also discusses the toxic characteristics of various classes of toxic materials. (Fall)

442. Principals of Radiation Safety. Credit 3 hours. Prerequisites: OSHE 141, PHYS 191, and PLAB 193. This course describes and defines the various forms of ionizing and non-ionizing radiation and the methods that are used to detect, identify, and measure workplace levels of radiation. It also describes control methods which employ engineering methods, administrative methods, and personal protective equipment to eliminate or minimize the hazards posed by radiation. (Spring)

451. Hazardous Materials Management. Credit 3 hours. Prerequisite: OSHE 251. This course examines acceptable policies, procedures, and methods for the use of hazardous materials, and the disposal of oil and hazardous wastes produced by industry. Major topics include characteristics of hazardous materials, including methods for their transportation and storage. It also includes advanced aspects of risk assessment; applicable environmental legislation; waste characterizations, minimization and recovery; chemical, physical, and biological waste treatment methods; thermal, injection well and landfill disposal methods; and a section on the transportation of hazardous wastes. (Spring)

452. Pollution Fundamentals and Control Technologies. Credit 3 hours. Prerequisite: OSHE 251. This course explores the mechanisms of air, water and soil pollution and the steps to eliminate or minimize impacts on the ecology and human health and safety. The course is also designed to explore the existing pollution prevention and control technologies and the evaluation of their performance. A laboratory fee is required for this course. (Fall, Spring)

471. Education and Training Methods for Occupational Safety and Health. Credit 3 hours. This course introduces the concepts of adult training and education with emphasis on occupational safety and health. Major topics include: instructional system design, including performing a training needs assessment tasks analysis, program design goals and objectives, performance evaluation, delivery methods and media; computer-based training methods; systems to manage costs; and record keeping. (Fall)

491. Special Topics. Credit 1-4 hours. Prerequisite: Permission of the Department Head. Special topics in occupational safety, health, and environment that are appropriate for a professional elective in Occupational, Safety, Health, and Environment major. May be taken repeatedly when topics vary for a maximum of six credit hours. (Varies)

492. Capstone. Credit 3 hours. Prerequisite: Permission of Department Head. Students conduct comprehensive projects that demonstrate culminating experiences based on the cumulative knowledge and skills acquired in earlier course work. Grades assigned on a Pass/Fail basis. (Varies)

Operations Management and Information Systems (OMIS)

200. Business Statistical Models I. [LCCN: CBUS 2303, Business Statistical Methods I]. Credit 3 hours. Prerequisite: MATH 105 or 161. Collection and organization of business and economic data; descriptive statistics; measures of central tendency and dispersion; statistical inference; probability; time series; index numbers; and regression and correlation topics. (Varies)

210. Business Statistical Models II. [LCCN: CBUS 2313, Business Statistical Models II]. Credit 3 hours. Prerequisite: MATH 241 or OMIS 200. Review of descriptive and inferential statistics. Additional topics include: two-sample confidence intervals and hypothesis testing, correlation analysis, ANOVA, simple linear regression and multiple regression forecasting, and use of application software. The course concludes with an introduction to business analytics. (Summer, Fall, Spring)

310. Quantitative Methods for Business Decisions. Credit 3 hours. Prerequisites: OMIS 210 and Junior standing. The use of quantitative methods and techniques as scientific tools in business decision making. (Spring)

320. Principles of Supply Chain Management. Credit 3 hours. Prerequisites: MATH 241 or OMIS 200 and Junior standing. A study of how Supply Chain Management impacts all the areas of the firm and how managers can improve their competitive position by employing many of the purchasing, operations and logistics practices and processes discussed throughout the course. (Summer, Fall, Spring)

325. Supply Management and Purchasing. Credit 3 hours. Prerequisites: OMIS 320 and Junior standing. A course that introduces the role of supply management in the organization along with its basic functional areas including the evolution of the function, the purchasing process, organization of supply management within the firm, policy and procedures, strategic sourcing, out-sourcing, supplier evaluation, supplier selection, quality management, supplier development, international sourcing, cost management, contracts, negotiation, purchasing of transportation services, EDI and the legal and ethical aspects of supply management. Credit toward the degree will not be granted for both MRKT 320 and OMIS 325. (Fall, Spring)

350. Management Information Systems. [LCCN: CMGM 3013, Management Information Systems]. Credit 3 hours. Prerequisite: Junior standing. A study of the foundations of information systems such as networks, databases, the Internet, computer hardware, and software. Focuses on the interdependence among an organization's management, business processes, and information systems. (Summer, Fall, Spring)

360. Web Design and Development. Credit 3 hours. Prerequisite: Junior standing. A study of the processes and tools used to design, create, publish and manage Web sites. Other topics include the use of text, graphics, sound, video, and digital imaging, e-mailing, newsgroups, Webboard discussions, Intranets, and the legal, social, and ethical issues faced by Internet users. (Fall)

365. Social Media Applications in Business. Credit 3 hours. Prerequisites: OMIS 350 and Junior Standing. This course examines the unique challenges of community, social interaction, and business communication of firms in a digital world. Course components include the techniques of digital media in business and the interactive media applications that support them. Students are expected to use social media practices to create multimedia learning journals, and small groups will use social media to produce and present projects. (Varies)

370. Data Management for Business. Credit 3 hours. Prerequisite: OMIS 350. An introduction to the concept, use, and application of data management in business decision making. Topics include data management principles, core components of data processing, data modeling, and relational database designs. (Spring)

380. Business Analytics. Credit 3 hours. Prerequisites: OMIS 210 and OMIS 350. The study of integrating methods and applications to solve business problems using descriptive, predictive and prescriptive analytics. Emphasis will be on data creation, distribution, mining, reporting, and storage throughout the organization. (Fall, Spring)

391. Operations Management and Information Systems Internship. Credit 3 hours. Prerequisites: OMIS 320 or OMIS 350, Junior standing, a 2.5 adjusted grade point average, and permission of the Department Head. The Operation Management and Information Systems Internship provides the student with work experience in an assignment selected and approved by the University with a cooperating business firm. Students will earn three hours credit for a minimum of 300 hours of approved work experience. Only Supply Chain Management majors can receive credit for the Operation Management and Information Systems Internship course. All grades are assigned on a Pass/Fail basis. (Summer, Fall, Spring)

392. Operations Management and Information Systems Internship II. Credit 3 hours. Prerequisites: OMIS 320 or 350, Junior Standing, a 2.5-degree grade point average and permission of the Department Head. Continuation of OMIS 391. In order to obtain credit for OMIS 392, the work assignment must be different from that of OMIS 391. The Operations Management and Information Systems Internship provides a student with work experience in an assignment selected and approved by the Department Head with a cooperating business firm. Students will earn three

semester hours of credit for a minimum of 300 hours of approved work experience. Only Supply Chain Management majors can receive credit for the Operations Management and Information Systems Internship course. All grades are assigned on a Pass/Fail basis. (Varies)

425. Logistics Management and Transportation. Credit 3 hours. Prerequisites: OMIS 310, OMIS 320 and Junior standing. This course introduces the student to logistics providing coverage on the following topics: the 21st Century supply chain, efficient logistics, customer accommodation, procurement, manufacturing and distribution strategies, operational integration, information networks, planning and scheduling, inventory management, major modes of transportation, transportation infrastructures and regulation, warehousing, packaging and materials handling, network integration, and administration. (Fall)

430. Production and Operations Management. [LCCN: CMGM 3213, Production & Operations (Upper Level)]. Credit 3 hours. Prerequisites: MGMT 351 and OMIS 200 or 210 or permission of Department Head. The study of the systems for the creation of goods and services consumed by society. (Summer, Fall, Spring)

435. Project Management. Credit 3 hours. Prerequisites: OMIS 210 and MGMT 351. The study of planning, scheduling, organizing, and controlling projects for product development, construction, information systems, new businesses, and special events. Primary course emphasis is on the project management process and the tools used for control. (Spring)

440. Current Issues in Supply Chain Management. Credit 3 hours. Prerequisites: Senior Standing, OMIS 325 and OMIS 425. This course is designed to introduce students to current purchasing, operations, logistics, and information systems practices within the firm operating in the global environment. Special emphasis is placed on improvement initiatives as they relate to the overall Supply Chain strategy of the firm. A team-based project is required. (Fall, Spring)

460. e-Business and e-Commerce. Credit 3 hours. Prerequisite: Junior standing. This course is designed to introduce students to electronic-based business strategies and other related issues ranging from the identification of business opportunities via the WWW to the evaluation of business strategies on the Internet. Credit toward the degree will not be granted for both MRKT 435 and OMIS 460. (Spring)

470. Decision Support Systems. Credit 3 hours. Prerequisites: OMIS 210 and OMIS 350. An introduction to business decision support systems. A cognitive process and decision-making perspective is used to highlight the implications of decision support technology for managerial problem solving. The evolution of decision support systems is discussed from architecture, design, and implementation through artificial intelligence. (Varies)

480. Management Information Systems Development. Credit 3 hours. Prerequisite: Registration in or prior credit for OMIS 370. The study of information systems tools, techniques, and skills necessary to perform in-depth systems analysis. Emphasizes the application of process-oriented, data-oriented, and object-oriented approaches to systems analysis. (Varies)

495. Special Topics in Supply Chain Management. Credit 3 hours. Prerequisite: OMIS 320. A varying course subject which discusses emerging topics of special interest in the field of supply chain management. The content may change from semester to semester and will be announced in advance. May be taken by majors and non-majors. (Varies)

600. Statistical Methods in Business and Economics. Credit 3 hours. Prerequisites: OMIS 200 and Graduate Standing. Statistical inference; analysis of variance; trend and curve fitting; multiple and partial correlation; application to business problems with appropriate computer applications. (Fall, Spring)

635. Applications in Project Management. Credit 3 hours. Prerequisites: OMIS 435 and Graduate Standing. This course focuses on the study of the unique challenges of information technology and knowledge management for today's project managers. Emphasis is placed on project control techniques. (Summer)

640. Advanced Supply Chain Issues. Credit 3 hours. Prerequisite: Graduate standing. This course explores supply chain issues as they impact business and economic development activities. Course involves in-depth look at supply chain and purchasing management issues that are central to the expedient development of markets and economies. (Varies)

650. Information Management for Organizations. Credit 3 hours. Prerequisite: Graduate Standing. A study of the application of computer technology in organizations. Course topics include the system approach in managing and implementing computer-based systems; behavioral aspects of modern organizations; planning, designing and implementing information systems; and the use of information systems for decision making. (Varies)

670. Database Modeling and Design. Credit 3 hours. Prerequisites: OMIS 350 and Graduate Standing. The study of database design methodologies in various database environments. Topics include data management, structured query language, security techniques, user interface design, and data warehouses. (Varies)

680. Information Systems Analysis and Design. Credit 3 hours. Prerequisites: OMIS 350 and Graduate Standing. A study of information systems for management decision making, systems construction and computer utilization, organizational concepts, systems and data systems designed for business functions. (Varies)

690. Technology Applications in Management. Credit 3 hours. Prerequisites: OMIS 350 and Graduate Standing. A course designed to examine existing and emerging information technology applications. Special emphasis will be given to the role managers play in the successful application of information technology to improve business processes. (Varies)

695. Special Topics in Operations Management and Information Systems. Credit 3 hours. Prerequisite: Graduate Standing. A seminar course focusing on selected issues in Operations Management and/or Information Systems. (Summer)

Philosophy (PHIL)

201. Introduction to Logical Reasoning. [LCCN: CPHL 2113, Introduction to Logic] Credit 3 hours. Prerequisites: ENGL 102, 122H, or 124H and MATH 105 or higher. An introduction to the basic principles of deductive and inductive reasoning, emphasizing the art of reasoning and its practical application. (Summer, Fall, Spring)

301. Introduction to Philosophy. Credit 3 hours. Prerequisite: ENGL 102 or 122H or 124H. An introductory study of philosophy which considers the four basic areas of philosophy-metaphysics (the nature of reality), epistemology (the nature of knowledge), ethics (moral values), and logic (the basic rules for correct thinking). (Fall)

302. The Great Philosophers. Credit 3 hours. Prerequisite: ENGL 102 or 122H or 124H. Introductory readings of the works of great philosophers beginning with the ancient Greeks (e.g., Plato, Aristotle) and proceeding to the modern and contemporary philosophers (e.g., Rene Descartes, David Hume, John Dewey). (Spring)

310. Critical Thinking. Credit 3 hours. Prerequisite: ENGL 102 or 122H or 124H. A study of the methods of understanding, analyzing, and evaluating arguments as found in everyday contexts which require practical reasoning skills, e.g., newspaper editorials, advertising, and political campaigns. Designed to improve analytical and critical skills in thinking, reading, writing, and listening. (Varies)

313. Ethics. Credit 3 hours. Prerequisite: ENGL 102 or 122H or 124H. A study of the major systems of thought focusing on moral values, concepts of good and evil, right and wrong. Designed to introduce students to the various perspectives on these themes as formulated by major philosophers. (Spring)

314. Special Topics in Philosophy. Credit 3 hours. Prerequisite: ENGL 102 or 122H or 124H. A detailed study of a topic selected by the instructor. Topics and instructors will vary. May be repeated once, but Department Head approval is required to count more than 3 hours toward the Minor in Philosophy. (Varies)

315. Philosophy of History. Credit 3 hours. Prerequisite: ENGL 102 or 122H or 124H. Especially recommended for history and political science majors, but open to all qualified undergraduates. A study of the way major philosophers have understood history, usually in terms of their search for patterns and meanings in the movement of history. Special consideration will be given to thinkers such as Karl Marx, Friedrich Nietzsche, G.W.F. Hegel, Arnold Toynbee, etc. (Fall)

320. Philosophy and the Arts (Aesthetics). Credit 3 hours. Prerequisite: ENGL 102 or 122H or 124H. A general survey of readings concerned with the question of what makes something beautiful, or what makes something a work of art. Frequent reference to the arts and artistic practice will be made (e.g., as found in film, literature, music, and painting). (Spring Even Years)

321. Existentialism and Contemporary Philosophy. Credit 3 hours. Prerequisite: ENGL 102 or 122H or 124H. This course will study the writings of some of the major figures in existentialism (e.g., Kierkegaard, Nietzsche, Heidegger, Sartre, Camus) as well the writings of some of the other important figures in contemporary philosophy (e.g., Wittgenstein, Rorty, Foucault, etc.). (Spring Odd Years)

416/516. American Philosophy. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. A study of the major development in American philosophy through a detailed consideration of American thinkers. (Spring Odd Years)

417/517. Intellectual History (History of Ideas). Credit 3 hours. Prerequisite: Junior standing or consent of the Department Head required. A study of the intellectual influences on western thought since the Middle Ages, beginning with Renaissance Humanism and proceeding through Protestantism, Rationalism, the Enlightenment and Romanticism to the dominant scientific and political views of the nineteenth and twentieth centuries. (Spring)

418/518. Independent Study in the History of Philosophy. Credit 3 hours. Prerequisites: Junior standing, permission of the Department Head, and at least nine hours of undergraduate philosophy. Conducted as a tutorial for individual students seeking additional work beyond the introductory level. Readings chosen according to student interest, academic orientation, and level of student preparedness. Evaluations conducted on the basis of discussions and written assignments. (Varies)

Physical Science (PHSC)

101. Physical Science I. [LCCN: CPHY 1013, Introduction to Concepts in Physics; CPHY 1023 Physical Science I]. Credit 3 hours. A survey course in selected topics of physics designed primarily for students majoring in a non-science degree. Course consists of three hours of lecture and demonstrations per week. (Summer, Spring)

102. Physical Science II. [LCCN: CPHY 1033, Physical Science II]. Credit 3 hours. A survey course in the cultural and applied aspects of chemistry designed primarily for students majoring in a non-science degree. Credit cannot be given for both PHSC 102 and CHEM 109. Course consists of three hours of lecture and demonstrations per week. (Summer, Fall)

142. Elementary Physical Science. Credit 4 hours. Prerequisite: Education major, in-service teacher, or permission of the Department Head. This course is designed to prepare prospective and in-service K-12 teachers to teach physical science as a process of inquiry. The curriculum focuses on core concepts of physics and chemistry, and students will actively engage in a process of hands-on investigation and discovery in a laboratory setting. The primary objective is to provide a student-centered, active-learning environment that promotes critical thinking, collaborative learning, and an understanding and appreciation of the processes of scientific investigations. Five hours of integrated lecture and laboratory per week. (Varies)

631. Computational Modeling in Physical Science. Credit 3 hours. Prerequisite: PHYS 622. A course designed to address introductory level topics in physical science with high performance computational modeling. Three major themes will guide the course: helping students clearly understand the tools and techniques of computational science to better understand how they are used in both modern research and teaching; providing students with an opportunity to deepen their content knowledge in a manner very different than traditional education in physical science, and providing students with alternate strategies that enable them to more effectively teach conceptual topics in physical science. Numerical modeling, systems dynamics modeling, agent modeling, and molecular modeling software tools and techniques will be used for a variety of physics and chemistry topics. (Varies)

635. Curriculum Design for Physical Science. Credit 3 hours. Prerequisites: PHYS 621/622 or and PHSC 631. A graduate-level capstone course that explores the elements of research-based curriculum design and their application for physical science. The three themes of the course include: identifying the key elements of research-based curricula, investigating and evaluating the application of these elements in the existing pool of research-based curricula for physical science, and the application of these elements toward the creation of original lessons and curriculum units for physical science. Key elements that will be surveyed include how people learn, teaching for understanding, assessment and its role in "backwards design", as well as the role of content standards, inquiry, nature of science, instructional models, technology, and various pedagogical structures (i.e. cooperative learning, questioning, science talk) in curriculum design. (As Needed)

Physics (PHYS & PLAB)

Credit toward the degree will be granted for only one of the Physics courses in each of the following combinations: 142-191-221, 192-222, 193-223, 194-224.

