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Prerequisite: a course you must successfully complete prior to enrolling in the course for which it is listed as a prerequisite. You must receive a grade of C (2.0) or better in order for the course to satisfy a prerequisite requirement, unless otherwise specified in the course description.

Corequisite: a course you may enroll in simultaneously as the course for which it is listed as a corequisite.

Co-enrolled: a course you must enroll in while simultaneously enrolled in another designated course.

NOTE: Weekly lecture/lab/external hours denoted in all course descriptions reference a standard sixteen (16) week fall or spring semester. For non-standard semesters/sessions (e.g. summer semesters, winter/spring mini-mesters, 12-week sessions, etc.), the lecture/lab/external material will be covered over a shorter period of time, resulting in more hours each week. Total contact hours will remain the same for each course regardless of the semester/session type or the teaching modality (e.g. internet, blended, face-to-face, etc.). Detailed weekly hour combinations are available in the specific course syllabus.

Courses included in the Core Curriculum are noted as a *Core Curriculum Course* after the course title.

(ACCT) ACCOUNTING

- +2301. (ACCT) Principles of Financial Accounting** **CIP 52.0301**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 This course is an introduction to the fundamental concepts of financial accounting as prescribed by U.S. generally accepted accounting principles (GAAP) as applied to transactions and events that affect business organizations. Students will examine the procedures and systems to accumulate, analyze, measure, and record financial transactions. Students will use recorded financial information to prepare a balance sheet, income statement, statement of cash flows, and statement of shareholders' equity to communicate the business entity's results of operations and financial position to users of financial information who are external to the company. Students will study the nature of assets, liabilities, and owners' equity while learning to use reported financial information for purposes of making decisions about the company. Students will be exposed to International Financial Reporting Standards (IFRS). **Prerequisites:** A student must be college ready in math according to TSI college-ready standards.
- +2302. (ACCT) Principles of Managerial Accounting** **CIP 52.0301**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 This course is an introduction to the fundamental concepts of managerial accounting appropriate for all organizations. Students will study information from the entity's accounting system relevant to decisions made by internal managers, as distinguished from information relevant to users who are external to the company. The emphasis is on the identification and assignment of product costs, operational budgeting and planning, cost control, and management decision making. Topics include product costing methodologies, cost behavior, operational and capital budgeting, and performance evaluation. **Prerequisites:** ACCT 2301.

(ACNT) ACCOUNTING TECHNOLOGY/TECHNICIAN

- #1303. (ACNT) Introduction to Accounting I** **CIP 52.0302**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 A study of analyzing, classifying, and recording business transactions in a manual and computerized environment. An emphasis will be on understanding the complete accounting cycle and preparing financial statements, bank reconciliations, and payroll.
- #1313. (ACNT) Computerized Accounting Applications** **CIP 52.0302**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Use of the computer to develop and maintain accounting records and to process common business applications for managerial decision-making. Students will utilize general ledger software (QuickBooks) for accounting and management applications. **Prerequisites:** ACNT 1303.
- #1391. (ACNT) Special Topics in Accounting** **CIP 52.0301**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency.

(AGRI) AGRICULTURE

- +1121. (AGRI) Livestock Judging** **CIP 01.0901**
4 lab hours per week; 64 total contact hours. Credit: 1 semester hour.
 Selection, evaluation, and classification of livestock and livestock products. May be repeated for credit. **Prerequisites:** Departmental approval.
- +1131. (AGRI) The Agricultural Industry** **CIP 01.0103**
1 lecture hour per week; 16 total contact semester hours. Credit: 1 semester hour.
 Overview of agriculture and the American agricultural system, including an examination of career opportunities and requirements.
- +1307. (AGRI) Agronomy** **CIP 01.1102**
Approval pending for inclusion in the AY 2017/2018 Core Curriculum
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Principles and practices in the development, production, and management of field crops including growth and development, climate, plant requirements, pest management, and production methods.
- +1311. (AGRI) Dairy Science** **CIP 01.0905**
2 lecture hours and 2 lab hours per week; 64 total contact hours. Credit: 3 semester hours.
 Survey of the dairy industry including dairy breeds, standards for selection and culling, herd replacements, feeding, management, physiology, and health maintenance. Food value for milk, tests for composition and quality, and use and processing of market milk and dairy products. Dairying in its relation to agriculture and community development; dairy breeds, standards for selection and culling, herd replacements, feeding, management, and health maintenance; the production and handling of clean milk on the farm; physiology of milk secretion; properties of milk; tests for composition of milk.