100. Acoustics for Musicians. Credit 3 hours. Prerequisite: MATH 105 or 161, or Math ACT score of 20 or higher. The fundamentals of sound, waves and related phenomena for music majors. Three hours of lecture per week. (Fall)

121. Elementary Modern Electronics. Credit 3 hours. Prerequisite: Registration for or prior credit for PHYS 123. A course emphasizing circuit design with modern integrated circuit chips. (Varies)

123. Elementary Modern Electronics Laboratory. Credit 1 hour. Prerequisite: Registration for or prior credit for PHYS 121. A laboratory course involving the construction of radios, digital counters, clocks, frequency meters and other devices for electronic measurement and control. (Varies)

130. Orientation to the Physics Curriculum. Credit 1 hour. Prerequisite: Major in physics or secondary science education with a teaching area of physics, or permission of the Department Head. This course will orient incoming physics majors to the physics curriculum by placing physical principles in the context of current events and current research. To this end, the physics faculty and other visiting speakers will present on topics of their choosing. (Fall)

142. Physics for Elementary Education. Credit 4 hours. Prerequisite: Education majors, in-service teachers, or permission of the Department Head. This course is designed to prepare preservice and in-service K-12 teachers to teach physical science as a process of inquiry. The curriculum will focus on a small number of topics in elementary physics, and students will actively engage in a process of hands-on

investigation and discovery in a laboratory setting. The central objective is to provide an active learning environment that promotes critical thinking skills, collaborative learning, and an understanding and appreciation of the process of scientific investigation. Three hours of lecture and two hours of laboratory per week. (Summer, Fall, Spring)

191. General Physics. [LCCN: CPHY 2113, Physics I (Algebra/Trigonometry Based)]. Credit 3 hours. Prerequisite: MATH 162, or 175, or 200, or permission of the Department Head. A study of the fundamentals of mechanics, heat and sound for students in the biological sciences, industrial technology, and other areas where a knowledge of calculus is not required. (Summer, Fall, Spring)

191H. General Physics Honors. Credit 3 hours. Prerequisites: ACT mathematics standard score of 27 or higher or completion of MATH 162, or 175, or 200 with a grade of C or higher; and registration for PLAB 193H. A study of the fundamentals of mechanics, heat and sound for students in disciplines where a knowledge of calculus is not required. (Varies)

192. General Physics. [LCCN: CPHY 2123, Physics II (Algebra/Trigonometry Based)]. Credit 3 hours. Prerequisite: PHYS 191 or 221. A study of the fundamentals of electricity, magnetism, light, and modern physics for students in the biological sciences, industrial technology, and other areas where a knowledge of calculus is not required. (Summer, Fall, Spring)

193. General Physics Laboratory. [LCCN: CPHY 2111, Physics Lab I (Algebra/Trigonometry Based)]. Credit 1 hour. Prerequisite: Registration for or prior credit for PHYS 191. Selected laboratory experiments designed to supplement the lecture in PHYS 191. Two hours of laboratory a week. (Summer, Fall, Spring)

193H. General Physics Honors Laboratory. Credit 1 hour. Prerequisite: Registration for or prior credit for PHYS 191H. Selected laboratory experiments designed to supplement the lecture in PHYS 191H. Two hours of laboratory a week. (Varies)

194. General Physics Laboratory. [LCCN: CPHY 2121, Physics II Lab (Algebra/Trigonometry Based)]. Credit 1 hour. Prerequisites: PLAB 193 or 223 and registration for or prior credit for PHYS 192. Selected laboratory experiments designed to supplement the lecture in PHYS 192. Two hours of laboratory a week. (Summer, Fall, Spring)

221. General Physics. [LCCN: CPHY 2133, Physics I (Calculus Based)]. Credit 3 hours. Prerequisites: Registration or prior credit for Mathematics 200. Basic principles of mechanics, heat and sound for technical students only. (Fall, Spring)

222. General Physics. [LCCN: CPHY 2153, Physics III (Calculus Based)]. Credit 3 hours. Prerequisite: PHYS 221. Basic principles of electricity, magnetism, and light for technical students only. (Fall, Spring)

223. General Physics Laboratory. [LCCN: CPHY 2131, Physics I Lab (Calculus Based)]. Credit 1 hour. Prerequisite: Registration for or prior credit for PHYS 221. A corresponding laboratory course for PHYS 221. Three hours of laboratory a week. (Fall, Spring)

224. General Physics Laboratory. [LCCN: CPHY 2141, Physics II Lab (Calculus Based)]. Credit 1 hour. Prerequisites: PLAB 223 and registration for or prior credit for PHYS 222. A corresponding laboratory course for PHYS 222. Three hours of laboratory a week. (Fall, Spring)

225. Applied Physics Experience. Credit 1 hour. Prerequisites: PHYS 221 and PLAB 223, or permission of the Department Head. Application of physics lecture and laboratory knowledge and skills in a supervised, experiential-learning environment. Pass/Fail only. Three hours per week. May be repeated for a total of 5 credit hours. (Varies)

241. Engineering Statics. Credit 3 hours. Prerequisite: PHYS 221. Vectors; two-dimensional and three-dimensional force system; equilibrium; friction; centroids; mass moments of inertia; second moments of areas. (Varies)

242. Engineering Circuits. Credit 3 hours. Prerequisite: PHYS 222. Introduction to linear, time-invariant and jumped circuits, Kirchoff's laws, analysis of resistive circuits and steady-state analysis of RLC and transformer circuits. (Varies)

301. Electricity and Magnetism. Credit 3 hours. Prerequisite: PHYS 222. Advanced study of the fundamentals of electricity and magnetism. (Varies)

303. Electricity and Magnetism Laboratory. Credit 1 hour. Prerequisites: PLAB 224 and registration for or prior credit for PHYS 301. Selected experiments in advanced electricity and magnetism. Three hours of laboratory a week. (Varies)

312. Optics. Credit 3 hours. Prerequisite: PHYS 222. Advanced study of the fundamentals of geometric and physical optics. (Varies)

314. Optics Laboratory. Credit 1 hour. Prerequisites: PLAB 224 and registration for or prior credit for PHYS 312. Selected experiments in optics. Three hours of laboratory a week. (Varies)

321. Thermodynamics. Credit 3 hours. Prerequisite: PHYS 222. An introduction to the principles of thermodynamics, kinetic theory, and statistical mechanics. (Spring)

331. Mathematical Physics. Credit 3 hours. Prerequisite: PHYS 222. A study of vectors, complex variables, and other selected topics that have application in mechanics, electromagnetic wave theory, and vibratory motion. (Varies)

332. Intermediate Mechanics. Credit 3 hours. Prerequisite: PHYS 222. A study of the fundamentals of mechanics. (Varies)

334. Intermediate Mechanics Laboratory. Credit 1 hour. Prerequisites: Physics Lab 224 and registration for or prior credit for Physics 332. Selected experiments in mechanics. Three hours of laboratory a week. (Varies)

351. Modern Physics. Credit 3 hours. Prerequisite: PHYS 222. A survey of the modern physical theories of relativity, quantum mechanics, the solid state, molecular structure, and elementary particles. (Varies)

353. Modern Physics Laboratory. Credit 1 hour. Prerequisites: Physics Lab 224 and registration for or prior credit for Physics 351. Selected experiments in modern physics. Three hours of laboratory a week. (Varies)

401/501. Advanced Mechanics. Credit 3 hours. Prerequisite: PHYS 332. A continuation of PHYS 332 with further study of the fundamentals of mechanics. (Varies)

402/502. Electromagnetic Wave Theory. Credit 3 hours. Prerequisite: PHYS 301. A theoretical treatment of electromagnetic waves. (Varies)

411/511. Physics Seminar. Credit 1 hour. Prerequisite: Permission of the Department Head. Reviews and discussion of current research topics by students, faculty, and industrial personnel. (Varies)

412/512. Physics Seminar. Credit 1 hour. A continuation of PHYS 411/511. (Varies)

421/521. Quantum Mechanics I. Credit 3 hours. Prerequisite: PHYS 351 or permission of the Department Head. A course on the fundamentals of quantum mechanics. (Varies)

422/522. Quantum Mechanics II. Credit 3 hours. Prerequisites: PHYS 421/521. A continuation of PHYS 421/521. (Varies)

425. Advanced Undergraduate Laboratory. Credit 2 hours. Prerequisite: Any one of PLAB 303, 314, 334, or 353, or permission of the Department Head. A capstone laboratory for physics majors. Students will design, propose, perform, and report on (both orally and in writing) an experiment in physics. Six hours of laboratory per week. (Varies)

430/530. Special Topics in Physics. Credit 1-3 hours per semester. Prerequisites: PHYS 222 and permission of the Department Head. Advanced topics in physics not covered elsewhere in the physics curriculum. The specific topic will be determined by the course instructor. This course may be repeated for a total of nine credit hours if different topics are studied. (Spring)

611. Continuum Mechanics. Credit 3 hours. Prerequisites: PHYS 332 and MATH 350 or permission of the Department Head. A study of the dynamics of solids and fluids modeled as continua rather than as discrete particles. (Varies)

612. Laser Physics. Credit 3 hours. Prerequisite: PHYS 402 or permission of Department Head. Topics include electromagnetic fields, propagation of optical beams, optical resonators, interaction of radiation and atomic systems, laser oscillation, modulation of optical radiation and some specific laser systems. Laser interferometric gravitational wave detector may be used as an example. (Varies)

618. Advanced Mathematical Physics. Credit 3 hours. Prerequisites: PHYS 222, MATH 312, and MATH 350 or permission of the Department Head. A study of advanced mathematical methods as applied to theoretical or experimental physics. (Varies)

619. Computational Methods in Physics. Credit 3 hours. Prerequisite: PHYS 331 or MATH 350 or CHEM 395. Computational methods for solving practical problems arising in physics. Topics include numerical methods for solving equations, systems of equations, ordinary differential equations, partial differential equations, polynomial integration and least square approximation. (Varies)

621. Conceptual Frameworks in Introductory Physics I. Credit 3 hours. Prerequisites: PHYS 221 and permission of the Department Head. This is a three credit-hour graduate course that will provide a rigorous treatment of the conceptual frameworks of introductory physics. Three major themes will guide the course: the process of science, motion as explained by force, and motion as explained by energy. The course will consist of textbook-supported guided inquiry exercises that lead students through their own development of the conceptual frameworks of physics by constructing, applying, evaluating, and/or revising theories and models in light of empirical evidence. (Varies)

622. Conceptual Frameworks in Introductory Physics II. Credit 3 hours. Prerequisites: PHYS 222, PHYS 621, and permission of the Department Head. This is a three credit-hour graduate course that will provide a rigorous treatment of the conceptual frameworks of introductory physics. Three major themes will guide the course: the process of science, motion as explained by force, and motion as explained by energy. The course will consist of textbook-supported guided inquiry exercises that lead students through their own development of the conceptual frameworks of physics by constructing, applying, evaluating, and/or revising theories and models in light of empirical evidence. (Varies)

Political Science (POLI)

200. Introduction to Political Science. Credit 3 hours. Introduction to major concepts, theories, and methodologies of political science, including the institutions of government, policy formation, law, comparative politics, international relations, and the methodologies used to study them. (Fall, Spring)

201. American Politics. [LCCN: CPOL 2013, Introduction to American Government]. Credit 3 hours. A study of the problems, principles, and structure of the American national political system. (Summer, Fall, Spring)

202. State and Local Politics. [LCCN: CPOL 2113, Introduction to State and Local Government]. Credit 3 hours. A study of the problems, principles, and structure of state and local politics in the United States. Special attention to Louisiana state and local politics. (Summer, Fall, Spring)

300. Research Methods and Statistics in Political Science. Credit 3 hours. Prerequisite: POLI 200 or 201 or permission of the Department Head. Emphasis on the elements of social scientific research as they apply to the field of political science. (Summer, Fall, Spring)

400/500. Independent Study. Credit 3 hours. Prerequisites: Junior standing or permission of the Department Head. Conducted as a tutorial for individual students seeking additional work beyond the introductory level. Readings chosen according to student interest, academic orientation, and level of preparedness. Evaluations conducted on the basis of discussions and written assignments. Students taking this course for graduate degree credit must expect greater reading and paper requirements. May be repeated once but Department Head approval is required to count more than 3 hours toward the B.A. in Political Science or M.A. in History. (Varies)

401/501. Introduction to Public Law. Credit 3 hours. Prerequisites: POLI 201 and ENGL 102. American law in action. Definition, classification, function, and relationships of law. The study of the role of legislatures and the courts in the legal process, theories of justice, and the development of modern jurisprudence. Students taking this course for graduate degree credit must expect greater reading and paper requirements. (Fall Odd Years)

403/503. Constitutional Law. Credit 3 hours. Prerequisites: POLI 201 and ENGL 102. A survey of the interpretation of the law according to the United States Constitution. Special emphasis on the study of cases in local, state, and federal courts. Class discussion and analysis of cases will be featured. Students taking this course for graduate degree credit must expect greater reading and paper requirements. (Spring Even Years)

405/505. Criminal Justice and the U.S. Constitution. Credit 3 hours. Prerequisites: POLI 201 and ENGL 102. An investigation of basic constitutional problems involving criminal justice procedures with an emphasis on landmark U.S. Supreme Court decisions. Credit cannot be given for both CJ 405/505 and POLI 405/505. Students taking this course for graduate degree credit must expect greater reading and paper requirements. (Varies)

406/506. The Administration of the American Courts Systems. Credit 3 hours. Prerequisites: POLI 201 and ENGL 102. An examination of the theory, practice, people, major issues and problems of the American civil and criminal court systems. Credit cannot be given for both CJ 406/506 and POLI 406/506. Students taking this course for graduate degree credit must expect greater reading and paper requirements. (Fall Even Years)

407/507. Civil Rights and Civil Liberties. Credit 3 hours. Prerequisites: POLI 201 and ENGL 102. Emphasis will be placed on First Amendment freedoms and on the Fourteenth Amendment Due Process and Equal Protection clauses. The study of cases will be supplemented by readings. Special attention is given to current problems. Students taking this course for graduate degree credit must expect greater reading and paper requirements. (Fall Even Years)

420/520. International Relations. Credit 3 hours. Prerequisites: POLI 201 and ENGL 102. Introductory study of principles and problems relating to the relations between nations. Special attention will be given to current world problems. Students taking this course for graduate degree credit must expect greater reading and paper requirements. (Fall Odd Years)

422/522. International Organizations. Credit 3 hours. Prerequisites: POLI 201 and ENGL 102. Regional, functional, and universal international organizations. Consideration of structure, process, and activities. Attention to their role as forces for change. Students taking this course for graduate degree credit must expect greater reading and paper requirements. (Spring Even Years)

424/524. International Political Economy. Credit 3 hours. Prerequisites: POLI 201 and ENGL 102. The study of the interplay between politics and economics in the international arena. Examines the theoretical frameworks of Classical Liberalism, Marxism, systems theory, etc., and how they apply to the advanced industrial nations and the developing nations. Focuses on the political environments that have emerged and their impact on the economic well-being of the northern and southern hemispheres. Students taking this course for graduate degree credit must expect greater reading and paper requirements. (Fall Even Years)

425/525. Comparative European Politics. Credit 3 hours. Prerequisites: POLI 201 and ENGL 102. The comparative study of European political systems, concentrating on politics in Great Britain, France, Germany, Italy, and Russia, including an analysis of the development and current status of the European Union. Students taking this course for graduate degree credit must expect greater reading and paper requirements. (Fall)

426/526. Comparative Politics of Developing Nations. Credit 3 hours. Prerequisites: POLI 201 and ENGL 102. The study of the political systems of developing nations, examining the progression of their political and economic systems, emphasizing the interrelated effects of these systems within each nation. Concentrating on India, Greater China, Brazil, Japan and the Pacific Rim, and nations of sub-Saharan Africa. Students taking this course for graduate degree credit must expect greater reading and paper requirements. (Spring)

428/528. Middle East Politics. Credit 3 hours. Prerequisites: POLI 201 and ENGL 102. An examination of the Middle East and the development of its geographical and political boundaries. A brief historical background introduces the contemporary nations of the Middle East, concentrating on a comparative analysis of their political systems, the international relations between these nations (through organizations such as OPEC and the Arab League), and relations between the Middle East and political systems outside of the region. Students taking this course for graduate degree credit must expect greater reading and paper requirements. (Spring Odd Years)

432/532. Southern Politics. Credit 3 hours. Prerequisites: POLI 201 and ENGL 102. An examination of the politics of the American South, focusing on the dramatic political developments and shifts within the region since World War II. Students taking this course for graduate degree credit must expect greater reading and paper requirements. (Spring Odd Years)

434/534. The American Presidency. Credit 3 hours. Prerequisite: POLI 201 and ENGL 102. An analysis of the creation, history, and development of the office of the presidency. Special attention will be given to the powers and responsibilities of the modern presidency. Students taking this course for graduate degree credit must expect greater reading and paper requirements. (Fall Odd Years)

436/536. Legislative Process. Credit 3 hours. Prerequisites: POLI 201 and ENGL 102. An analysis of the principles, procedures, and problems of law-making in the United States, including Congress and state legislatures. Students taking this course for graduate degree credit must expect greater reading and paper requirements. (Spring Even Years)

437/537. The Louisiana Legislature in Session. Credit 3 hours. Prerequisites: POLI 201 and ENGL 102. Intensive coverage of the Louisiana legislature in session. Special emphasis on actual daily attendance of the legislative session in Baton Rouge, observing committee hearings and floor debates, and meeting the players in the legislative arena. Students taking this course for graduate degree credit must expect greater reading and paper requirements. (Summer)

438/538. Political Parties. Credit 3 hours. Prerequisites: POLI 201 and ENGL 102. A study of the origin, development, and functions of American political parties. Students taking this course for graduate degree credit must expect greater reading and paper requirements. (Fall Odd Years)

440/540. Louisiana Politics. Credit 3 hours. Prerequisites: POLI 201 and ENGL 102. A study of patterns, trends, and issues important to the development of Louisiana politics and political culture. Students taking this course for graduate degree credit must expect greater reading and paper requirements. (Spring Even Years)

442/542. Polling and Public Opinion. Credit 3 hours. Prerequisites: POLI 201 and ENGL 102. An examination of the content, causes, and effects of public opinion in American politics. Special emphasis on the tools of public opinion research. Students taking this course for graduate degree credit must expect greater reading and paper requirements. (Fall Even Years)

444/544. American Foreign Policy. Credit 3 hours. Prerequisites: POLI 201 and ENGL 102. A study of the patterns, trends, and sources of American foreign policy. Particular emphasis on post-World War II foreign policy. Students taking this course for graduate degree credit must expect greater reading and paper requirements. (Spring Odd Years)

446/546. Politics and the Environment. Credit 3 hours. Prerequisites: POLI 201 and ENGL 102. An exploration of the evolution of modern environmental policy in the United States. A focus on the American approach to domestic and international environmental issues. Students taking this course for graduate degree credit must expect greater reading and paper requirements. (Spring Odd Years)

450/550. Ancient and Medieval Political Theory. Credit 3 hours. Prerequisites: POLI 201 and ENGL 102. Political thought of Greece, Rome, Medieval Europe, and the emergence of modern political concepts. Students taking this course for graduate degree credit must expect greater reading and paper requirements. (Fall Odd Years)

451/551. Modern and Contemporary Political Theory. Credit 3 hours. Prerequisites: POLI 201 and ENGL 102. Political thought in recent times which strongly reflects the impact of the industrial revolution. Socialism, Marxism, Communism, Nazism, and Fascism are considered. Students taking this course for graduate degree credit must expect greater reading and paper requirements. (Spring Even Years)

452/552. American Political Theory. Credit 3 hours. Prerequisites: POLI 201 and ENGL 102. Significant American political ideas from colonial times to the present. Students taking this course for graduate degree credit must expect greater reading and paper requirements. (Fall Even Years)

460/560. American Public Policy. Credit 3 hours. Prerequisites: POLI 201 and ENGL 102. An examination of the policy-making process and the major areas of domestic policy in the United States. (Fall Even Years)

462/562. Special Topics in Public Policy. Credit 3 hours. Prerequisites: POLI 201 and ENGL 102. A detailed examination of a topic within the field of public policy. May be repeated for credit once provided different topics are studied. (Spring Odd Years)

470. Internships in Political Science. Credit 3 hours. Prerequisite: A minimum grade point average of 2.7 cumulative and 3.0 in political science. An opportunity for students to learn about government and politics from the viewpoint of a participant. Interns must work a minimum of 20 hours per week during a regular semester, a minimum of 40 hours per week during a summer semester, at times mutually agreeable to the individual and the agency. Any reading and paper requirements must be satisfied. All grade requirements and criteria will be established ahead of time by the faculty internship coordinator. Course may be taken twice for a maximum of 6 credit hours. Each instance may be substituted for 3 required credit hours in a particular subfield of political science at the 400 level, though there can be no such substitution for POLI 490. (Varies)

475/575. International Political Simulations. Credit 3 hours. Prerequisites: POLI 201 and ENGL 102. This course prepares students for political simulations of policy decisions within international organizations. While the most common format for such simulations is that provided by the Model United Nations, other possible simulation formats include the Model Organization of American States, the Model European Union, the Model North Atlantic Treaty Organization, and the Model Arab League, among others. (Varies)

480/580. Special Topics in Political Science. Credit 3 hours. Prerequisite: Junior standing or permission of Department Head approval. A detailed study of a topic selected by the instructor. Topics and instructors will vary. May be repeated once, but Department Head approval is required to count more than 3 hours toward the B.A. in Political Science or M.A. in History. (Varies)

490. Seminar for Political Science Majors. Credit 3 hours. Prerequisite: Senior standing or permission of the Department Head. A seminar style readings course designed to give students a general survey of the field of political science. This course serves as a capstone course for majors in political science. (Fall, Spring)

600. Seminar: Special Topics in American Politics. Credit 3-6 hours. Course may be taken twice, for a maximum of 6 credit hours, when the subject matter differs. (Varies)

610. Seminar: Special Topics in International Politics. Credit 3-6 hours. Course may be taken twice, for a maximum of 6 credit hours, when the subject matter differs. (Varies)

Population Health Management (PHM)

601. Essentials of Population Health Science. Credit 3 hours. Prerequisite: Admission to the Population Health Management program or permission of the Department Head. This course addresses population health outcomes for a group of individuals. Population Health provides a population perspective on the multi-level (socio-ecologic) determinants of health, disease and injury; the programs, policies and services that

protect and promote health and prevent disease; and key concepts related to maintaining the health and wellness of populations. This class examines the importance of determinants of health; including medical care, public health, genetics, personal behaviors and lifestyle; and a broad range of social, environmental, health equity and economic factors. (Fall)

602. Research Science In Population Health Management. Credit 3 hours. Prerequisite: Admission to the Population Health Management program or permission of the Department Head. This course will introduce the major components in research methods including: Levels of measurements, qualitative and quantitative study designs, selection of study populations, hypothesis formulation, sampling, measurement instrumentations, formulation of research questions, and study interpretation issues such as determination of causality and the effectiveness of clinical and community interventions. (Fall)

603. Introduction to Biostatistics and Health Analytics. Credit 3 hours. Prerequisite: Admission to the Population Health Management program or permission of the Department Head. This class covers biostatistical methods necessary to interpret data for Evidence-Based Practice (EBP) in Population Health. Topics include critical appraisal of evidence, variation and variables, levels of data measurement, descriptive statistics and data display, probability, statistical and clinical significance, confidence intervals, statistical power analysis, hypothesis testing, and inferential statistics. Emphasis will be placed on the application of biostatistics to collect and translate health data to plan actionable interventions and programs that improve the delivery of healthcare and patient health outcomes. (Fall)

605. Epidemiology and Health Determinants. Credit 3 hours. Prerequisite: Admission to the Population Health Management program or permission of the Department Head. This class covers the principles and methods of epidemiology and includes research designs and methods used to study and describe disease occurrence. Students will develop skills in obtaining, evaluating and interpreting research findings and other population data sources. This course will examine social determinants of health, health disparities, and the linkages between social epidemiology and health. (Fall)

610. Wellness, Disease Prevention and Management. Credit 3 hours. Prerequisite: Admission to the Population Health Management program or permission of the Department Head. This course examines the concepts and strategies of wellness, care management, analyzes strategies aimed at primary and secondary prevention, and evaluates models and efforts to expand care management accountability into the community. (Spring)

611. Healthcare Systems Management and Project Management. Credit 3 hours. Prerequisite: Admission to the Population Health Management program or permission of the Department Head. This course provides an overview of the evolution, structure and current issues in the healthcare system. It examines the management of health care as a product, and the changing relationships between patients, physicians, hospitals, insurers, employers, communities, and government. The course will also address implementation of services within systems using projects and project teams. Core concepts and skills for managing services and projects effectively; making sure they are completed on time, within budget, and meeting performance objectives, will be addressed. (Spring)

612. Health Informatics. Credit 3 hours. Prerequisite: Admission to the Population Health Management program or permission of the Department Head. This class introduces students to concepts, methods, and issues related to the application of health information technology (HIT) to population health. Emphasizes the population health potential of comprehensive electronic health records (EHRs), personal health records (PHRs), mobile health and telemedicine devices; and consumer focused internet-based tools. Covers the uses of HIT to define and identify populations and sub-populations of interest, describe the health status and needs of populations, improve the health of populations, and evaluate services provided to populations. (Spring)

613. Health Leadership, Economics, and Policy. Credit 3 hours. Prerequisite: Admission to the Population Health Management program or permission of the Department Head. This class focuses on the health organization, financing, economics, delivery of healthcare and leadership skills to manage healthcare systems. In addition, this course will discuss private and public sectors and examines government regulation and market competition and payer plans, trends in healthcare spending, quality of care, and access to care. Students will demonstrate the ability to use predictive economic modeling to anticipate how patient/consumer behavior, business, and government policy and regulation affect healthcare and health outcomes. (Spring)

615. Healthcare Financial Strategy. Credit 3 hours. Prerequisite: Admission to the Population Health Management program or permission of the Department Head. This course introduces key concepts and principles of strategy as it relates to financial considerations in the healthcare industry. Topics to be addressed include financial management and strategy to plan, create, implement and monitor strategic initiatives within healthcare organizations; healthcare reimbursement systems, general accounting, financial analysis, strategic planning, risk based contracting, and regulatory issues. (Fall)

616. Healthcare Marketing and Consumerism. Credit 3 hours. Prerequisite: Admission to the Population Health Management program or permission of the Department Head. This course examines health consumerism as a movement that advocates patients' involvement in their own healthcare decisions as well as the impact in marketing practices for organizations. (Spring)

621. Research Science and Dissemination. Credit 2 hours. Prerequisite: Admission to the Population Health Management program or permission of the Department Head. This course focuses on application of qualitative research and case studies as well as interpreting and translating research findings into community practice. Students will learn how to develop and submit a manuscript for publication. (Summer)

625. Social Determinants of Health. Credit 3 hours. Prerequisite: Admission to the Population Health Management program or permission of the Department Head. Through a combination of readings, critical analysis and reflection, and in-class exercises, students will examine social determinants, health disparities, and interventions to promote health. Students will explore the ways health and illness are influenced by social and economic determinants including race, ethnicity, gender, income, and sexual orientation. (Varies)

626. Program Planning and Evaluation for Population Health. Credit 3 hours. Prerequisite: Admission to the Population Health Management program or permission of the Department Head. This course will enable students to describe and apply assessment and planning processes to determine priorities for the population health interventions. The course will provide an overview of planning and development of population health interventions from a systems perspective, with attention to evidence-based, theoretical, ethical approaches. Students will learn skills to evaluate effectiveness of population health and chronic care transition programs. (Fall)

627. Global Health. Credit 3 hours. Prerequisite: Admission to the Population Health Management program or permission of the Department Head. This foundation course introduces the study of global health and its theories, perspectives, methods, and evidence. The course offers a basic overview of the methods for measuring population health, analytic tools for decision-making, and the evidence base for the effectiveness, risks, and efficiency of interventions, programs, and policies. (Varies)

628. Health Navigation I: Theories and Methods of Behavior Change. Credit 3 hours. Prerequisite: Admission to the Population Health Management program or permission of the Department Head. This course will provide an in-depth overview of behavior change theory and their application to individuals with chronic health conditions. Students will also be introduced to health navigation skills for population health professionals with emphasis on the practical application of brief intervention and motivational interviewing skills to promote healthy lifestyle changes. (Fall)

629. Health Navigation II: Advanced Motivational Interviewing for Behavior Change. Credit 3 hours. Prerequisite: PHM 628 or HS 624 or permission of the Department Head. This course will provide advanced training in health navigation skills with an emphasis on the 4 key elements

of motivational interviewing; patient engagement, patient focusing, evocation for behavior change, and developing a behavior change plan. In addition, consideration will be given to motivational interviewing applications for patients with chronic health conditions. (Spring)

635. Capstone Project. Credit 3 hours. Prerequisite: Admission to the Population Health Management program or permission of the Department Head. A capstone project will comprise a minimum of 120 hours applying culminating program competencies meant to provide students the opportunity to build upon population health, population health management, and value-based care delivery models to demonstrate and hone knowledge and skills, through project planning and development they have gained in the program. Field experience required. (Summer)

Process Technology (PTEC)

101. Introduction to Process Technology. Credit 3 hours. An introduction to the field of Process Technology and the role of process operators within the plant. Major topics to be studied include operator performance and responsibilities, employer expectations, plant safety, responsible care and compliance with regulations, instrumentation, plant equipment and processes, and industrial process control.

131. Instrumentation I. Credit 3 hours. An introduction to the common instrumentation components and their operation and their function within a control loop. Students will be introduced to pressure, temperature, level and flow measurement as well as controllers, valve positioners and relays. Two hours of lecture and two hours of laboratory per week.

132. Instrumentation II. Credit 3 hours. Prerequisites: PTEC 131 and CMPS 110. A detailed study of instrumentation as applied to industrial process control. Major topics to be studied include control concepts, functional structure of feedback control, sensors and transmission systems, controllers, process dynamics and tuning control systems. Two hours of lecture and two hours of laboratory per week.

161. Plant Equipment. Credit 3 hours. A study of industrial plant equipment, including their construction, principles of operation, and utilization within process systems. Equipment to be studied includes pumps, compressors, valves, instruments, boilers, furnaces, turbines, heat exchangers, and cooling towers. Two hours of lecture and two hours of laboratory per week.

207. Statistical Quality Control. Credit 3 hours. Prerequisites: PTEC 242 and MATH 161. A study of the statistical quality control requirement of process industries. Major topics include internal and external customer/supplier relationship, total quality management, statistical methods of quality control, and computer software SPC/SQC programs.

242. Unit Operations. Credit 3 hours. Prerequisites: PTEC 101 and 161. A functional examination of the general types of processes found in the chemical and refining industries, including distillation and fractionation, reaction, absorptions, adsorption, extraction, stripping, cracking, alkylation, hydro processing, clarification and water treatment. Two hours of lecture and two hours of laboratory per week.

243. Industrial Process Control. Credit 4 hours. Prerequisites: PTEC 132 and 242 and CHEM 101 and 103. An advanced study of the design and control of industrial processes. Students will be required to operate and monitor process plant simulators and troubleshoot system upsets. Two hours of lecture and four hours of laboratory per week.

263. Fluid Mechanics. Credit 3 hours. Prerequisites: PTEC 132 and PHYS 191 and 193. A study of the principles of fluid mechanics which provide the theoretical foundation required for the design, construction, installation and operation of plant equipment and process units.

Psychology (PSYC)

101. General Psychology I. [LCCN: CPSY 2013, Introduction to Psychology]. Credit 3 hours. A survey of the science of mind and behavior of humans and other animals. Topics may include the scientific method, history of psychology, learning, development, personality, social psychology, and psychopathology. (Summer, Fall, Spring)

102. General Psychology II. Credit 3 hours. Prerequisite: PSYC 101 or permission of Department Head. A continuation of topic areas not covered in PSYC 101. Covers the biological and cognitive basis of behavior, possibly including the brain, anatomy and physiology, sensation and perception, consciousness, language, and other aspects of cognition. (Fall, Spring)

116H. General Psychology for Honors I. Credit 3 hours. Prerequisite: Active status in the Honors Program or permission of Department Head. An intensive survey of the science of the mind and behavior of humans and other animals. Topics may include the scientific method, history of psychology, learning, development, personality, social psychology, and psychopathology. In addition to exams, students may be assigned papers, presentations, and other enriching assignments. This course substitutes for PSYC 101; students may not receive credit for both PSYC 101 and PSYC 116H. (Varies)

117H. General Psychology for Honors II. Credit 3 hours. Prerequisites: PSYC 101 or PSYC 116H and active status in the Honors Program or permission of Department Head. This course surveys the biological and cognitive basis of behavior, possibly including the brain, anatomy and physiology, sensation and perception, consciousness, language and other aspects of cognition. In addition to exams, student may be assigned papers, presentations, and other enriching assignments. This course substitutes for PSYC 102; student may not receive credit for both PSYC 102 and PSYC 117H. (Varies)

204. Developmental Psychology. [LCCN: CPSY 2113, Developmental Psychology]. Credit 3 hours. Prerequisite: PSYC 101 or consent of the Department Head. General principles of development: theory and research relating to cognitive, social, biological, and emotional factors across the life span. (Fall, Spring)

205. Psychology of Criminal Justice. Credit 3 hours. Prerequisites: CJ 101 and PSYC 101 or consent of the Department Head. Also offered as CJ 207. Applications of psychology to the criminal justice system. Topics will include: theories of violence, eyewitness testimony, jury selection and procedures, expert testimony, victims, and prisons. Credit cannot be given for both CJ 207 and PSYC 205. (Varies)

210. Social Psychology. [LCCN: CPSY 2413, Social Psychology]. Credit 3 hours. Prerequisite: PSYC 101. Scientific study of human social interaction and influence. Topics may include interpersonal attraction, attribution theory, attitudes, and group dynamics. (Fall, Spring)

220. Principles of Research Design. Credit 3 hours. Prerequisites: PSYC 101 or permission of Department Head. Principles of designing, conducting, and interpreting psychological research are surveyed. Critical analysis of published research is emphasized. Students are required to write a paper proposing a research project. (Fall, Spring)

221. Psychological Statistics. Credit 3 hours. Prerequisites: MATH 107 or 161, PSYC 220, and registration for PSYC 222. Basic descriptive and inferential statistics applied to data in the behavioral sciences. (Fall, Spring)

222. Psychological Statistics Laboratory. Credit 1 hour. Prerequisite: Registration in PSYC 221. A series of laboratory exercises on microcomputers designed to reinforce statistical concepts presented in PSYC 221. Students will complete a series of tutorial programs. In addition, students will get experience analyzing data using standard social sciences statistical packages such as SPSS. (Fall, Spring)

223. Professional Issues in Psychology. Credit 3 hours. Prerequisite: PSYC 101. This course provides an overview of the field of psychology with a focus on career opportunities for psychology majors and ethical considerations in the science and practice of psychology. Topics include privacy, licensure, ethical treatment of participants in research, and career options for psychology majors terminating with bachelor's degrees as well as those moving on to post-graduate work. (Varies)

231H. Honors Research. Credit 1-3 hours. Prerequisites: Limited to Honors students and PSYC 220. This course is an independent study research mentorship with a member of the Psychology faculty. Students will spend approximately 4 hours per week on the faculty member's research team for each credit hour. May be repeated for a total of three credit hours. Grading will be Pass/Fail. (Varies)

251. Group Dynamics. Credit 3 hours. Prerequisite: PSYC 101. This course will survey group theory, interpersonal dynamics, and team processes with special consideration for teams within organizations. Topics will include interpersonal influence and conformity, group effectiveness, and group decision making. (Varies)

282. Special Topics in Psychology. Credit 3 hours. Prerequisite: PSYC 101 or permission of the Department Head. An exploration of current issues in Psychology, including those of relevance to students not intending to major in the field. May be repeated for a maximum of six hours. (Varies)

285. Psychology of Developmental Disabilities. Credit 3 hours. Introduction to development disabilities. Topics include history of developmental disabilities, assessment, legal issues, and research relating to cognitive, social, biological and emotional factors among individuals with developmental disabilities. (Fall, Spring)

324. Psychology of Infancy and Childhood. [LCCN: CPSY 2313, Child Psychology] Credit 3 hours. Prerequisite: PSYC 204. Overview of development from conception through middle childhood with a focus on physical, neurological, cognitive, and social-emotional domains across multiple contexts. Psychological theories and research findings are emphasized and both typical and atypical development are addressed. (Varies)

335. Research Design and Analysis. Credit 3 hours. Prerequisites: PSYC 221 and PSYC 222. The principles of research covered in PSYC 220 applied in an experimental or non-experimental research project. Students will be presented with a research design and procedure, which they implement. Results of the research will be communicated in a complete report following standard journal article format. (Fall, Spring)

343. Conditioning and Learning. Credit 3 hours. Prerequisite: PSYC 101 or permission of the Department Head. The course will survey classical and operant conditioning and theoretical approaches to understanding them. Special topics with theoretical and practical significance will be explored. (Spring)

345. Psychology of Adolescence and Adulthood. Credit 3 hours. Prerequisite: PSYC 204. Overview of development from puberty to old age, with a focus on physical, neurological, cognitive, and social-emotional domains across multiple contexts. Psychological theories and research findings are emphasized and both typical and atypical development are addressed. (Varies)

346. Sensation and Perception. Credit 3 hours. Prerequisites: PSYC 101 and 102, or consent of the Department Head. A survey of the functions of the major senses stressing the psychological aspects of perception, with some attention to their physiological substrata. Topics will include color vision, the perceptual constancies, the perception of pitch, movement, and psychophysics. (Even Spring Semesters)

347H. Honors Seminar: Issues in Psychology. Credit 1 hour. Prerequisite: Honors student in good standing. This course covers classic readings in psychology; professional issues in psychology; presentations of faculty research; presentations of student research. Course may be repeated no more than six times. (Varies)

350. Introduction to Clinical Psychology. Credit 3 hours. Prerequisites: PSYC 101 and 102, or consent of the Department Head. This course is designed to provide a general survey of the field of clinical psychology; however, the areas of diagnostic assessment, personality theory and psychotherapy techniques are emphasized. Diagnostic assessment will focus on the concepts of reliability and validity with regard to those tests which usually comprise the standard psychiatric battery. Those personality theories which have generated relatively distinctive techniques of psychotherapy will be considered as well as the effectiveness of the psychotherapies themselves. (Spring)

353. Introduction to Applied Behavior Analysis. Credit 3 hours. Prerequisite: PSYC 343 or consent of Department Head. This course provides an introduction to the principles and concepts of applied behavior analysis (ABA), including historical perspective of ABA, fundamental vocabulary, philosophy, and methodology of the science of behavior management. Topics may also include rule-governed and verbal behavior, along with examples of behavioral assessment and modification techniques. Ethics issues and responsibilities of behavior analysts will be discussed. (Varies)

364. Tests and Measurement. Credit 3 hours. Prerequisite: PSYC 220. This course provides students the opportunity to develop skills for assessing quality of commonly used measures of human behavior. Core concepts covered will include norms, reliability and validity, and how these aspects lead to evaluation, administration, and interpretation of tests currently in use in clinical, industrial, and educational settings. Other topics include ethics, testing and the law, and test construction. (Varies)

365. Advanced Research Design and Analysis. Credit 3 hours. Credit 3 hours. Prerequisite: Grades of "B" or higher in PSYC 220 and PSYC 221. The principles of research covered in Psychology 220 applied in an original experimental or non-experimental research project. Students will work collaboratively with faculty to devise and implement a research design and procedure. Results of the research will be communicated in a complete report following standard journal article format and presented at a regional or departmental event. This course is recommended for those intending to pursue graduate studies. (Fall, Spring)

367H. Senior Honors Research in Psychology. Credit 3 hours. Prerequisites: Honors student in good standing and PSYC 335. Independent studies course in preparation for Honors Thesis. (Varies)

373. Evolutionary Psychology. Credit 3 hours. Application of Darwinian principles to the understanding of human nature. The course integrates important concepts from evolutionary biology, anthropology, and comparative psychology in order to construct a comprehensive framework from which human thought and behavior can be understood. (Varies)

375. Research Design and Analysis in ABA. Credit 3 hours. Prerequisites: PSYC 221 and PSYC 353. The principles of research design covered in PSYC 220 and PSYC 353 will be applied in a student-conducted research project. This course will provide first-hand exposure to clinical research in Applied Behavior Analysis (ABA). Additionally, this course will further develop students' skills related to critical analysis of research, experimental design, data analysis, and academic writing. The procedures and results of the clinical research experiences will be communicated in a complete report following standard-journal article format. (Varies)

416. Personality. Credit 3 hours. Prerequisites: 12 hours of Psychology courses including PSYC 101 and Junior standing. This course explores the concepts of psychological traits and personality types and the relationship between personality and personal identity. (Fall)

421/521. History and Systems of Psychology. Credit 3 hours. Prerequisites: 12 hours in Psychology and Junior standing. Comparative historical study, with some unifying reconciliation, of the various influential individuals, systems, or "schools" of psychology that represent the major different approaches to the study of the mind and behavior. (Varies)

422/522. Abnormal Psychology. Credit 3 hours. Prerequisites: PSYC 101 and Junior standing. Examination of the validity of the concept of "Abnormality" and what variables influence the diagnostic process. Nature, etiology, and prognosis of major behavioral and emotional disorders will be included to illustrate basic principles. (Fall, Spring)

440. Cognitive Psychology. Credit 3 hours. Prerequisites: PSYC 101, 102, and Junior standing. An analysis of theories and research on internal mental processes. (Fall, Spring)

449/549. Individual Research in Psychology. Credit 3 hours. Prerequisite: PSYC 335 or consent of the Department Head. Enrollment ordinarily limited to one or two students per instructor. A course devoted to research design and implementation of this design by conducting and communicating results in publishable form. May be taken up to 3 times (9 credit hours) with the permission of the Department Head. (Varies)