- +1315. (AGRI) Horticulture** **CIP 01.0601**
Approval pending for inclusion in the AY 2017/2018 Core Curriculum
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Structure, growth, and development of horticultural plants. Examination of environmental effects, basic principles of reproduction, production methods ranging from outdoor to controlled climates, nutrition, and pest management.
- +1319. (AGRI) Introductory Animal Science** **CIP 01.0901**
Approval pending for inclusion in the AY 2017/2018 Core Curriculum
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Scientific animal production and the importance of livestock and meat industries. Selection, reproduction, nutrition, management, and marketing of livestock.
- +1325. (AGRI) Marketing of Agricultural Products** **CIP 01.0102**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Essential marketing functions in the movement of agricultural commodities and products from producer to consumer.
- +1327. (AGRI) Poultry Science** **CIP 01.0907**
2 lecture hours and 2 lab hours per week; 64 total contact hours. Credit: 3 semester hours.
 Introduction to the poultry industry. Practices and principles in the production and marketing of turkeys, layers, broilers, and specialized fowl. Management, automated equipment, product technology, incubation, and production economics. A general course in poultry, including types, breeds, poultry houses and construction, breeding, feeding, incubation and brooding, culling, diseases and insects.
- +1329. (AGRI) Principles of Food Science** **CIP 01.1001**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Biological and scientific aspects of modern industrial food supply systems. Food classification, modern processing, and quality control.
- +1407. (AGRI) Agronomy** **CIP 01.1102**
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 Principles and practices in the development, production, and management of field crops including plant breeding, plant diseases, soils, insect control, and weed control. The scientific approach to major food and fiber crops of the world is studied, emphasizing origin, history, classification, distribution, climatic, cultural and soil requirements, improvement and seed technology. Food production as a source to feed an ever increasing population is emphasized.
- +2301. (AGRI) Agricultural Power Units** **CIP 01.0204**
2 lecture hours and 2 lab hours per week; 64 total contact hours. Credit: 3 semester hours.
 Fundamentals of internal combustion engines: gasoline, diesel, and liquefied petroleum. Maintenance and adjustments of the electrical, ignition, fuel, lubricating, and cooling systems of agricultural power machinery.
- +2303. (AGRI) Agricultural Construction** **CIP 01.0201**
2 lecture hours and 2 lab hours per week; 64 total contact hours. Credit: 3 semester hours.
 Safety procedures, selection, use, and maintenance of hand and power tools; metal cutting and welding; and construction materials and principles.
- +2304. (AGRI) Agriculture Construction II** **CIP 01.0201**
2 lecture hours and 2 lab hours per week; 64 total contact hours. Credit: 3 semester hours.
 Selection, use, and maintenance of hand and power tools; arc and oxy-acetylene welding; and construction materials and principles.
- +2313. (AGRI) Plant Protection** **CIP 01.1105**
2 lecture hours and 2 lab hours per week; 64 total contact hours. Credit: 3 semester hours.
 Principles and practices of controlling and preventing economic loss caused by plant pests. Includes instruction in entomology, plant pathology, weed science, crop science, environmental toxicology, and related environmental protection measures. **Prerequisite:** Sophomore level standing or departmental approval.
- +2317. (AGRI) Introduction to Agricultural Economics** **CIP 01.0103**
Approval pending for inclusion in the AY 2017/2018 Core Curriculum
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Fundamental economic principles and their application in the agricultural industry.
- +2321. (AGRI) Livestock Evaluation** **CIP 01.0901**
2 lecture hours and 3 lab hours per week; 80 total contact hours. Credit: 3 semester hours.
 Evaluation and grading of market cattle, swine, sheep, and goats and their carcasses and wholesale cuts. Emphasis will be placed on value determination. Selection and evaluation of breeding cattle, sheep, swine, and goats with emphasis on economically important traits.