450. Service Learning. Credit 1-3 hours. This course is intended for students to gain field experience in an applied psychological setting. Students are required to write a paper about their experiences. May be repeated for a maximum of 6 credits. Pass/Fail Grading. (Varies)

452/552. Industrial Psychology. Credit 3 hours. Prerequisite: PSYC 101 or consent of the Department Head. This course will survey the application of psychological principles to important areas in the work setting. Topics will include job analysis, personnel selection, training, performance appraisal / management, and human factors. (Varies)

458. Skill Acquisition in Applied Behavior Analysis. Credit 3 hours. Prerequisite: Grade of "C" or better in PSYC 353. This course provides an intensive study of the assessments and interventions that constitute evidence-based skill acquisition procedures. This course will allow students to develop, refine, and practice their clinical skills in relation to these procedures. (Spring)

460. Behavior Reduction in Applied Behavior Analysis. Credit 3 hours. Prerequisite: Grade of "C" or better in PSYC 353. This course provides an intensive study of the assessments and interventions that constitute evidence-based behavior reduction procedures. This course will allow students to develop, refine, and practice their clinical skills in relation to these procedures. (Fall)

462. Physiological Psychology. Credit 3 hours. Prerequisites: PSYC 101 and 102, or consent of the Department Head. Understanding the brain-behavior relationship by investigating research which deals with the manipulation of physical and chemical events in the organism and the resultant behavior. (Fall, Spring)

467H. Honors Thesis in Psychology. Credit 3 hours. Prerequisites: Honors student in good standing and PSYC 367H. Independent study for writing and oral defense of Honors Thesis. (Varies)

468. Independent Readings in Psychology. Credit 3 hours. May not be repeated. Prerequisites: Senior standing and consent of the instructor. Guided readings in an area mutually agreed upon by the student and the instructor. A final written report is required. (Varies)

470/570. Organizational Psychology. Credit 3 hours. Prerequisites: PSYC 101 or consent of the Department Head. This course will survey the application of psychological principles to important areas in work settings. Topics will include attitude theory, group dynamics, leadership, occupational health, organization development, and work motivation. (Varies)

482/582. Seminar in Psychology. Credit 3 hours. Prerequisites: 12 hours in Psychology or consent of the Department Head, and Junior standing. Intensive exploration, in-depth, of selected topics, designed to organize, clarify, and supplement the student's grasp of psychology. Course may be taken up to three times for a maximum of 9 hours with consent of the Department Head or the Graduate Coordinator. (Varies)

612. Learning, Memory, and Cognition. Credit 3 hours. Prerequisite: Psychology graduate standing or permission of the Department Head. A survey of advanced issues of learning and cognitive processes. (Fall)

613. Physiological Psychology. Credit 3 hours. Prerequisite: Psychology graduate standing or permission of the Department Head. An advanced survey of theory and research dealing with relationship between brain and behavior. (Spring)

614. Social Psychology. Credit 3 hours. Prerequisite: Psychology graduate standing or permission of the Department Head. An advanced survey of theory and research in social processes. Topics include perception of self and others, group influence and group dynamics, altruism, and aggression. (Fall)

615. Psychological Assessment. Credit 3 hours. Prerequisite: PSYC 635 or 636. Introduction to the systematic assessment of individuals. Basic test theory is presented. Interviews, surveys, objective and projective tests will be covered, with the emphasis varying from time to time. Limited laboratory practice with representative techniques. (Fall)

616. Theories of Personality. Credit 3 hours. Prerequisite: Psychology graduate standing or permission of the Department Head. A survey of selected major theories of personality development and dynamics, and evaluation of their usefulness in the prediction and control of behavior. Also, evaluation of therapy techniques derived from such theories. (Varies)

620. Developmental Psychology. Credit 3 hours. Prerequisite: Psychology graduate standing or permission of the Department Head. An advanced survey of theory and research in development. Topics include cognitive, social, and emotional development, and the development of psychopathology. (Varies)

635. Experimental Design and Analysis. Credit 4 hours. Prerequisite: Psychology graduate standing or permission of the Department Head. Design and analysis of research for which there is direct control of the independent variable(s). Both experimental and quasi-experimental designs will be covered. Statistical techniques will include ANOVA, planned comparisons, and post-hoc tests. (Fall)

636. Non-experimental Design and Analysis. Credit 4 hours. Prerequisite: Psychology graduate standing or permission of the Department Head. Design and analysis of research for which there is no direct control of the independent variable(s). Statistical techniques will include correlation, regression, multiple correlation, and multiple regression. (Spring)

649. Independent Skills Augmentation for Research. Credit 1-3 hours. Prerequisites: Psychology graduate standing and completion of PSYC 635 and 636 with a grade of at least "B" or permission of the Department Head. This course will provide individualized instruction on research design, statistics, protocol development, and technical writing in psychology to facilitate thesis and non-thesis project progression. Additional skills such as time management, goal setting, and data collecting strategies will be discussed. Weekly meetings will be required. This course may not be used to satisfy required elective hours. The course may be taken to facilitate project development prior to enrolling in thesis or non-thesis hours, but is required for students as outlined in the Progression guidelines. This course may be repeated. (Summer, Fall, Spring)

660. Special Topics in Psychology. Credit 3 hours. Prerequisites: Psychology graduate standing or permission of the Department Head. An in-depth analysis of a limited number of topics in Psychology. Topics will change from semester to semester, depending on the interests of the instructor. This course may be repeated for credit. (Fall, Spring)

661. Special Topics in Industrial/Organizational Psychology. Credit 3 hours. Prerequisite: Psychology graduate standing or permission of the Department Head. This course will survey the application of psychological principles to important areas in work settings. Topics will include work analysis, personnel selection, performance appraisal / management, training and development, employee attitudes, motivation, organizational culture, leadership, teams, cross-cultural considerations, and human factors. May be repeated as topics vary. (Varies)

668. Independent Readings in Psychology. Credit 3 hours per semester. Prerequisite: Psychology graduate standing or permission of the Department Head. Individual reading in an area agreed upon by the faculty member and student. A final written report is required. May not be repeated. (Varies)

679. Psychotherapy Techniques. Credit 3 hours. Prerequisites: Psychology graduate standing or permission of the Department Head. Provides education and training in psychotherapy techniques, including such topics as establishing a therapeutic relationship, formulating and implementing effective treatment plans, crisis intervention, and ethical principles/legal issues relevant to psychotherapy. Topics covered are not designed to be bound to any particular theoretical orientation but are relevant to any practice of psychotherapy. (Spring)

683. Practicum. Credit 3 hours. Prerequisites: Approval of the Psychology Graduate Coordinator; a grade of "B" or better in PSYC 635 and 636; students interested in testing practicum must complete PSYC 615 or an approved alternative; students interested in a counseling practicum must complete PSYC 679; students interested in an Industrial/Organizational practicum must complete PSYC 661 or receive permission from the

coordinator. Students will provide teaching in psychology or psychological services to individuals and/or organizations in a suitable setting. For students involved in clinical practica, the supervisor must be state licensed. For students involved in I/O practica, the supervisor must have appropriate or related educational background. Students involved in teaching practica will teach or assist with teaching an undergraduate class in psychology, possibly including developing a syllabus, delivering lectures, and designing and grading quizzes, exams, and other assignments. May be repeated up to 3 times with permission of the Department Head and no more than 6 hours count toward the Master's Degree. (Summer, Fall, Spring)

692. Psychopharmacology. Credit 3 hours. Prerequisite: Psychology graduate standing or permission of the Department Head. Course will survey basic principles of drug action and the effects of several classes of psychoactive drugs on the nervous system and behavior. Therapeutic and illicit use of drugs will be covered. (Varies)

770. Thesis. Credit 1-6 hours each semester, with six hours needed for graduation. Prerequisites: Psychology graduate standing and completion of PSYC 635 and 636 with a grade of "B" or better. The student must enroll in the thesis course each semester the thesis is in progress. The thesis is graded Pass/Fail. (Summer, Fall, Spring)

771. Non-Thesis Project. Credit 1-6 hours each semester, with six hours needed for graduation. Prerequisites: Psychology graduate standing and completion of PSYC 635 and 636 with a grade of "B" or better. This course is required for all non-thesis plan graduate students. The student must enroll in the non-thesis project course each semester the non-thesis project is in progress. The non-thesis project is graded Pass/Fail. (Summer, Fall, Spring)

Publishing Studies (PUBL)

463/563. Desktop Programs for Online Publishing. Credit 1 hour. An intensive course on the principles, practices, and production techniques for web design and online publishing. One to two hours of lecture and/or lab per week (based on a 15-week semester). (Varies)

496/596. Desktop Programs for Text Publishing. Credit 1 hour. An intensive course on the principles, practices, and production techniques in desktop layout of text and images for print and online publishing. One to two hours of lecture and/or lab per week (based on a 15-week semester). (Varies)

Scientific Computation (SC)

200. Computational Methods for Scientists. Credit 3 hours. Prerequisites: CMPS 152, Enrollment in MATH 163 or 200. This course covers techniques for scientific computing. Students will learn numerical algorithms for data analysis and analyze models using Python and R. Topics include matrices and linear system solvers, eigenvalues, model fitting, simulation, and high-performance computing. (Varies)

671. Computational Methods in Science. Credit 3 hours. Prerequisite: PHYS 331 or MATH 350 or CHEM 395 or permission of the Dean. Computational methods for solving practical problems arising in science. Topics include numerical methods for solving equations, systems of equations, ordinary differential equations, partial differential equations, polynomial integration and least square approximation. Each numerical method will be learned by solving various examples of scientific problems using programming languages such as C or C++. (Varies)

672. Monte Carlo Simulations. Credit 3 hours. Prerequisite: PHYS 321 or MATH 350 or CHEM 396 or permission of the Dean. Statistical simulation of the thermodynamic properties of atomic/molecular system using Monte Carlo methods. Topics include force fields, statistical ensembles, introductory and advanced techniques in solving simple scientific problems using programming languages such as C or C++. (Varies)

673. Computational Statistics. Credit 3 hours. Prerequisites: MATH 201 and MATH 380. A survey of computational methods used to analyze data collected from real world settings. Computational methods such as Monte Carlo methods, estimation methods of probability density functions, methods for random number generation, methods for identification of data structure and bootstrap methods will be studied. An emphasis will be on the understanding of the critical role that computational techniques plays in statistical research and the application of statistical methods to real life situation. (Varies)

674. Scientific Visualization. Credit 3 hours. Prerequisites: MATH 360 and CMPS 390, or permission of the Dean. This course covers a variety of topics in computer graphics using OpenGL with the focus on visualizing scientific and engineering data. Computer graphics emphasizing converting geometry to a display, visualization emphasizing converting data into geometry, and various data visualization techniques and methods will be introduced. (Varies)

675. Molecular Dynamics Simulations. Credit 3 hours. Prerequisite: PHYS 331 or MATH 350 or CHEM 395 or permission of the Dean. Simulation of the dynamic and thermodynamic properties of atomic/molecular systems using molecular dynamics simulations. Topics include the intermolecular forces, statistical mechanics, introductory and advanced techniques of molecular dynamics simulations. A number of projects will be performed throughout the course applying the numerical techniques in solving simple scientific problems using programming languages such as C or C++. (Varies)

676. Finite Element Method. Credit 3 hours. Prerequisite: MATH 201 or MATH 409, or permission of the instructor. This course introduces the numerical solution of linear problems using finite element methods (FEM). Topics include formation of stiffness matrix, assembly, constraints, solution techniques, and post-processing. How the principles of FEM can be applied to solve physical problems such as stress analysis, heat transfer, acoustics, fluid dynamics, MEMS, and electrical-magnetic fields will be discussed as well. (Varies)

677. Ab Initio Quantum Chemistry. Credit 3 hours. Prerequisite: PHYS 351 or CHEM 395 or permission of the Dean. A course on numerical methods for solving the electronic Schrodinger equation. Topics include self-consistent field methods for molecular orbitals, discretization of partial differential equations using Gaussian basis sets, semi-empirical molecular orbital methods, methods for going beyond self-consistent fields: density functional methods and many-body theory. Students will write programs to compute semi-empirical molecular orbitals. (Varies)

678. Computational Optimization. Credit 3 hours. Prerequisites: MATH 312, MATH 350, and MATH 360. This is a course on continuous and discrete optimization. Several standard optimization problems along with their numerical and idea solutions will be discussed. Possible topics include unconstrained optimization using vector calculus, Lagrange multipliers, Kuhn-Tucker conditions, Conjugate Gradient Methods, Hilbert space methods in optimization, Linear Programming (simple and interior point methods), quadratic programming shortest path problems, minimal spanning trees, and stochastic optimization. (Varies)

Social Work (SW)

101. Introduction to Social Work, Fields of Practice. Credit 3 hours. A survey of the resource and delivery systems in which social work is practiced. Emphasis given to both public and private agencies and various methodologies. Social Work values, ethics, skills and knowledge base are examined. An overview of the history of social welfare is presented with an emphasis on fields of practice. Service gaps and biases are identified. (Summer, Fall, Spring)

201. History and Philosophy of Social Welfare and Social Work. Credit 3 hours. Prerequisite: SW 101 or permission of Department Head for non-majors. An historical survey of the history of social work and social organizations in the U. S. designed to meet social problems. Emphasis is given to Social Welfare laws and organizations as a reflection of culture and societal values. Attention is also given to the philosophical base of social work practice as reflected in the ethics and values of the profession. (Summer, Fall, Spring)

202. Child Welfare Services. Credit 3 hours. An assessment of society's means of meeting physical, social, psychological and legal needs of children, including protective, court, health, placement, recreational and financial services. (Summer, Fall, Spring)

203. Human Behavior in the Social Environment I. Credit 3 hours. Prerequisites: SW 101, SOC 101, PSYC 101 and registration in or prior credit for GBIO 106, or permission of the Department Head for non-majors. A study of the interaction of biological, psychological, and sociological factors in the formation of personality and the functioning of persons in the environment. Specific theories and tools of assessment of individuals are discussed. (Fall, Spring)

204. Human Behavior in the Social Environment II. Credit 3 hours. Prerequisites: Registration in or prior credit for SW 203, SOC 212, and GBIO 107 or permission of Department Head for non-majors. A study of the social system model as a basic way to think about behavior in the social environment. This model will be applied to society, communities, organizations, groups and families. Culture as a determinant of behavior will be examined. Additional factors such as rurality, poverty, membership in special populations, and gender differences will be addressed. Specific theories in relation to society are discussed. (Fall, Spring)

205. Understanding Human Diversity and Populations at Risk. Credit 3 hours. The primary purpose of this course is to prepare students to work with populations they will encounter in their professional careers. The populations social workers must be trained to work with represent the broadest spectrum of humanity – in ethnicity, culture, race, religion, worldview, gender, sexual orientation, ability, and in life experiences. Attention is given to understanding mechanisms of oppression, theoretical foundations, cultural identity development, and antiracist practice. The course is designed to encourage both knowledge building and self-exploration skills that are essential in developing multicultural social work practice. (Fall, Spring)

303. Crisis Intervention. Credit 3 hours. Prerequisite: Sophomore standing or permission of the Department Head. This course examines the practical and theoretical aspects of crisis intervention including relevant applications to how crisis may impact at-risk/special populations within communities in the United States and around the world. Explores effective multi-level responses for human service intervention through learning activities. (Summer, Fall, Spring)

304. Generalist Social Work Practice: Micro-Practice Skills. Credit 3 hours. Prerequisites: SW 101, 201, 202, 203, 204, 205, with a minimum grade of "C" and admission into professional standing. The primary purpose of this course is to prepare students for generalist social work practice with individuals and families. The course focuses on the problem-solving model, case management, and communication skills. The course will identify practice skills that emphasize strengths, advocacy, empowerment, and change. Attention is given to populations-at-risk. (Fall, Spring)

305. Generalist Social Work Practice: Mezzo Practice Skills. Credit 3 hours. Prerequisites: SW 304 and admission into professional standing. The primary purpose of this course is to prepare students for generalist social work practice with diverse populations utilizing mezzo skills. It provides specific skills for working with families and groups. Particular attention is given to working in rural settings, to populations-at-risk and to economic and social justice issues. The course will identify practice skills that emphasize strengths, empowerment, advocacy and change. (Fall, Spring)

308. Generalist Social Work Practice: Case Management Skills. Credit 3 hours. Prerequisites: SW 201, 203, 204, 205, and Professional Standing, or permission of Department Head. Preparation for generalist social work practice in case management settings with vulnerable populations, (developmental disabilities, health and mental health, addictions, child welfare, geriatrics, criminal justice, HIV/AIDS, the homeless, and veterans). Skills in brokering, advocacy, coordination, client empowerment and recordkeeping will be stressed through experiential learning activities. (Fall, Spring)

360. Social Work Research Methods and Designs. Credit 3 hours. Prerequisites: SW 201, 204, and registration in or prior credit for MATH 241 or permission of the Department Head. The principles and foundations of designing and conducting issues in social work research are examined. Emphasized are ethical issues in social work research and the relevance of evaluation skills. (Fall, Spring)

361. Methods of Analysis and Dissemination. Credit 3 hours. Prerequisites: SW 360 and MATH 241 or permission of the Department Head. This course focuses on the examination of selected research instruments used in data analysis important to the practice of social work. Analytical techniques used in the statistical analysis of quantitative data and the utilization of computers for information management and data analysis are emphasized. (Fall, Spring)

366. Writing and Documentation in Social Services. Credit 3 hours. This course will prepare students to engage in professional writing requirements by agencies across the social services spectrum. Students will develop their professional level writing skills through the practice of case notes, completing assessment reports, documenting progress, and other exercises. Assignments will focus on gaining the skills to write clearly and concisely for multiple audiences, how to identify appropriate note and report content, and how to professionally interpret content for reporting purposes. (Fall/ Spring)

400/500. Independent Study. Credit 1-3 hours. Prerequisites: Permission of the Department Head and Junior standing. An in-depth study of topics appropriate to generalist social work practice culminating in a research report. Student works with an instructor on a one-to-one basis. May be repeated in one to three hour credits for no more than 6 hours credit. New materials are investigated in each repeat. (Summer, Fall, Spring)

402. Social Welfare Policy, A Framework for Analysis. Credit 3 hours. Prerequisites: SW 101, 201, 203, 204, and admission into professional standing or permission of Department Head for non-majors. The course will focus on the issues and conflicts raised by policy makers in designing social welfare policies and programs. A conceptual framework for social welfare policy analysis is explored. Techniques for advocacy, empowerment, and transformation are demonstrated. (Fall, Spring)

406. Generalist Social Work Practice: Macro Practice Skills. Credit 3 hours. Prerequisites: Admission into professional standing and successful completion of SW 304. The primary purpose of this course is to prepare students for generalist social work practice with communities, organizations, and large groups. Special attention is paid to populations at risk and to economic and social justice issues, as well as to issues pertaining to working within bureaucracies. Techniques for program implementation and evaluation are demonstrated. Methods for community assessment, organization, and empowerment are examined. (Fall, Spring)

409/509. Child Welfare I: Principles of Practice. Credit 3 hours. Prerequisites: Permission of the Department Head. This course is one of two child welfare courses which examines the continuum of public child welfare services to children and families. In-home services, including child protection investigations and family support services are explored in depth. Family assessment theories and skills are reviewed as well as trauma informed care. Families at risk and the effect of abuse and neglect on child development are discussed. (Fall)

410/510. Child Welfare II: Working with Families and System Dynamics. Credit 3 hours. Prerequisites: Permission of the Department Head. This course examines out-of-home services in child welfare along the child welfare continuum, from pre-placement activities to placement in foster care to reunification or adoption. The stages of development are explored with a specific focus on the effects of maltreatment on each stage of development. Therapeutic assessment is explored in order to understand the family dynamic and how to address their needs. (Spring)

415. Addictions and Social Work Practice. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. This course develops beginning competence necessary for working with individuals experiencing problems with the use of psychoactive substances and other mood altering behaviors. Application of knowledge and beginning practice skills toward identification and screening, assessment, intervention models and approaches, and analysis of policy and prevention will be delivered through a variety of learning activities. This course is open to non-majors. (Varies)