- +2330. (AGRI) Wildlife Conservation and Management** **CIP 03.0601**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Principles and practices used in the production and improvement of wildlife resources. Aesthetic, ecological, and recreational uses of public and private lands.

(ANTH) ANTHROPOLOGY

- +2301. (ANTH) Physical Anthropology** **CIP 45.0301**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 The study of human origins and bio-cultural adaptations. Topics may include primatology, genetics, human variation, forensics, health, and ethics in the discipline. Note: Credit will only be awarded for one course from ANTH 2301 and ANTH 2401. Does not meet Core Curriculum requirements for Blinn College.

- +2302. (ANTH) Introduction to Archeology *** **CIP 45.0301**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 The study of the human past through material remains. The course includes a discussion of methods and theories relevant to archeological inquiry. Topics may include the adoption of agriculture, response to environmental change, the emergence of complex societies, and ethics in the discipline.

- +2346. (ANTH) General Anthropology *** **CIP 45.0201**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 The study of human beings, their antecedents and related primates, and their cultural behavior and institutions. Introduces the major subfields: physical and cultural anthropology, archeology, linguistics, their applications, and ethics in the discipline.

- +2351. (ANTH) Cultural Anthropology *** **CIP 45.0201**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 The study of human cultures. Topics may include social organization, institutions, diversity, interactions between human groups, and ethics in the discipline.

- +2389. (ANTH) Academic Cooperative: Forensic Anthropology** **CIP 45.0101**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 An instructional program designed to integrate on-campus study with practical hands-on experience in anthropology. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of human social behavior and/or social institutions. This is an introductory forensic anthropology course designed for lower-division, college-level students with complex terminology kept to a minimum. Only basic anatomical terms from *Gray's Anatomy* are used. The course is devised to introduce a student to osteology and to issues surrounding the death of an individual, specifically determining the demographics of a skeleton and the time since death either from partially or fully decomposed remains. Topics can also include recovery scene methods, contemporary versus non-contemporary remains, attribution of sex, estimation of age at death, projectile trauma, blunt trauma, sharp trauma, burn trauma, animal modification and postmortem changes to bone.

- +2401. (ANTH) Physical Anthropology *** **CIP 45.0301**
Core Curriculum Course
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 The study of human origins and bio-cultural adaptations. Topics may include primatology, genetics, human variation, forensics, health, and ethics in the discipline. This course includes laboratory component. Note: Credit will only be awarded for one course from ANTH 2301 and ANTH 2401.

(ARCH) ARCHITECTURE

- +1301. (ARCH) Architectural History I *** **CIP 04.0801**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Study of the history of architecture from the ancient civilizations to the present. Emphasis on the relationship of culture, geography, climate, natural resources, and materials to the methods of construction. Architectural History I will provide students with a thorough understanding of world architecture, interiors, and furnishings from the prehistoric eras through the 12th century. The course will also introduce them to architectural theory and how theory, context, politics, economics, and culture have influenced and continue to influence the designs of the built environment.

- +1302. (ARCH) Architectural History II *** **CIP 04.0801**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Study of the history of architecture from the ancient civilizations to the present. Emphasis on the relationship of culture, geography, climate, natural resources, and materials to the methods of construction. Architectural History II will provide students with a thorough understanding of world architecture, interiors, and furnishings from the 12th century through present-day. The course will also allow students to gain an understanding of architectural theory and how theory, context, politics, economics, and culture have influenced and continue to influence the designs of the built environment.
- +1303. (ARCH) Architectural Design I** **CIP 04.0201**
2 lecture hours and 4 lab hours per week; 96 total contact hours. Credit: 3 semester hours.
 An introductory studio providing foundation in the conceptual, perceptual, and manual skills necessary for two-dimensional and three-dimensional design. Course is intended to fulfill all or part of the following National Architectural Accrediting Board (NAAB) Student Performance Criteria: A.1) Professional Communication Skills; A.2) Design Thinking Skills; A.4) Architectural Design Skills; A.5) Ordering Systems.
- +1304. (ARCH) Architectural Design II** **CIP 04.0201**
2 lecture hours and 4 lab hours per week; 96 total contact hours. Credit: 3 semester hours.
 Creative problem solving and presentation of principles, concepts and ideas as applied to introductory architectural projects. Course is intended to fulfill all or part of the following National Architectural Accrediting Board (NAAB) Student Performance Criteria: A.1) Professional Communication Skills; A.2) Design Thinking Skills; A.4) Architectural Design Skills; A.5) Ordering Systems.
Prerequisites: ARCH 1303 or ARCH 1403.
- +1307. (ARCH) Architectural Graphics I** **CIP 15.1303**
2 lecture hours and 4 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 Introduction to basic drawing methods and tools. Exploration of techniques available for the design process with emphasis on two-dimensional and three-dimensional composition. Course is intended to fulfill all or part of the following National Architectural Accrediting Board (NAAB) Student Performance Criteria: A.1) Professional Communication Skills.
- +1308. (ARCH) Architecture Graphics II** **CIP 15.1303**
2 lecture hours and 4 lab hours per week; 96 total contact hours. Credit: 3 semester hours.
 Continuation of the study, methodology, and production of architectural drawings. Exploration of techniques available for the design process with emphasis on three-dimensional composition both analog and digital. Course is intended to fulfill all or part of the following National Architectural Accrediting Board (NAAB) Student Performance Criteria: A.1) Professional Communication Skills; A.5) Ordering Systems. **Prerequisites:** ARCH 1307 or ARCH 1407.
- +1311. (ARCH) Introduction to Architecture *** **CIP 04.0201**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 An introduction to the elements of the architectural profession. An introduction to the profession of architecture from the perspective of the creative process. The course discusses concepts of problem solving, creativity, imagination and its application on the design process from the onset to final product. Students are enticed to think holistically, to envision and create new products taking into consideration its impact on the environment and in society.
- +1315. (ARCH) Architectural Computer Graphics** **CIP 15.1303**
2 lecture hours and 4 lab hours per week; 96 total contact hours. Credit: 3 semester hours.
 Introduction to computer graphics systems with emphasis on architectural applications. This course will introduce students to space planning methodology and graphic methods of visualizing, communicating, and producing design solutions for various spaces. It emphasizes the production of 2-D and 3-D drawings using computer technology such as Google Sketchup, Adobe Photoshop, Adobe InDesign and AutoCAD. Students will become familiar with all types of construction documents, such as floor/site plans, elevations, sections, details, schedules and perspectives.
- +2312. (ARCH) Architectural Technology I** **CIP 15.0101**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Introduction to the properties, specifications, and application of materials related to architectural structures. Emphasis on the methods of construction and the effect of design.
- (ARTC) GRAPHIC DESIGN**
- #1302. (ARTC) Digital Imaging I** **CIP 50.0409**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Digital imaging using raster image editing and/or image creation software: scanning, resolution, file formats, output devices, color systems, and image-acquisitions.