422/522. Social Aspects of Aging. Credit 3 hours. Prerequisite: Junior or Senior standing. A study of the interactions of the aging individual with the institutions of society. Society's attitudes, values and provisions relating to the aged will be brought into focus with a view of providing social services. (Varies)

425/525. Mental Health Across the Lifespan and Populations. Credit 3 hours. Prerequisite: Admission into professional standing or permission of the Department Head. This foundation course prepares students to recognize major mental health concerns across the lifespan. The course includes an introduction to the Diagnostic and Statistical Manual of Mental Disorders (DSM) as the organizing framework for reviewing major mental disorders and critique of the current "medical model" approach to mental health in the United States. The course considers mental health issues from a generalist practice perspective, including the role of the social environment, culture, stigma in the mental health services, access, and policy. (Varies)

495. Special Topics. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. An in-depth study of selected topics in social work. May be repeated (when topic varies), for a total of six hours credit. (Summer)

497. Integrative Field Seminar. Credit 3 hours. Prerequisites: Completion of all required courses and permission of the field director. Students must be concurrently enrolled in SW 498. This course serves as an integrative seminar in conjunction with the field practicum experience. This is a capstone course: therefore, the material covered addresses all social work foundation areas from the perspective of a generalist social work practitioner. Emphasis on values and ethics, diversity, and research are addressed all throughout the course. Students are guided through course work and assignments to implement the generalist model with their various client systems in rural practicum settings. (Fall, Spring)

498. Internship. Credit 9 hours. Prerequisites: Completion of all required courses and permission of the field instructor. This course consists of a minimum of 430 hours of field experience in a social agency under the direct supervision of a qualified social worker. This course must be taken concurrently with SW 497. (Fall, Spring)

515. Addictions and Social Work Practice. Credit 3 hours. Prerequisite: Junior standing or permission of the Department Head. This course develops beginning competence necessary for working with individuals experiencing problems with the use of psychoactive substances and other mood altering behaviors. Application of knowledge and beginning practice skills toward identification and screening, assessment, intervention models and approaches, and analysis of policy and prevention will be delivered through a variety of learning activities. This course is open to non-majors. (Varies)

Sociology (SOC)

101. Introductory Sociology. [LCCN: CSOC 2013, Introduction to Sociology]. Credit 3 hours. A study of culture, social organization, and social relations. (Summer, Fall, Spring)

101H. Introductory Sociology for Honors Students. Credit 3 hours. Prerequisite: Active status in the Honors Program. This course allows Honors students the opportunity for an in-depth exploration of the discipline of sociology. Focusing on the critical analysis of issues concerning the interplay of personal identities, social structure, culture, and power, the course emphasizes real-world applications of core sociological concepts to understanding contemporary social issues. (Varies)

203. Reading and Writing for Sociology. Credit 3 hours. Prerequisite: SOC 101 or permission of Department Head. This course is designed to provide sophomore-level Sociology Majors with the deep-reading, library research, and academic writing skills they will need to succeed in higher-level sociology courses and in their chosen career fields, with an emphasis on developing the tools and techniques needed to navigate the forms of research and writing that are specific to the field of sociology. (Spring)

212. Social Problems. [LCCN: CSOC 2113, Social Problems]. Credit 3 hours. Prerequisite: SOC 101. An examination of the major social problems in society with an emphasis on how these problems are interrelated and the role of society in their creation and perpetuation. (Summer, Fall, Spring)

215. Sociology of Sexuality. Credit 3 hours. This course examines human sexuality from a sociological point of view. It focuses on the social foundation of sexual behavior, as well as the socio-biological aspects of human sexuality that promote physical and emotional health, and interpersonal relations. (Varies)

222. Marriage and Family Life. [LCCN: CSOC 2213, Marriage and Family]. Credit 3 hours. Prerequisite: None. A functional study of courtship, mate selection, preparation for marriage, marriage adjustment, discord, and parenthood. Credit cannot be given for both SW 321 and SOC 321. (Summer, Fall, Spring)

230. Sociology Through Sports. Credit 3 hours. Prerequisite: Soc 101. An exploration of sociological forces, processes and institutions as observed through the study of sports. Students will develop their understanding of important social factors and phenomena, such as gender, race, globalization and deviance, by analyzing sports institutions in the United States and around the world. (Varies)

242. Stratification and Inequality. Credit 3 hours. Prerequisite: SOC 101 or permission of Department Head. This course focuses on the systematic social inequality in assessing opportunities, resources, rewards, as well as the uneven distribution of power and authority across the social categories in the United States. We will address how stratification has developed to its present state in the U.S. and question why members of certain groups advance while others do not. (Fall)

258. Identities, Inequalities, and Social Media. Credit 3 hours. Prerequisite: SOC 101. This class examines the social interactions and consequences of social media and will engage students in exploring the role of social media in society, paying close attention to social media technologies, institutions, discourses, ideologies, and identity formation. Students will examine how we construct meanings and connections in the absence of face-to-face interaction via social media platforms. Students will also actively engage in using social media as a platform of learning, particularly focusing on the relationships among social media and social inequalities and power disparities. (Varies)

300. Medical Sociology. Credit 3 hours. Prerequisite: SOC 101 or consent of the Department Head. This course examines the health care system and experience of health and illness in American society from a sociological perspective. (Summer, Fall, Spring)

305. Data Analysis and Statistics for the Social Sciences. Credit 3 hours. Prerequisites: SOC 101 and Junior Standing or permission of Department Head. Elementary descriptive and inferential statistics as applied to social science problems, with computer applications. (Summer, Fall, Spring)

310. Methods of Social Research. Credit 3 hours. Prerequisites: SOC 101 and Junior Standing or permission of Department Head. Philosophy, methods, and techniques, including research design; methods of observation and other sources of social data, analysis, inference and research report writing. (Summer, Fall, Spring)

312. Sociology Through Film. Credit 3 hours. Prerequisite: SOC 101. An exploration of key dimensions of social inequality and how they are presented in documentaries and Hollywood films. (Varies)

315. Media and Society. Credit 3 hours. Prerequisite: SOC 101. A course examining the social dimensions of mass media. Students will study media organizations and content using a sociological perspective, and they will analyze the connections between media and other social, political, and economic institutions. (Varies)

331. Sociology of Religion. Credit 3 hours. Prerequisite: Junior standing. The complex relationship between religion, culture, and society is explored in a comparative perspective. Religion is examined as a social fact which shapes, and is shaped by, modernism, nationalism, globalization and other historical forces. (Varies)

337. The Sociology of Civic Participation. Credit 3 hours. Prerequisites: SOC 101, Sophomore standing, adjusted GPA of 3.0, and permission of Department Head. Application of sociological theories and concepts through volunteering in a nonprofit organization. Students volunteer in a nonprofit or governmental organization and complete writing and reflection assignments to demonstrate their learning. Students volunteer 90 hours, prepare papers related to sociology and the civic participations experience, and keep a reflective journal. (Varies)

352. Comparative Family Patterns. Credit 3 hours. Prerequisite: Sophomore standing. Also taught as ANTH 352. A comparison of selected family patterns in various cultures. Attention given to role performance in each society and comparison of norms, values and attitudes related specifically to the family. Credit is not to be given for both ANTH 352 and SOC 352. (Varies)

354. Sociology of Gender. Credit 3 hours. Prerequisite: SOC 101 or consent of Department Head. The course is designed to be an introductory exploration of gender and its relation to culture and social institutions. Gender will be examined as a social construct that has emerged historically and is maintained institutionally. Emphasis will be placed on conflict, contradictions and the potential of social transformation. (Fall)

355. Social Movements and Social Action. Credit 3 hours. Prerequisite: SOC 101. An introduction to how social movements arise from collective behavior and social action when people act together to promote or resist social change. (Varies)

360. Environmental Sociology. Credit 3 hours. Prerequisites: SOC 101 and Sophomore standing. This course is an introductory exploration into relationships between the biophysical environment and major social, political and economic structures of society. (Varies)

365. Sociology of Disaster. Credit 3 hours. This course focuses on the anthropogenic aspects of the causes and effects of both natural and technological disasters, with a focus on how social and cultural power relations create situations whereby some populations are more vulnerable to disasters than others. (Varies)

400/500. Independent Study. Credit 1-3 hours. Prerequisites: Consent of the Department Head and Junior standing. Student works with an instructor on a one-to-one basis and prepares a research report on an appropriate topic. May be repeated in one to three-hour credits for a total of 6 hours. New materials are investigated in each repeat. (Varies)

401/501. Population and Immigration. Credit 3 hours. Prerequisite: Junior standing. An exploration into how population processes, such as immigration, fertility, and aging, affect American society and countries worldwide. The course examines the causes of population change and its consequences for the environment, health, the economy, education, and the legal and criminal justice system, with a special emphasis on migration processes and the experience of immigrants. (Varies)

405/505. Indigenous Peoples of the Americas. Credit 3 hours. Prerequisite: Junior standing or consent of the Department Head. Also offered as ANTH 405/505. Examination of the origin, distribution, ecology, culture and social systems of indigenous populations of the New World. May not be used for credit with ANTH 405/505. (Fall)

411/511. Race and Ethnic Relations. Credit 3 hours. Prerequisites: SOC 101 or ANTH 101 and Junior standing. Also taught as ANTH 411. Designed to give an insight into the attitudes of groups, particularly racial groups where interrelations are marked by antagonism, discrimination, and conflict. Influence on community welfare considered. Credit is not to be given for both ANTH 411 and SOC 411/511. (Summer, Fall, Spring)

412/512. Criminology. Credit 3 hours. Prerequisite: Junior standing. Also offered as CJ 412/ 512. A study of the incidence, nature, factors influencing, and social treatment of crime. May not be used for credit with CJ 412/512. (Summer, Fall, Spring)

430/530. The Development of Social Theory. Credit 3 hours. Prerequisites: SOC 101 and Junior standing. An introduction to the field of social theory and the relation of social thought to the history of sociology. (Summer, Fall, Spring)

440/540. Juvenile Delinquency. Credit 3 hours. Prerequisite: Junior standing. Also offered as CJ 440/540. A scientific study of the nature, extent and causes of delinquency. Methods of prevention, treatment, and correction will be analyzed. Designed especially for teachers, social workers, police, and correctional workers. May not be used for credit with CJ 440/540. (Summer, Fall, Spring)

455/555. Urban Sociology. Credit 3 hours. Prerequisite: Junior standing or consent of Department Head. A study of urbanization and challenges and opportunities associated with urban living in the United States and abroad. The focus is on the history and development of cities, housing, crime, transportation, employment, residential segregation, and urban policy from a sociological perspective. (Varies)

460/560. Food, Sustainability and Society. Credit 3 hours. Prerequisite: SOC 101. This course is an in-depth exploration into relationships between our environment, food systems and major social, political, and economic structures of society. In studying the ways food is produced and consumed, we will also discover the ways food shapes and expresses relationships among people. This course will also address issues of culture, meaning, identity, power, and ecology, all through a focus on food. (Varies)

465/565. Social Change and Globalization. Credit 3 hours. An examination of the nature, development, and dimensions of globalization. Globalization is conceptualized as a long-term emergent phenomenon. Major theories of social change and development are introduced. Cultural, economic, technological, environmental, military, political, and other aspects of globalization are considered. Anti-systemic social movements resisting globalization are analyzed. (Fall)

470/570. Vulnerable Populations and Disasters. Credit 3 hours. Prerequisite: SOC 101. This course is designed to critically examine the relationship between social inequality and disaster vulnerability. Special emphasis will be placed on social theories of disaster vulnerability, research examining experiences of socially marginalized populations during disasters, and strategies for reducing disaster vulnerability among marginalized populations. (Varies)

495/595. Special Topics Seminar. Credit 3 hours. Prerequisite: SOC 101, Junior standing or consent of the Department Head. An in-depth study of selected topics in sociology that are not covered in existing courses. May be repeated for a total of six hours credit. (Varies)

601. Complex Organizations. Credit 3 hours. Structure and process in organizations, with applications designed to help students function effectively in various positions within organizations. (Fall)

602. Social Stratification and Structured Inequality. Credit 3 hours. Examines systems of stratification and the forms, causes, and consequences of structured inequality in the United States and globally. The distribution of economic, political, and social resources in society; the processes of class formation; status differentials based on race, gender and other dimensions analyzed. Strategies for addressing these inequalities are explored. (Spring)

603. Applied Social Theory. Credit 3 hours. Development of sociological theories of human behavior and interaction. Special emphasis will be placed on how theoretical concepts are applied to further an understanding of how humans interact with and shape the daily operation of social institutional settings. (Fall)

604. Applied Research Design and Methodology. Credit 3 hours. Examines the production, distribution and consumption of applied social science research. Focus on quantitative and qualitative methods of conducting social science research and applying these methods to questions addressed by public and private agencies. Topics include review of the scientific method, ethical issues in research, the principles of measurement, a survey of research designs most frequently used in applied social science research, and the writing of research proposals. (Fall)

605. Advanced Statistics for Applied Sociology. Credit 3 hours. Prerequisite: Department Head consent required. Descriptive and inferential statistics as they are applied to various practical problems. Focuses on concepts and tools of statistics as they are used in the analysis of social science data, rather than on the mathematical and computational aspects. (Spring)

606. Evaluation and Assessment. Credit 3 hours. This course prepares students for the design and execution of agency evaluation and assessment, including needs assessment, program evaluation, and formative and summative evaluations of service delivery. (Summer)

607. Social Policy. Credit 3 hours. Study of how economic, political, and social factors affect social policy formation and change. Specific applications selected each semester from these and other areas: health, employment, poverty, aging, crime, and justice. Comparative and international analyses will be included. (Varies)

620. Applied Criminological Theory. Credit 3 hours. This course provides a multi-disciplinary study of the causes of crime and criminal behavior, including biogenic, psychogenic, and sociogenic explanations. (Varies)

630. Race, Gender, Class and the Criminal Justice System. Credit 3 hours. This course is designed to focus on developing the conceptual and analytical tools necessary to understand how race, gender and class shape human behavior. Special emphasis will be placed on how humans interact with and shape the operation of social and institutional settings based on their perceptions of race, gender and social class. (Varies)

635. Applied Mapping in the Social Sciences. Credit 3 hours. Students are exposed to Geographical Information Systems (GIS) techniques as a mechanism for studying crime from a spatial perspective. Specific emphasis will be placed on using GIS to test theoretical perspectives in sociology. (Varies)

650. Applied Study Abroad/Away. Credit 3 hours. This course provides graduate students a study and research plan designed to maximize benefits from the department's study abroad and study away programs. Course materials will focus on culture and diversity, cross-cultural relations, various aspects of globalization, and history and society of the destination country and/or region. Students will first conduct background research and then explore the topic on location, visiting local experts, touring facilities, and conducting research on the daily operation of social institutions. (Varies)

655. Applied Environmental Sociology. Credit 3 hours. Relationship between the study of the biophysical environment and major social, cultural, political, and economic structures of society. Practical applications to local or regional environmental problems. (Varies)

660. Participatory Research and Popular Education. Credit 3 hours. This course is designed to allow students to understand the development, implementation and evaluation of participatory models of education and research. Special emphasis will be placed on how scholars and members of agencies and community groups can work together to explore, understand and shape the daily operation of social and institutional processes, which set the parameters on their lives. (Varies)

665. Globalization and Social Transformation. Credit 3 hours. This course focuses on large-scale social transformation and processes of globalization. Important theories of social transformation and development are introduced and applied to cultural, political, economic, organizational, and interpersonal dimensions of globalization. Important debates on globalization and its historical unfolding are reviewed. Anti-systemic social movements of resistance against globalization are examined as well as considerations of how globalization will impact the work of social agencies, organizations, and institutions in the coming decades. (Varies)

690. Independent Study in Applied Sociology. Credit 3 hours. An intensive program of research on a topic approved in advance by the instructor. May be repeated if content is different, but no more than six hours may be applied toward the M.S. in Applied Sociology degree. (Varies)

698. Special Topics in Applied Sociology. Credit 3 hours. Selected topics in areas not available in existing courses. May be new or unique issues or contemporary topics relevant to applied sociology. May be repeated for credit when different topics are studied. (Varies)

760. Field Internship Research. Credit 1-6 hours each semester, with six hours needed for graduation. The student must enroll in the field internship research course each semester the research is in progress. This course allows students to be placed in an internship setting to complete 200-on site hours and to write and defend a research/policy-oriented paper based on the internship experience. The internship is designed in collaboration with the student, graduate coordinator, field internship coordinator, and the mentor in the student's area of concentration. The field internship course is graded Pass/Fail. (Varies)

770. Thesis Research and Thesis. Credit 1-6 hours each semester, with six hours needed for graduation. The student must enroll in the thesis course each semester the thesis is in progress. The thesis is graded Pass-Fail. (Varies)

Southeastern (SE)

101. Freshman Academic Success at Southeastern. Credit 2 hours. Prerequisite: Freshman standing. A student success course providing the tools that address the rigors of academic life on the University level. Topics include the purpose and value of higher education; the expectations and responsibilities of a college student; the development of analytical and metacognitive learning strategies; choosing the appropriate major and developing degree/career goals; and personal management during the college years. This course is required of all freshman. (Summer, Fall, Spring)

101H. Honors Freshman Academic Success at Southeastern. Credit 2 hours. Prerequisite: Active status in the Honors Program and freshman standing. A student success course focused on the unique needs of the Honors student. Topics include the purpose and value of higher education; the expectations and responsibilities of an Honors college student; choosing the appropriate major and developing degree/career goals; and opportunities for leadership, research, engagement, and/or service. Honors freshmen are required to take either SE 101H or SE 101. (Fall, Spring)

102. Freshman Academic Coaching Seminar. Credit 1 hour. Prerequisite: Permission of the Director of the Center for Student Excellence. This course provides student-focused academic coaching by engaging and encouraging freshman students to identify the personal and academic strategies necessary to succeed as college students. Students will be provided with semester-long support in areas such as time management, test preparation, note taking, and learning strategies. Students will examine personal and academic concerns, perceived barriers to success, strengths and needs, and devise a personalized plan of action for succeeding academically to earn a Southeastern degree. May be repeated for a maximum of 2 hours. (Fall, Spring)

103. Special Topics in Student Success. Credit 1 hour. Prerequisite: Permission of the Dean of Honors and Excellence. A seminar course with variable content that provides semester-long student-focused academic coaching and support while engaging and encouraging students to identify the personal, academic, and life skills necessary to succeed as a college student. May be repeated for a maximum of 2 hours. (Fall, Spring)

Spanish (SPAN)

101. Elementary Spanish I. [LCCN: CSPN 1013, Elementary Spanish I]. Credit 3 hours. The beginning course for students with no knowledge of Spanish. All appropriate elements of basic language learning are utilized for the purpose of providing a foundation in the language and culture of the countries where Spanish is spoken. Classwork supplemented by aural-oral drill in the language laboratory. Offered as the first of four sequential courses (101, 102, 201, 202) designed to provide an overall desired proficiency. (Summer, Fall, Spring)

101H. Elementary Spanish I for the Honors Student. Credit 3 hours. Prerequisite: Active status in the Honors Program. The beginning course for students with no prior knowledge of Spanish. All appropriate elements of basic language learning are utilized for providing an enriched foundation in the language and culture of the countries where Spanish is spoken. Classwork is supplemented by aural/oral drill in the language laboratory. (Fall, Spring)

102. Elementary Spanish II. [LCCN: CSPN 1023, Elementary Spanish II]. Credit 3 hours. Prerequisite: SPAN 101 or equivalent. Continuation of SPAN 101. (Summer, Fall, Spring)

102H. Elementary Spanish II for the Honors Student. Credit 3 hours. Prerequisites: Active status in the Honors Program and successful completion of SPAN 101 or equivalent. The second course in the initial sequence of Spanish classes. All appropriate elements of basic language learning are utilized for the purpose of providing an enriched foundation in the language and culture of the countries where Spanish is spoken. Classwork is supplemented by aural/oral drill in the language laboratory. (Fall, Spring)

201. Intermediate Spanish I. [LCCN: CSPN 2013, Intermediate Spanish I]. Credit 3 hours. Prerequisites: SPAN 101, 102 or equivalent. Completion and review of basic elements of grammar. Introduction to reading material of moderate difficulty. (Summer, Fall, Spring)

202. Intermediate Spanish II [LCCN: CSPN 2023, Intermediate Spanish II]. Credit 3 hours. Prerequisites: SPAN 101, 102, 201 or equivalent. A course with emphasis on proficiency in reading and continuation of grammar review. (Summer, Fall, Spring)

300. Introduction to Conversation in Spanish. Credit 3 hours. Prerequisite: Span 202 or equivalent. An introduction to the development of conversational skills in Spanish. Course may be repeated once for credit as an elective. (Varies)

304. Introduction to Grammar in Spanish. Credit 3 hours. Prerequisite: SPAN 202 or equivalent. An introduction to the study of certain grammatical structures in Spanish. (Varies)

305. Introduction to Writing in Spanish. Credit 3 hours. Prerequisite: SPAN 202 or equivalent. An introduction to the study of writing in Spanish. Students will focus on conventions of writing within various contexts (such as blogs, professional emails, newsletters, websites, social media). (Varies)

306. Introduction to Translation in Spanish. Credit 3 hours. Prerequisite: SPAN 202 or equivalent. An introduction to the practice of translating documents between English and Spanish. Students will focus on a variety of professional, public, and commonly used documents. (Varies)

307. Introduction to Interpretation in Spanish. Credit 3 hours. Prerequisite: SPAN 202 or equivalent. An introduction to methods of translation and interpretation, with an emphasis on the translation of written texts from Spanish to English. Course may be repeated once for credit as an elective. (Varies)

308. Pronunciation and Phonetics in Spanish. Credit 3 hours. Prerequisite: SPAN 202 or equivalent. An introduction to Spanish phonetics with a focus on pronunciation in Spanish and dialectal differences in pronunciation from around the Spanish-speaking world. (Varies)

310. Advanced Spanish Conversation. Credit 3 hours. Prerequisite: SPAN 202 or equivalent. An intensive exploration of the process of conversation. Examines vocabulary development, pronunciation, fluency, and other related issues. Course may be repeated once for credit as an elective. (Varies)

311. Advanced Spanish Grammar. Credit 3 hours. Prerequisite: SPAN 202 or equivalent. Intensive study of grammar and syntax. Recommended for students who wish to improve their language skills. (Varies)

312. Advanced Spanish Composition and Syntax. Credit 3 hours. Prerequisites: SPAN 101, 102, 201, 202 or equivalent. Descriptive and narrative compositions in Spanish with emphasis on syntax and verb forms. Effective writing of letters and short reports will be stressed to develop business skills. Recommended for students who wish to improve their language skills. (Varies)

314. Hispanic Civilization. Credit 3 hours. Prerequisite: SPAN 202 or permission of the Department Head. Geography, history, literature, art, music, educational system, and economy of Spain and Latin America. Recommended for students interested in Hispanic culture. (Varies)

320. Introduction to Literature in Spanish. Credit 3 hours. Prerequisite: SPAN 202 or equivalent. An introduction to the interpretation of literary texts written in Spanish. Includes a discussion of genres, artistic periods, literary styles and concepts of literary theory. (Varies)

323. Spanish for Specific Purposes. Credit 3 hours. Prerequisite: SPAN 202 or permission of the Department Head. A study of Spanish as a tool for performing a particular job. This course focuses on commands, questions, and phrases critical to a particular area of focus. (e.g., Business, Nursing, Law Enforcement). Content will vary. Course may be repeated as topics vary. (Varies)

324. Latin American Culture and Civilization. Credit 3 hours. Prerequisite: SPAN 202 or permission of the Department Head. A course recommended for Spanish majors or minors. A survey course of the geography, history, literature, art, music, and general aspects of culture in the various countries of Latin America, reflecting the early contributions of the indigenous peoples and their interaction with the Hispanic culture since the Spanish arrived. (Varies)

325. Literature of Spain. Credit 3 hours. Prerequisite: SPAN 202 or permission of the Department Head. A survey of Spanish literature from the early *jarchas* through the twenty-first century. Develops reading and analytical skills in Spanish and explores different theoretical approaches to the texts. (Varies)

326. Latin American Literature. Credit 3 hours. Prerequisite: SPAN 320. A required course for Spanish majors. A survey of Latin American literature from the pre-Hispanic era through the twentieth century. Develops reading and analytical skills in Spanish and explores different theoretical approaches to texts. (Varies)

329. Spanish for Business and International Trade. Credit 3 hours. Prerequisite: SPAN 202 or equivalent. The course seeks to develop students' ability to use Spanish and to conduct business. As such it is a course in language for special purposes. Within the context of an intensive grammar review and the development of greater cross-cultural awareness, it will develop the following language skills: speaking, listening comprehension, reading, writing, translation/interpretation. (Varies)

330. Spanish for Translation. Credit 3 hours. Prerequisite: SPAN 202 or equivalent. The course's aim is to develop useful translation skills. Dialogue examples and a full range of exercise work enable students to acquire the skills necessary for a broad range of translation. (Varies)

334. Spanish for Radio Broadcasting. Credit 3 hours. Prerequisites: SPAN 202 and COMM 151, or permission of the Department Head. Within the context of an intensive grammar and culture review, this course will provide students with the basics of Spanish-language radio broadcasting, including practical work in several program formats. This course in language for special purposes is recommended to both Spanish and Communication students interested in a career in the increasingly important field of Spanish-speaking media. (Varies)

370. Studies in Hispanic Cinema. Credit 3. hours. The Cinema of Spain and Latin America. Topics may include cinematic representation of dictatorships in Latin America; Hispanic women; Spanish literature in film; a comparative analysis of literary works and cinematic adaptations;

cinema as a reflection of changes in Spanish and Latin American Society; Spanish and Latin America history in films and documentaries; and a study of the work of specific directors. Taught in English. May be repeated once as topics vary. (Varies)

423/523. Special Topics in Hispanic Studies. Credit 3 hours. Prerequisite: SPAN 202 or permission of the Department Head. A special topics course that offers a detailed analysis of a particular genre, movement, or author. May be repeated for credit as topics vary. (Varies)

498. Senior Capstone Project in Spanish. Credit 1 hour. Prerequisites: A completed graduation application and 100 or more credit hours earned, or permission of Department Head. Students will create a professional portfolio detailing their most significant class work and their progress toward linguistic, literary, and cultural competence. Portfolios must be successfully presented to a faculty panel in order to obtain credit. The course is graded P/F. (Fall, Spring)

Special Education (SPED)

200. Introduction to Diverse Learners. Credit 3 hours. Prerequisites: Prior or concurrent enrollment in EDUC 202 and 2.75 cumulative GPA, a grade of C or better in ENGL 102, or permission of Department Head. An introduction to characteristics of exceptionalities, this course provides teacher candidates with the knowledge and skills to educate students with diverse needs in the classroom. Content includes current trends for meeting the educational needs of individuals with exceptionalities: characteristics of diverse learners; special education policies, procedures, and forms; interventions; accommodation, modification, and differentiation strategies; assistive technology; collaboration and co-teaching models; group management; assessment techniques; and reflective practice. Competency-based clinical practice required. (Summer, Fall, Spring)

210. Characteristics of Individuals with Exceptionalities. Credit 2 hours. Prerequisite: Sophomore standing (30 hours). An introduction to each exceptionalality with a survey of characteristics and a review of current trends for meeting the educational needs of individuals with exceptionalities. One and a half hour of lecture and one-hour laboratory per week. (Summer, Fall, Spring)

213. Technology for Inclusion. Credit 1 hour. Prerequisite: EDUC 202. An intensive examination of technology for including all students in the classroom environment. The course is designed to focus on: (a) technology for inclusion, (b) classification, (c) legislative basis, (d) devices and service delivery, (e) benefits, (f) terminology across environments, and (g) impact on learning. The purpose of this course is to develop a knowledge-base of technology to enhance inclusion in the classroom. Competency-based clinical practice required. (Summer, Fall, Spring)

260. Introduction to the Development of Children with Mild/Moderate Impairments. Credit 3 hours. Prerequisite: SPED 200 or permission of the Department Head. An overview of the developmental processes of individuals with the mild/moderate impairments. Emphasis is given to the social, psychological, physiological and cognitive problems associated with mild/moderate impairments. Implications for educational intervention stressed. (Varies)

361. Methods and Materials for Teaching Students with Mild/Moderate Disabilities. Credit 3 hours. Prerequisites: SPED 363; EDUC 304 or 308 depending on area of certification (may be taken concurrently), Full SARTE status. This course deals with methods of teaching academic subjects to students with mild/moderate disabilities. It provides practice in selecting goals and objectives, task analysis, preparing developmentally and academically sequenced materials, and evaluating intended learning outcomes. Course will also include techniques for teaching learning strategies and promoting transitions. Two hours lecture and two hours of laboratory per week. (Varies)

363. Classroom Organization and Management for the Student with Mild/Moderate Disabilities. Credit 3 hours. Prerequisite: SPED 210. This course deals with techniques and strategies for creating classroom environments that support student learning, including: designing, an appropriate physical setting, developing standards for behavior, and building an atmosphere of caring and respect. Humanistic and behavioral approaches to classroom management are investigated. Additionally, the course focuses on maximizing individual differences, management of time and space, use of centers, scheduling, and working with parents, general educators, and paraeducators. Two hours lecture and two hours of laboratory per week. Must be taken concurrently with SPED 440. (Varies)

365. Behavior Management Strategies for the Student with Mild/Moderate Disabilities. Credit 3 hours. Prerequisites: SPED 200 and Full SARTE status. This course provides study and application of a continuum of classroom approaches for effective behavior management. Course will include a review of both humanistic and behavioral techniques that promote responsible classroom management. Candidates in this course will be able to develop and use management plans that meet the emotional and behavioral needs of students with mild/moderate disabilities. Competency-based clinical practice required. (Spring)

366. Methods for Teaching Individuals with Mild/Moderate Disabilities in Language Arts and Content Areas. Credit 3 hours. Prerequisites: Full SARTE status, SPED 200, prior or concurrent enrollment in EDUC 307, and concurrent enrollment in SPED 367. This course teaches the methods of teaching language arts and content subjects to students with mild/moderate disabilities. It provides practice in selecting goals and objectives for lesson planning, task analysis, preparing developmentally appropriate and academically sequenced materials and evaluating intended learning outcomes. The course will also include techniques for teaching differentiated learning strategies and promoting instructional transitions. This course will emphasize the development and use of positive behavior interventions and supports. Candidates will develop and select instructional content, resources, and strategies that respond to cultural, linguistic, ability, and gender differences. The form of the course includes lecture, small group activities, independent work, and Competency-based clinical practice each week. (Fall)

367. Methods for Teaching Individuals with Mild/Moderate Disabilities in Mathematics and Content Areas. Credit 3 hours. Prerequisites: Full SARTE status and SPED 200. Must be taken concurrently with SPED 366. This course teaches the methods of teaching mathematics and content subjects to students with mild/moderate disabilities. It provides practice in selecting goals and objectives for lesson planning, task analysis, preparing developmentally appropriate and academically sequenced materials and evaluating intended learning outcomes. The course will also include techniques for teaching differentiated learning strategies and promoting instructional transitions. This course will emphasize the development and use of positive behavior interventions and supports. Candidates will develop and select instructional content, resources, and strategies that respond to cultural, linguistic, ability, and gender differences. The form of the course includes lecture, small group activities, independent work, and Competency-based clinical practice each week. (Fall)

440. Principles of Assessment and Evaluation of Individuals with Exceptionalities. Credit 3 hours. Prerequisite: SPED 363; EDUC 304 or EDUC 308 depending on area of certification (may be taken concurrently). Full SARTE status. Course designed to provide students with the basic statistical concepts needed to interpret results of psychological and educational test results. Study is given to those special procedures used to evaluate and diagnose educational problems in exceptional students with particular emphasis on criterion-referenced and developmentally based tests. Practice in design of instruments to evaluate motor, cognitive, language and social/emotional development as well as academic achievement will be included. Two hours lecture and two hours laboratory per week. Must be taken concurrently with SPED 361. (Varies)

441. Practice in Assessment and Evaluation of Individuals with Exceptionalities. Credit 3 hours. Prerequisites: SPED 365, 366, 367, and 442. Must be taken concurrently with SPED 465. Supervised practice in administering and interpreting standardized and informal tests. Focus on use of developmentally based evaluation procedures as well as measurement and evaluation in the modern school program. Emphasis is placed on the diagnosis of the learners' needs in reading, written expression, and math and prescription of appropriate activities for advancement. Knowledge of and skills for teaching and assessing reading are featured. (Summer)

442. Developing Family and Professional Partnerships Through Collaboration. Credit 3 hours. Prerequisites: Full SARTE status and SPED 200. This course provides an overview of the collaborative issues between families and professionals. Family systems and family life cycle

theory and issues surrounding families who have children with disabilities are reviewed. Development of communication skills between candidates and families of individuals with disabilities are highlighted. Candidates develop strategies to become effective collaborators with parents/families who have children with disabilities. Special Education majors only. Competency-based clinical practice/ service-learning / professional development is required. (Spring)

457/557. Alternative/Augmentative Communication Strategies for Individuals with Significant Disabilities. Credit 3 hours. This course presents alternative communication, including aided and unaided communication, such as sign language, body/gestural systems, graphic communication, and technology. (Summer)

458/558. Computer Applications for Individuals with Special Needs. Credit 3 hours. Prerequisites: SPED 200 or 600, EDUC 201 or permission of Department Head. A course designed to provide an overview of microcomputers and other technology with an emphasis on applications for special populations. Topics include basic computer operations/adaptations, learning theories related to educational/clinical uses of technology, computer-managed instruction, and computer-assisted instruction. Awareness of technology-related ethical issues and knowledge of resources useful to computer users will be components of the course. Credit cannot be given for both CSD 552 or SPED 458/558. (Varies)

465/565. Clinical Practice in Inclusive Settings. Credit 3 hours. Prerequisites: SPED 365, 366, 367, and 442. Must be taken concurrently with SPED 441, or permission of Department Head. Clinical practice in teaching students with disabilities in an inclusive, integrated setting. Experience in cooperative planning, implementation, assessment, coordination, and teaching within the inclusive classroom setting. (Summer)

481/581. The Exceptional Family. Credit 3 hours. Prerequisite: SPED 200 or 600 or permission of the Department Head. To enhance the student's knowledge and empathic understanding of family dynamics in American Society. Special emphasis given to families with atypical children whose presence demands frequent adaptive maneuvers and long-term adjustments. Study of counseling methods applied to the exceptional child and family will constitute a major portion of the course. Appropriate for teachers, counselors, nurses, social workers and others serving the exceptional family. (Varies)

490. Special Topics Seminar in Special Education. Credit 1-4 hours. Prerequisite: SPED 200 and permission of Department Head. An intensive examination of issues relevant to the field of special education. The course will focus on contributions of research, philosophy, and current best practices as they apply to the education of students with special needs. Course may be repeated for credit as topics vary for a maximum of 12 credit hours. (Fall, Spring)

495/595. The Inclusion of Students with Disabilities in the Regular Classroom. Credit 3 hours. Prerequisites: SPED 200 or 210, Full SART status and Introductory Portfolio. This course provides special and general education candidates with the knowledge, skills, and dispositions necessary to educate students with diverse needs in inclusive classrooms. Content includes characteristics of diverse learners; special education policies, procedures, and forms; interventions; accommodation, modification, and differentiation strategies; assistive technology; collaboration and co-teaching models; group management; assessment techniques; and reflective practice. Must be taken concurrently with EDUC 415, EDUC 484, or ECE 422 depending on area of certification. Field experience is required. Education majors only. (Fall, Spring)

600. Introduction to the Education of Individuals with Exceptionalities. Credit 3 hours. A course for educators, students in behavioral sciences and students beginning graduate study in education. Study of relevant research dealing with the physical, mental, emotional, and social traits of individuals with exceptionalities. Current issues in the development of educational programs for individuals with special needs will be addressed. (Summer, Spring)

601. Organization and Administration of Classes for Individuals with Exceptionalities. Credit 3 hours. Prerequisite: SPED 200 or 600. A study of the principles of administration as they pertain to special education. Emphasis will be on class structure, supervision, relationship to the total educational program, and financial structure of classes for Individuals with Exceptionalities. (Varies)

602. Seminar in Special Education. Credit 3 hours. Prerequisites: SPED 200 or 210 or 600 and EDF 600 or department consent. Additionally, students pursuing a Master of Education, Special Education must have a completed all degree course work before taking SPED 602. An intensive examination of the issues relative to the special education program. This course will be interdisciplinary in nature and will focus upon contributions of research, philosophy, history, and recent trends in special education as they apply to the resolution of major issues in special education. This is the capstone seminar of the graduate program in special education and is the last of the required courses for a Master of Education, Special Education. May be repeated for a total of 6 hours of credit. (Varies)

603. Transition Issues for Individuals with Disabilities. Credit 3 hours. Prerequisite: SPED 200 or 210 or 600. Identification of transition needs of individuals with disabilities with emphasis on positive student outcomes and adult lifestyles. Visitation of employment facilities required. (Summer)

608. Evaluation of Individuals with Disabilities. Credit 3 hours. Theory, administration, and interpretation of formal and informal instruments to assess personal-social-school adjustment, educational level, intellectual functioning, and sensory deficits of individuals with disabilities. (Fall, Spring)

612. Behavioral Assessment and Intervention with Individuals with Disabilities. Credit 3 hours. Prerequisite: SPED 200 or 210 or 600. Systematic behavioral assessment and intervention strategies with individuals with disabilities. Practical application of strategies with individuals with disabilities will be an integral part of the course. (Fall, Spring)

613. Consulting Teacher Strategies. Credit 3 hours. Prerequisite: SPED 200 or 210 or 600. A study of effective techniques and strategies of consultation, collaboration and communication in the schools. The role of consulting teacher will be emphasized. (Summer)

614. Assessment and Diagnostic/Prescriptive Strategies of Individuals with Exceptionalities. Credit 3 hours. Prerequisite: SPED 608. Theory, administration, and interpretation of formal and informal assessment measures which assist in designing prescriptive strategies to meet the unique needs of individuals with exceptionalities. (Odd Fall Semesters)

615. Compliance Issues in Special Education. Credit 3 hours. A study of compliance issues as they pertain to special education is presented. Emphasis will be on the Louisiana State Plan for special education, the legal basis for special education, interpretation of federal and state laws, due process proceedings, federal and state litigation, discipline regulations, child identification, state and federal reports, complaint management systems, state, federal, local investigations, free appropriate education, least restrictive environment, and funding. (Varies)

616. Supervised Internship in Evaluation of Individuals with Exceptionalities. Credit 6 hours. Prerequisites: ESPY 605, and SPED 608, 612, 613, 614, 663, and prior approval of the Department Head. A supervised internship with individuals with exceptionalities. Emphasis will be placed on evaluation and implication for educational intervention through the development of individualized assessment/intervention plans. One hundred child contact hours required. (Varies)

625. Independent Readings and Research in Exceptionalities. Credit 3 hours. Prerequisites: Advanced standing in special education and permission of the Department Head. May be repeated for a total of 6 hours credit. (Varies)

641. Practicum in Assessment and Evaluation of Individuals with Disabilities. Credit 3 hours. Prerequisites: SPED 608 and SPED 663. Supervised practice in administering and interpreting standardized and informal tests for individuals with disabilities. Focus on use of criterion-referenced and developmentally-based procedures. Sixty hours of practicum experiences are required. (Varies)

642. Practicum in Special Education Administration. Credit 3 hours. Prerequisites: Completion of all requirements leading to certification in Parish or City School Supervisor/Director of Special Education and permission of Department Head. This course meets the three-hour requirement for a practicum in special education administration that is necessary for certification as a Parish or City School Supervisor/Director of

Special Education. Course will focus on the role of the administrator in all aspects of implementation of federal, state and local regulations regarding special education. (Varies)

649. Instructional Strategies for Individuals with Significant Disabilities. Credit 3 hours. The study of instructional arrangements and strategies for implementing appropriate educational programs for students with severe disabilities. Utilization of systematic instruction and data to develop and evaluate the effectiveness of programs will be emphasized. (Spring)

650. Introduction to the Characteristics and Development of Individuals with Significant Disabilities. Credit 3 hours. This course presents an overview of characteristics and development of individuals with significant disabilities with an emphasis on the impact on the total life and development of the individual. An exploration of litigation and legislation, etiology and a study of the effects of the interaction of significant disabilities on normal developmental processes will be included. (Varies)

658. Advanced Teaming Strategies of Working with Paraprofessionals and Related Service Providers. Credit 3 hours. Prerequisite: SPED 200 or SPED 210 or SPED 600 or permission of the Department Head. The focus of this course will be teaming and effective communication strategies for working with paraprofessionals and related service providers. The dynamics of interdisciplinary and interagency teaming including different models of teaming (e.g. multidisciplinary, interdisciplinary, and transdisciplinary) and the concept of role release will be explored. The role of paraprofessionals, and medical/related service providers including methods and techniques for obtaining appropriate support personnel, supervising, and coordinating the paraprofessional will be discussed. Experience component required. (Varies)

659. Curriculum Design for Individuals with Severe/Profound Impairments. Credit 3 hours. Prerequisite: SPED 600 or 650 or permission of Department Head. Curriculum design for individuals with severe/profound impairments is studied. Strategies for inclusion, community-based programming, and instruction in a variety of natural environments will be emphasized. (Varies)

660. Learning Principles and Classroom Behavior Management and Intervention Strategies for Individuals with Severe/Profound Impairments. Credit 3 hours. Prerequisite: SPED 200, 600, or 650 or permission of the Department Head. This course will provide a review of general learning principles and behavioral analysis techniques appropriate for individuals with severe/profound impairments. Emphasis will be on proactive techniques, environmental structuring and implementation of positive behavior support strategies. (Varies)

661. Methods of Designing and Assessing Curricula for Individuals with Mild/Moderate Impairments. Credit 3 hours. Prerequisite: SPED 200 or 600. Design, adaptation and evaluation of curricula for students with mild/moderate impairments is conducted. Experience in preparing developmentally and academically sequenced materials as well as a review of commercially prepared curricula is included. (Varies)

662. Approaches to Teaching Students with Learning and Behavior Problems. Credit 3 hours. Prerequisite: SPED 200 or 600. Investigation of the various instructional models for teaching students with mild/moderate impairments. Emphasis on strategies which promote motivation and efficient student learning included. (Varies)

663. Methods of Teaching Basic Subjects to Individuals with Mild/Moderate Disabilities. Credit 3 hours. Prerequisites: SPED 200 or 210 or 600 and SPED 608. This course integrates the basic skills with instructional processes and methods of teaching academic subjects. It includes the individualization techniques and strategies necessary for teaching individuals with mild/moderate disabilities. Experience component required. (Spring)

664. Classroom Organization and Management for Students with Mild/Moderate Disabilities. Credit 3 hours. Prerequisite: SPED 200 or 210 or 600. This course addresses classroom organization strategies to meet the academic and behavioral needs of students with mild/moderate disabilities. Scheduling, physical structure of the room and use of learning and interest centers will be addressed as well as non-behavioristic management strategies. Field experience component required. (Varies)

665. Humanistic Approaches to Managing the Child with Mild/Moderate Impairments. Credit 3 hours. Prerequisite: SPED 200 or 210 or 600 or department consent. Non-behavioristic approaches used to assist development of internal control of behavior and actualization of self is studied. Experience component required. (Varies)

667. Assessment and Instruction for Diverse Populations in Inclusive Classrooms. Credit 3 hours. Prerequisites: SPED 200 or 210 or 600. This is a core course for graduate students in all master's programs in Curriculum and Instruction. This course provides an understanding of how special education policies and practices are applied in inclusive classrooms. (Fall, Spring)

670. Instructional and Assistive Technology for Individuals with Disabilities in Educational and Community Environments. Credit 3 hours. Instructional and assistive technology classifications, legislation, services and devices; benefits, resources, terminology across environments; impact of technology on learning needs. Competency-based clinical practice to develop case studies will be an integral part of the course. (Summer, Spring)

675. Basic Adaptive Skills and Prevocational Needs of Exceptional Individuals. Credit 3 hours. Prerequisite: SPED 200 or 600 or permission of the Department Head. Attention will be directed toward the basic living and prevocational skills needed by the exceptional individuals. Experience component. (Varies)

676. The Inclusive Classroom: Methods of Designing and Assessing Curricula for Culturally and Linguistically Diverse Individuals with Exceptionalities. Credit 3 hours. Prerequisite: SPED 200 or 600. This course focuses on implications of multicultural trends and issues with relation to designing and choosing curricula. The impact of learning style, culture and language variation on the education of minority students with exceptionalities will be emphasized. (Varies)

677. Seminar in Communication Disorders in Culturally and Linguistically Diverse Populations. Credit 3 hours. Prerequisite: SPED 200 or 600. Focuses on study of language development and disorders within a sociocultural perspective. This course will emphasize assessment and intervention of language disorders for handicapped students with culturally diverse backgrounds. (Varies)

680. Families in Early Intervention: Sociocultural Partnerships and Interdisciplinary Perspectives. Credit 3 hours. This course is designed to explore issues and models of family-professional and interpersonal relationships in early intervention settings. Collaborative communication and problem-solving strategies are emphasized in the context of diversity. Competency-based clinical practice required. (Varies)

681. Problems of Atypical Language Development. Credit 3 hours. Prerequisite: SPED 200 or 600. Normal language development will be reviewed and atypical language development patterns will be studied. Identification techniques and approaches to habilitation will be surveyed. (Varies)

682. Foundations of Early Education for Young Children with Disabilities. Credit 3 hours. Prerequisite: SPED 200, 210 or 600. An overview of the historical influences, research, controversies, and issues that provide the foundation for early education for exceptional children. Includes a review of model programs, their methods, materials, and rationales and a study of current issues in early intervention programs. Competency-based clinical practice required. (Fall)

683. Instructional Program Implementation for Young Children with Disabilities. Credit 3 hours. Prerequisite: SPED 200 or 210 or 600. Individual and group teaching strategies are analyzed within the framework of the classroom system and home-based intervention. Curriculum goals and content and the learning environment are studied with reference to developmental process. Experience component required. (Summer)

684. Biophysical Development, Medical Management and Nutritional Needs of Young Children with Disabilities. Credit 3 hours. Prerequisite: SPED 200 or 210 or 600. An overview of normal development from conception to age five. Includes development of the musculoskeletal systems, and neurological systems as well as influences of genetics, diseases, trauma and chemicals on the developing child. Experience component required. (Varies)

685. Language and Literacy Development for Young Children with Disabilities. Credit 3 hours. Prerequisite: SPED 200 or 210 or 600. Normal and abnormal language development and appropriate intervention procedures for young children with disabilities is explored. Content related to emergent and early literacy and the reading process is discussed in the context of providing candidates with the knowledge and skills to design, organize, and apply developmentally appropriate practices in a literacy program for young children with disabilities. Experience component is required. (Fall)

686. Learning Theory in Applied Settings. Credit 3 hours. Prerequisites: SPED 200, 210, or 600. Investigation and application of major theories of learning, with emphasis on behavioral and cognitive approaches is presented. Design and implementation of management and instructional procedures in educational settings is included. (Summer)

687. Research Methods in Special Education and Speech Pathology. Credit 3 hours. Principles, procedures, and techniques of research with an intensive survey of scientific investigations in special education, speech pathology, audiology, and related fields is studied. Emphasis on practical application for teachers/practitioners is provided. Credit cannot be granted for both SPED 687 and CSD 687. (Varies)

688. Evaluation of Young Children with Disabilities. Credit 3 hours. Prerequisites: SPED 200 or 210 or 600 or departmental consent. Theory, administration, and interpretation of instrumentation to assess family characteristics, and personal-social, cognitive, motor, communication, self-help, and sensory abilities of young children who are "at risk" or have an identified disability. Competency-based clinical practice required. (Spring)

689. Teaming, Physical, and Medical Management. Credit 3 hours. Prerequisite: SPED 200, 210, or 600 or permission of Department Head. This course presents an overview of teaming and effective communication strategies for working with paraprofessionals and related service providers; the dynamics of interdisciplinary and interagency issues; the role of paraprofessionals and medical/related service personnel; normal development from conception to age five including development of the musculoskeletal systems, neurological systems and the influences of genetics, diseases, trauma and chemicals on the developing child. (Summer)

690. Student Teaching I in Special Education: Early Intervention of Young Children with Disabilities. Credit 3 hours. Prerequisites: SPED 682, 683, and 689 or permission of Department Head. This is the first semester of a supervised and directed experience in teaching programs for young children with disabilities, birth to age 5. Course is for students not currently employed as full-time early interventionists. Available on a pass/fail basis only. (Varies)

693. Teaching Internship in Special Education: Early Intervention of Young Children with Disabilities. Credit 3 hours. Prerequisites: SPED 682, 683, 693 or permission of Department Head. Supervised and directed experience in teaching programs for young children with disabilities, birth to age 5. Course is for students currently employed as full-time early interventionist and pursuing certification in early intervention. May be repeated for a total of six hours credit, with no more than three credit hours in one semester. This course will be graded Pass/Fail only. (Varies)

694. Student Teaching in Special Education: Early Intervention. Credit 6 hours. Prerequisites: SPED 683 and 684 or permission of Department Head. Supervised and directed experience in teaching in programs for young children with disabilities, birth to age 5. Course is for students not currently employed as an early interventionist, but pursuing early intervention certification. This course will be graded Pass/Fail only. (Varies)

696. Teaching Internship in Special Education: Significant Disabilities. Credit 3 hours. May be repeated for 6 total hours credit. Prerequisite: Permission of the Department Head. Supervised and directed experience in teaching students with significant disabilities in a variety of educational settings. (Fall, Spring)

697. Teaching Internship in Special Education. Credit 3 hours. Prerequisite: SPED 663 or permission of Department Head. Supervised and directed experience in teaching in special education classrooms. Course is for students currently employed as full-time special education teachers and pursuing certification in special education. May be repeated for a total of six hours credit, with not more than three credit hours in one semester. This course will be graded Pass/Fail only. (Varies)

699. Student Teaching II in Special Education: Early Intervention of Young Children with Disabilities. Credit 3 hours. Prerequisite: SPED 690. This is the second semester of a supervised and directed experience in teaching programs for young children with disabilities, birth to age 5. Course for students not currently employed as full-time early interventionists. Available on a pass/fail basis only. (Varies)

703. Advanced Transition Issues for Individuals with Disabilities. Credit 3 hours. Prerequisite: Permission of the Department Head to verify SPED Mild/Moderate Certification. This course will focus on advanced transition needs of individuals with mild/moderate disabilities. An emphasis will be on positive student outcomes and adult lifestyles. Candidates will acquire the knowledge and skills necessary to guide students in the development of IEPs and transition plans. Additionally, candidates will consider culture and diversity when assisting students in taking active roles in developing education and lifestyle goals. There will be a field component incorporated into this class. (Fall, Summer)

704. Effective Practices in Instructional and Assistive Technology. Credit 3 hours. Prerequisite: SPED 670. Current practices, strategies, planning, and device knowledge and skills necessary to implement services for individuals with disabilities. Field experience to develop case studies will be an integral part of this course. (Varies)

705. Evaluation and Assessment for Instructional and Assistive Technology. Credit 3 hours. Prerequisite: SPED 670. Theory, administration, and interpretation of formal and informal assessment measures to determine the need for assistive technology devices and services. Professional and ethical practice, collaboration, problem solving, and the decision process in educational settings will be emphasized. Field experience to develop case studies will be an integral part of the course. (Varies)

706. Practicum in Instructional and Assistive Technology for Individuals with Disabilities. Credit 3 hours. Prerequisites: SPED 670, 704, and 705. This course will entail candidates developing and implementing action research in instructional and assistive technology for individuals with disabilities. (Varies)

708. Theories and Approaches to Assessing Individuals with Disabilities. Credit 3 hours. This course focuses on assessment theories, creating, administering, scoring, and interpreting informal and formal assessment instruments that meet the diverse needs of individuals with disabilities. Assessment activities include addressing social, visual/motor, and sensory deficits of individuals with disabilities. (Fall)

710. Advanced Theory and Practice in Assessment and Evaluation of Individuals with Exceptional Learning Needs. Credit 3 hours. Prerequisite: SPED 708. Advanced course in the principles of tests and measurement. The course covers the various tenets of test theory and principles to determine technical adequacy of test scores. Basic concepts including: reliability, validity, norms, and methods of expressing test scores statistically are studied. Test administration, scoring, and interpretation applied to individuals with exceptionalities. Practice in test administration, interpretation, and educational diagnosis for Educational Diagnosticians. The course will examine CHC theory and other classical and item response theory models. (Varies)

716. Supervised Internship in Evaluation of Individuals with Exceptionalities. Credit 3 hours. Prerequisites: SPED 612, 613, 614, 708, 710, or prior approval of Department Head, and special education certification. A supervised internship with individuals with exceptionalities. Emphasis will be placed on evaluation and implication for educational intervention through development of individualized assessment/intervention plans. Competency-based clinical practice required. (Varies)

741. Practicum in Linking Assessment to Instruction. Credit 3 hours. Prerequisites: SPED 708 and 763. This course provides supervised practice in implementing research-based assessment and instructional practices to individuals with disabilities in inclusive classroom settings. The practicum focuses on data-based decision making that links research-based assessment results to instructional methods and strategies that will impact achievement for individuals with disabilities. Candidates will be required to collaborate with individuals with disabilities, their family members, school faculty and administrators, and other interested stakeholders that have relationships with individuals with disabilities. (Varies)

763. Advanced Methods of Teaching Individuals with Disabilities. Credit 3 hours. Prerequisite: SPED 708. This course will enhance and expand candidate's basic knowledge about instructional processes and methods of teaching academic subjects to students with disabilities through strategies, direct instruction, differentiating instruction, and universal design for learning. A special emphasis will be on communication/literacy issues with respect to individuals with disabilities. This course will enable candidates to develop skills needed to proceed with National Board for Professional Teaching Standards certification. (Spring)

765. Humanistic Approaches to Developing Inclusive Classrooms. Credit 3 hours. Prerequisite: SPED 200, 210, or 600. Non-behavioristic approaches used to assist development of appropriate behaviors in inclusive classrooms will be explored. Field experience component is required. (Varies)

767. Advanced Strategies for Developing Partnerships with Families of Children and Youth with Disabilities. Credit 3 hours. This course is designed to develop an understanding of exceptional families and the dynamics, roles, and relationships within families, schools, and communities in a pluralistic society. Special emphasis is placed on application of family systems theory, development of family/school partnerships, and examination of the impact of special education laws and policies on exceptional families. Competency-based clinical practice required. (Summer, Fall)

770. Capstone Seminar. Credit 3 hours. This is the capstone seminar for candidates enrolled in the Professional Special Education Program. Emphasis is placed on preparing special educators for the roles as teacher leaders and collaborators for change and improvement in districts and schools. Further, candidates will expand their knowledge of strategies that will prepare them to continue to be lifelong learners. The competencies of this course are derived from the requirements for teachers by the national standards for the Council for Exceptional Children, the Standards for the NBPTS (Exceptional Needs Specialist), CAEP, and INTASC, and guidance from the special education program faculty. Must be taken during final semester of course work. (Fall, Spring)

Substance Abuse Counseling (SAC)

619. Substance Abuse Counseling. Credit 3 hours. Prerequisites: COUN 601, 603 and 605. This course will provide a general knowledge base concerning the emotional, social, physical and spiritual impact of addiction upon the abuser and the family system. Special emphasis will be given to the principles of the progression of addiction, treatment modalities, recovery and relapse prevention. (Summer, Spring)

Theatre (THEA)

131. Introduction to the Theatre. [LCCN: CTHE 1013, Introduction to Theatre]. Credit 3 hours. A course designed to impart a deepened appreciation and understanding of today's theatre by surveying both contemporary techniques and the contribution of theatre to world culture. Consideration of the interrelation of all aspects of theatre production and the contributions of various related arts. Open to all students. (Fall, Spring)

201. Voice for the Actor. Credit 3 hours. Prerequisite: THEA 234. This course will focus on the development of the actor's voice and speech techniques for stage and film. Emphasis will be placed on how the voice is connected to the mind (impulse), emotion, and body. Linklater voice work, among other techniques, will be explored. Methods such as relaxation, alignment, breathing, phonation, resonance, articulation, vocal range, inflection and rhythm skills will be developed through daily vocal warm-up and workout activities. Students will learn the American sounds of the International Phonetic Alphabet (IPA). IPA will then be applied to learning standard American dialect which will serve as a basis for applying IPA to other dialects. Six hours of laboratory per week. (Fall, Spring)

217. Script Analysis. Credit 3 hours. Prerequisite: THEA 131. This course provides students with the skills necessary to analyze dramatic texts. Students will be introduced to a wide range of plays spanning various genres throughout theatre history. The basic skills needed to understand a play will be learned through reading, attending productions, discussion and a variety of analytical exercises. Analysis from the perspective of actor, designer and director will be explored. (Summer, Fall, Spring)

231. Stagecraft. [LCCN: CTHE 2303, Stagecraft]. Credit 3 hours. An introduction to technical Theatre, this course will provide the student with a background in the tools, materials, techniques, and processes used in the execution of theatrical designs. Scenery, lighting, stage and scene painting will be discussed along with such specialty areas as properties, woodworking, and construction techniques. This course includes a production/ crew component as a means of applying the lecture material in an actual production setting. (Summer, Fall, Spring)

234. Introduction to Acting. [LCCN: CTHE 2103, Acting I]. Credit 3 hours. A course designed to familiarize the student with the history and nature of the techniques of acting-concentrating on understanding and mastering skills associated with body movement and vocal production in character analyses and performances. Refereed performances, attention to television acting; a basic course. (Fall, Spring)

240. Stage Movement. Credit 3 hours. Prerequisite: THEA 234 or permission of the department head. A foundational course on the dynamics of the performer's body as a vital, expressive instrument in theatrical production. Course focus is on building performer awareness of the body, personal physical habits, and efficacy of the body as well as building performer strength, flexibility, endurance, and release of unnecessary body tensions. This preparatory work enables the student for further development in theatrical storytelling and character development using physical approaches in tandem with character analysis; in augmenting performer presence; and in creating ensemble and solo movement compositions through improvisation and crafting. (Varies)

250. Stage Management. Credit 3 hours. Prerequisite: THEA 131 and 231 or permission of the department head. This course is an introduction to stage management techniques and practical application during the pre-production, rehearsal, and performance processes. Students will explore the core functions and responsibilities of stage management including blocking and calling techniques, organizational skills, and interpersonal communication. Methods for documentation and communication of the rehearsal and production process will be emphasized. (Varies)

332. Acting for the Camera. Credit 3 hours. Prerequisite: THEA 234. An in-depth study of the techniques required for performing before the camera. Special attention paid to the technical considerations specific to film/television acting. Emphasis on performance. (Spring)

333. Design for Stage and Studio. Credit 3 hours. This course is designed to introduce students to the fundamental elements and principles of design and how they apply to the theatre experience of scenery, and lighting design. Students will create a vocabulary for the discussion, appreciation and evaluation of theatrical design, and develop an appreciation, understanding and respect for the work and contribution of theatre design and designers to the experience of a theatre production. (Spring)

335. Advanced Acting. Credit 3 hours. Prerequisite: THEA 234. A course designed for in-depth study of varied dramatic roles. American and continental theories will be examined and applied to advanced character analyses and performances. Extensive performance coupled with professional critiques. (Fall)

337. Makeup Design for Stage and Studio. Credit 3 hours. This introductory course will cover the methodologies and concepts of makeup design for stage, screen, and photography. Students will be instructed in products, tools, and techniques of makeup application, basic and character makeup design and application, special effects, and prosthetics, as well as hair and wig styling. Lectures, demonstrations, and laboratory work will be completed in conjunction with Southeastern Theatre productions, and assigned design projects. Purchase of makeup and drawing materials required. (Fall, Spring)

338. Costume Design for Stage and Studio. Credit 3 hours. This comprehensive course will cover the methodologies and concepts of costume design for stage and screen. Students will develop skills in areas such as rendering, costume history, research methods, play and character analysis, and costume crafts. Lectures, demonstrations, and laboratory work will be covered in conjunction with Southeastern Theatre productions and assigned design projects. Purchase of drawing materials required. (Spring)

341. Theatre Directing. Credit 3 hours. Prerequisites: THEA 231 and 234 and Junior Standing or permission of the department head. Fundamental theories for the stage. Students select, cast, direct, and present scenes and/or short plays for class and public presentation. (Varies)

400. Special Topics in Theatre. Credit 3 hours. Prerequisite: Junior standing or permission of Department Head. A variable content course which treats subjects of special interest. The content will change from semester to semester and will be advertised in advance. May be taken by both majors and non-majors. May be repeated once for a total of 6 hours. (Varies)

401. Theatre History I. Credit 3 hours. Prerequisite: THEA 131 or permission of the department head. A creative and critical engagement with world drama and theatre and performance texts and practices from roughly 534 B.C.E. to 1690 C.E. Students engage in close readings of texts from the periods, theatrical and performance conventions and practices, and observe legacies and resonances in contemporary theatre. Through critical reading responses, individual research, and creative projects, students explore theatre and performance as a critical lens for viewing social and cultural life, and as a creative act of worldmaking. (Varies)

402. Theatre History II. Credit 3 hours. Prerequisite: THEA 131 or permission of the department head. A creative and critical engagement with world drama and theatre and performance texts and practices from the early 1700s to the millennium. Students engage in close readings of texts from the periods, theatrical and performance conventions and practices, and observe legacies and resonances in contemporary theatre. Through critical reading responses, individual research, and creative projects, students explore theatre and performance as a critical lens for viewing social and cultural life, and as a creative act of worldmaking. (Varies)

403/503. Independent Study in Theatre. Credit 3 hours. Prerequisite: Junior standing and permission of the Department Head and written permission of instructor. Areas of study may include, but are not limited to, the following topics: Stage Combat, Musical Comedy, Playwriting, Arts Administration, Stage Speech, Advance Performance, Creative Dramatics, Character Makeup and Masque, Refereed Directing, Dialects, Scenic Painting, and Community Theatre. This course is used for study abroad. (Varies)

404/504. Independent Study in Theatre. Credit 3 hours. Prerequisite: Junior standing and permission of the Department Head and written permission of instructor. Areas of study may include, but are not limited to, the following topics: Stage Combat, Musical Comedy, Playwriting, Arts Administration, Stage Speech, Advance Performance, Creative Dramatics, Character Makeup and Masque, Refereed Directing, Dialects, Scenic Painting, and Community Theatre. (Varies)

430. Acting and Directing Workshop. Credit 3 hours. Prerequisites: THEA 131, 234, 341 or permission of the department head. This capstone course is designed to explore the collaborative process in theatre making, drawing on skills of performance, directing, and dramaturgy. Students will examine various scenes and develop short performance pieces to present in class. Various methods for devising performance will be investigated, including: text-based, image-based, improvisation, site-specific, object-based, and character-based techniques. (Varies)

431/531. Play Production. Credit 3 hours. Prerequisites: THEA 231 and 234 and Junior standing or permission of the Department Head. This course is a survey of stage management and theatre administration exploring the relationship between the artistry and the execution of theatre as a fine arts discipline. Topics to be studied include resumes, stage management, theatre administration, professional unions, production management, publicity/marketing, box office, program design, website development and house management. As a capstone course, students will also build their own resumes and webpages to support their professional development. (Every other Fall Even)

433/533. Theatre History. Credit 3 hours. Prerequisite: THEA 131 or permission of the Department Head. The development of the Western Theatre from the time of the ancient Greeks to the present. Emphasis on the physical theatre and production styles. (Fall, Spring)

435/535. Children's Theatre. Credit 3 hours. An introductory course in theatre history as it applies to children. Emphasis will be placed on the criteria for productions with children as the audience and adults as actors and on productions using children as actors. Activities in the use of creative dramatics will also be included. (Every other Fall Odd)

Theatre Laboratory Courses (TLAB)

Laboratory courses in theatre are offered for credit through satisfactory participation, but no more than a total of three semester hours may be applied toward a minor in Theatre. Credit above three hours may be used to satisfy elective requirements in any degree program.

137-138/237-238/337-338/437-438. Theatre Laboratory. Credit 1 or 2 hours each. Credit will be earned by successful completion of significant work as determined by the instructor of record. (138, 238, 338, 438-Fall; 137, 237, 337, 437-Spring)

435-436/535-536. Advanced Theatre Laboratory. Credit 2 hours. Prerequisite: permission of the Department Head. Performance of an important role or significant creative work in technical production. Credit for acting subject to audition in open tryouts. (Varies)

Zoology (ZOO & ZOOL)

210. Human Anatomy & Physiology Laboratory I Simulation. Credit 1 hour. Prerequisites: Registration in or prior credit for ZOO 250, eligibility for the CALL program (RN to BSN in Nursing), and permission of the Department Head of Biological Sciences. A series of online, virtual, and science kit laboratories designed to illustrate the course material in ZOO 250, focusing on the skeletal system, the muscular system, the skin, histology, and the nervous system. Students will relate topics learned in lectures to a virtual laboratory setting using principles of anatomy and physiology to answer questions relevant to human health and disease. This course does not provide practical experience with biological specimens, chemicals, instrumentation, or laboratory safety procedures. This course is exclusively for students in the CALL nursing program and may not be used to substitute for any Biology, Microbiology, or Zoology laboratory or lecture course, nor can it be used to satisfy any prerequisites, corequisites, or requirements for any other courses. A laboratory fee is required for this course. (Summer, Fall, Spring)

211. Human Anatomy & Physiology Laboratory II Simulation. Credit 1 hour. Registration in or prior credit for ZOO 251, eligibility for the CALL program (RN to BSN in Nursing), and permission of the Department Head of Biological Sciences. A series of online, virtual, and science kit laboratories designed to illustrate the course material in ZOO 251, focusing on the cardiovascular system, the respiratory system, blood, the digestive system, the urinary systems, and reproduction and development. Students will relate topics learned in lectures to a laboratory setting using principles of anatomy and physiology to answer questions relevant to human health and disease. This course does not provide practical experience with biological specimens, chemicals, instrumentation, or laboratory safety procedures. This course is exclusively for students in the CALL nursing program. In addition, this course may not be used to substitute for any Biology, Microbiology, or Zoology laboratory or lecture course, nor can it be used to satisfy any prerequisites, corequisites, or requirements for any of these courses without the consent of the Department Head of the student's major. A laboratory fee is required for this course. (Summer, Fall, Spring)

242. Principles of Human Biology. Credit 4 hours. Prerequisites: GBIO 151 and BIOL 152 or equivalent and all prerequisite courses must have a grade of "C" or better. Principles of Human Biology has been primarily designed for students pursuing careers with curricula that require a single semester of human biology such as Kinesiology. The major areas of subject concentration are the Intramuscular, cardiovascular, respiratory, nervous, and sensory systems. Biology majors may not use this course to fulfill their major requirements. However, it may be used to fulfill an elective requirement and in calculating cumulative and major averages. Three hours of lecture and two hours of laboratory per week. (Varies)

250. Human Anatomy and Physiology Lecture I. [LCCN: CBIO 2213, Human Anatomy and Physiology I]. Credit 3 hours. Prerequisites: GBIO 151 and BIOL 152 and registration in or prior credit for ZOO 252 or permission of the Department Head and all prerequisite courses must have a grade of "C" or better. Topics covered include: anatomical terminology and the structure and function of molecules, cells, tissues, and the integumentary, skeletal, muscular, and nervous systems. Three hours of lecture per week. This course cannot be used as a concentration elective for Biology majors; however, it may be used as a general elective. (Summer, Fall, Spring)

251. Human Anatomy and Physiology Lecture II. [LCCN: CBIO 2223, Human Anatomy and Physiology II]. Credit 3 hours. Prerequisites: ZOO 250 and registration in or prior credit for ZOO 253 or permission of the Department Head and all prerequisite courses must have a grade of "C" or better. Topics covered include the structure and function of the endocrine, cardiovascular, digestive, reproductive, respiratory, lymphatic, urinary, and excretory systems energy & metabolism as well as water and ion homeostasis. Three hours of lecture per week. This course cannot be used as a concentration elective for Biology majors; however, it may be used as a general elective. (Summer, Fall, Spring)

252. Anatomy and Physiology Laboratory I. [LCCN: CBIO 2211, Human Anatomy and Physiology I Lab]. Credit 1 hour. Prerequisites: Registration in or prior credit for ZOO 250 and all prerequisite courses must have a grade of "C" or better. A series of laboratory exercises designed to illustrate the course material in ZOO 250. Two hours of laboratory per week. Persons majoring in Biology may not use this course to fulfill their major requirements; however, it may be used to fulfill an elective requirement. A laboratory fee is required for this course. (Summer, Fall, Spring)

253. Anatomy and Physiology Laboratory II. [LCCN: CBIO 2221, Human Anatomy and Physiology II Lab]. Credit 1 hour. Prerequisites: Registration in or prior credit for Zoology 251 and all prerequisite courses must have a grade of "C" or better. A series of laboratory exercises designed to illustrate the course material in Zoology 251. Two hours of laboratory per week. Persons majoring in Biology may not use this course to fulfill their major requirements; however, it may be used to fulfill an elective requirement. A laboratory fee is required for this course. (Summer, Fall, Spring)

301. Invertebrate Zoology. Credit 4 hours. Prerequisites: GBIO 153 and BIOL 154 or equivalent and all prerequisite courses must have a grade of "C" or better. A general study of the principal forms of invertebrate animals. Two hours of lecture and four hours of laboratory per week. A laboratory fee is required for this course. (Summer)

302. Comparative Anatomy of the Vertebrates. [LCCN: CBIO 3234, Comparative Anatomy Lecture + Lab (Upper Level)]. Credit 4 hours. Prerequisites: GBIO 153 and BIOL 154 or equivalent and all prerequisite courses must have a grade of "C" or better. A comparative study of the anatomy of representative vertebrate animals. Three hours of lecture and three hours of laboratory per week. A laboratory fee is required for this course. (Fall)

331. Embryology. Credit 4 hours. Prerequisites: ZOO 301 and GBIO 200 and all prerequisite courses must have a grade of "C" or better. A comparative study of the embryology of invertebrates and vertebrates. Three hours of lecture and three hours of laboratory per week. A laboratory fee is required for this course. (Varies)

332. Animal Histology. [LCCN: CBIO 3613, Histology (Upper Level)] Credit 4 hours. Prerequisites: GBIO 153 and BIOL 154 or equivalent and Junior standing or consent of the Department Head and all prerequisite courses must have a grade of "C" or better. A study of normal animal microscopic anatomy; correlations with cellular and tissue function are given. Two hours of lecture and four hours of laboratory per week. A laboratory fee is required for this course. (Spring)

352. Field Zoology. Credit 4 hours. Prerequisites: GBIO 153 and BIOL 154 or equivalent and Junior standing or consent of the Department Head and all prerequisite courses must have a grade of "C" or better. A laboratory course designed to acquaint the student with the methods of collecting and identifying the common species of vertebrate animals found in Louisiana. One hour of lecture and six hours of laboratory per week. A laboratory fee is required for this course. (Varies)

392. Animal Physiology. [LCCN: CBIO 3643, Evolutionary Biology (Upper Level)] Credit 4 hours. Prerequisites: GBIO 200 or consent of the Department Head and all prerequisite courses must have a grade of "C" or better. A comparative approach to study the fundamental mechanisms which underlie the basic physiological processes in animals. Laboratory will involve research experiments emphasizing hands-on instrumentation and computer usage, data analysis and scientific written reports. Three hours of lecture and three hours of laboratory per week. A laboratory fee is required for this course. (Fall, Spring)

409/509. General Entomology. [LCCN: CBIO 3603, Entomology (Upper Level)] Credit 4 hours. Prerequisites: GBIO 153 and BIOL 154 or equivalent and Junior standing or consent of the Department Head and all prerequisite courses must have a grade of "C" or better. A general study of the earth's most diverse group of animals, the insects. Lecture will emphasize insect diversity, physiology, structure, and life history. Laboratory will focus on collection and identification of insects. Creation of an insect collection is a major component of the laboratory. Three hours of lecture and three hours of laboratory per week. A laboratory fee is required for this course. (Varies)

428/528. Waterfowl Management. Credit 3 hours. Prerequisites: GBIO 153 and BIOL 154 or equivalent and Junior standing or consent of the Department Head and all prerequisite courses must have a grade of "C" or better. A study of the principles, practices, and problems of waterfowl management, with an introduction to current research methods and pertinent literature. A two-hour laboratory stresses habitat evaluation with trips to waterfowl refuges. Waterfowl identification and aquatic plant identification are other laboratory objectives. Two hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Varies)

438/538. Mammalogy. Credit 4 hours. Prerequisites: GBIO 153, BIOL 154, and Junior standing or permission of the Department Head, and all prerequisite courses must have a grade of "C" or better. A study of the life history, distribution, systematics, evolution, and adaptations of mammals. Two hours of lecture and four hours of laboratory per week. (Varies)

453/553. Ecological Parasitology. Credit 4 hours. Prerequisites: GBIO 153, BIOL 154, and Junior standing or permission of the Department Head and all prerequisite courses must have a grade of "C" or better. Survey of the major parasitic taxa, including microparasites (protistans) and macro parasites (helminthes). Ecological aspects of host-parasite relationships, parasite life histories, and methods of transmission. Topics in the evolutionary ecology of parasites will focus on origins and evolution of complex life cycles, host specificity, and strategies of host exploitation. Patterns and processes of parasite aggregation, population dynamics, and community structure are analyzed. Four hours of lecture per week. (Varies)

455/555. Medical Parasitology. [LCCN: CBIO 3623, Parasitology (Upper Level)] Credit 4 hours. Prerequisites: GBIO 153, BIOL 154, and Junior standing or permission of the Department Head and all prerequisite courses must have a grade of "C" or better. A study of human parasites of significant medical importance. Two hours of lecture and four hours of laboratory per week. A laboratory fee is required for this course. (Varies)

456/556. Ichthyology. Credit 4 hours. Prerequisites: GBIO 153 and BIOL 154 or equivalent and Junior standing or permission of the Department Head and all prerequisite courses must have a grade of "C" or better. A study of the classification, structure, and life history of fishes, both freshwater and marine. Two hours of lecture and one four-hour laboratory per week. A laboratory fee is required for this course. (Even Fall Semesters)

457/557. Invertebrate Ecology. Credit 4 hours. Prerequisites: ZOO 301 or equivalent or permission of the Department Head and all prerequisite courses must have a grade of "C" or better. Field and laboratory study of ecological relationships of invertebrate animals. Observation and collection of invertebrates in terrestrial, marine, estuarine, and freshwater environments. Identification and preservation of specimens in the laboratory. Two Saturday field trips. Two hours of lecture and four hours of laboratory per week. A laboratory fee is required for this course. (Varies)

458/558. Fisheries Ecology and Management. Credit 4 hours. Prerequisites: GBIO 151, GBIO 153, Junior standing or permission of Department Head, and all prerequisite courses must have a grade of "C" or better. An evaluation of the theory and practice of fisheries ecology and management emphasizing management techniques and principles, including sampling and assessment methods, stocking, population and habitat manipulation, and regulations. The laboratory will focus on the use of sampling gears and data analysis. Two hours of lecture and four hours of lab per week. A laboratory fee is required for this course. (Varies)

465/565. Animal Development. [LCCN: CBIO 4503, Developmental Biology (Upper Level)] Credit 4 hours. Prerequisites: GBIO 200. Credit for or enrollment in GBIO 312 also recommended and all prerequisite courses must have a grade of "C" or better. A study of the major patterns of animal development and the mechanisms responsible for cell differentiation during development. Three hours of lecture and three hours of lab per week. A laboratory fee is required for this course. (Varies)

470/570. Ornithology. Credit 4 hours. Prerequisites: GBIO 153, BIOL 154, and Junior standing, or permission of the Department Head, and all prerequisite courses must have a grade of "C" or better. A study of the taxonomy, life history, ecology, evolution, and adaptations of birds. Two hours of lecture and four hours of laboratory per week. A laboratory fee is required for this course. (Varies)

471/571. Comparative Endocrinology. [LCCN: CBIO 4513, Endocrinology (Upper Level)] Credit 4 hours. Prerequisites: ZOO 392 or equivalent or permission of the Department Head and all prerequisite courses must have a grade of "C" or better. A study of the hormones regulating reproduction, growth, and homeostasis in animals, including humans. Three hours of lecture and three hours of laboratory per week. A laboratory fee is required for this course. (Varies)

475/575. Animal Behavior. Credit 4 hours. Prerequisites: GBIO 151, GBIO 153, and Junior standing, or permission of Department Head and all prerequisite courses must have a grade of "C" or better. This course will examine the biological basis of animal behavior, including molecular, cellular, physiological, ecological, and evolutionary aspects of survival and reproduction. Three hours of lecture and three hours of laboratory per week. A laboratory fee is required for this course. (Fall)

483/583. Introduction to Paleontology. Credit 4 hours. Prerequisites: GBIO 153 and BIOL 154 or equivalent and Junior standing or consent of the Department Head and all prerequisite courses must have a grade of "C" or better. A study of vertebrate evolution from Devonian fishes to man. The course is divided between vertebrate evolution and anthropology. Field experience will be emphasized using and teaching basic techniques and concepts. Three hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Varies)

499/599. Neurobiology. Credit 4 hours. Prerequisite: GBIO 200 or permission of the Department Head and all prerequisite courses must have a grade of "C" or better. A physiological approach to the study of the nervous system. The laboratory will focus on neurophysiology and neuroanatomy. Three hours of lecture and three hours of laboratory per week. A laboratory fee is required for this course. (Spring)

605. Developmental Biology. Credit 3 hours. A study of the molecular interactions and processes which occur during the developmental phases of organelle, cell, and tissue formation. Three hours of lecture per week.

608. Fisheries Biology. Credit 3 hours. Prerequisite: ZOO 456/556. Research methods in fishery biology; life histories, environmental relations, and fishery management problems. One hour of lecture and four hours of laboratory per week. A laboratory fee is required for this course. (Varies)

611. Advanced Invertebrate Zoology. Credit 4 hours. Prerequisite: ZOO 301 or equivalent. A study of the phylogeny, morphology, and biology of invertebrate animals. Two hours of lecture and four hours of laboratory per week. A laboratory fee is required for this course. (Varies)

630. Herpetology. Credit 4 hours. Prerequisite: ZOO 352 or equivalent. A course dealing with the survival strategy of amphibians and reptiles. Areas of study include evolution, dispersal, and populations of these organisms with emphasis on their role in the various ecosystems. Three hours of lecture and two hours of laboratory per week. A laboratory fee is required for this course. (Varies)

635. Endocrinology. Credit 4 hours. A study of the evolution, pharmacology, physiology, and structure of endocrine glands and hormones. This will include not only the medical implications, but also the role of hormones in the survival strategy of various organisms. Three hours of lecture and four hours of laboratory per week. A laboratory fee is required for this course. (Varies)

645. Environmental Physiology. Credit 4 hrs. A study of physiology in the content of an animal's physical, chemical, and social environment. Multiple levels of organization are considered, from organism to biochemistry. Three hours of lecture and three hours of laboratory per week. A laboratory fee is required for this course. (Varies)