- #1313. (ARTC) Digital Publishing I** **CIP 50.0409**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.
 The fundamentals of using digital layout as a primary publishing tool and the basic concepts and terminology associated with typography and page layout.
- #1349. (ARTC) Art Direction I** **CIP 50.0402**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Creation of projects in art direction for advertising graphic campaigns for products, services, or ideas. Topics include all campaign procedures from initial research and creative strategy to final execution and presentation of a comprehensive project.
- #1353. (ARTC) Computer Illustration** **CIP 50.0402**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Use of the tools and transformation options of an industry-standard vector drawing program to create complex illustrations or drawings.
- #1391. (ARTC) Special Topics in Graphic Design, Commercial Art and Illustration** **CIP 50.0402**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.
 Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency.
- #2313. (ARTC) Digital Publishing II** **CIP 50.0409**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.
 Includes layout procedures from thumbnails and roughs to final comprehensive and print output. Emphasis on design principles for the creation of advertising and publishing materials, and techniques for efficient planning and documenting projects.
- #2335. (ARTC) Portfolio Development for Graphic Design** **CIP 50.0402**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.
 Preparation of a portfolio comprised of completed graphic design projects. Evaluation and demonstration of portfolio presentation methods based on the student's specific area of study. **Prerequisites:** ARTC 1313.
- #2388. (ARTC) Internship – Commercial and Advertising Art** **CIP 50.0402**
15 external hours per week; 240 total contact hours. Credit: 3 semester hours.
 A work-based learning experiences that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. **Prerequisites:** ARTC 1349.
- (ARTS) ARTS**
- +1301. (ARTS) Art Appreciation *** **CIP 50.0703**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 A general introduction to the visual arts designed to create an appreciation of the vocabulary, media, techniques, and purposes of the creative process. Students will critically interpret and evaluate works of art within formal, cultural, and historical contexts.
- +1303. (ARTS) Art History I (Prehistoric to the 14th century) *** **CIP 50.0703**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 A chronological analysis of the historical and cultural contexts of the visual arts from prehistoric times to the 14th century. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards.
- +1304. (ARTS) Art History II (14th century to the present) *** **CIP 50.0703**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 A chronological analysis of the historical and cultural contexts of the visual arts from the 14th century to the present day. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards.
- +1311. (ARTS) Design I (2-dimensional)** **CIP 50.0401**
2 lecture hours and 4 lab hours per week; 96 total contact hours. Credit: 3 semester hours.
 An introduction to the fundamental terminology, concepts, theory, and application of 2-dimensional design. Focus is on the development and application of critical thinking skills.
- +1312. (ARTS) Design II (3-dimensional)** **CIP 50.0401**
2 lecture hours and 4 lab hours per week; 96 total contact hours. Credit: 3 semester hours.
 An introduction to the fundamental terminology, concepts, theory, and application of three-dimensional design. Focus is on the development and application of critical thinking skills.

- +1316. (ARTS) Drawing I** **CIP 50.0705**
2 lecture hours and 4 lab hours per week; 96 total contact hours. Credit: 3 semester hours.
 A foundation studio course exploring drawing with emphasis on descriptive, expressive and conceptual approaches. Students will learn to see and interpret a variety of subjects while using diverse materials and techniques. Course work will facilitate a dialogue in which students will engage in critical analysis and begin to develop their understanding of drawing as a discipline.
- +1317. (ARTS) Drawing II** **CIP 50.0705**
2 lecture hours and 4 lab hours per week; 96 total contact hours. Credit: 3 semester hours.
 A studio course exploring drawing with continued emphasis on descriptive, expressive and conceptual approaches. Students will further develop the ability to see and interpret a variety of subjects while using diverse materials and techniques. Course work will facilitate a dialogue in which students will employ critical analysis to broaden their understanding of drawing as a discipline.
Prerequisites: ARTS 1316 or departmental approval pending portfolio review.
- +2289. (ARTS) Academic Cooperative** **CIP 24.0103**
2 lecture hours; 32 total contact hours. Credit: 2 semester hours.
 An instructional program designed to integrate on-campus study with practical hands-on work experience. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of studio art and/or art history. **Prerequisites:** Departmental approval.
- +2313. (ARTS) Design Communications I** **CIP 50.0401**
2 lecture hours and 4 lab hours per week; 96 total contact hours. Credit: 3 semester hours.
 Communication of ideas through processes and techniques of graphic design and illustration.
- +2314. (ARTS) Design Communications II** **CIP 50.0401**
2 lecture hours and 4 lab hours per week; 96 total contact hours. Credit: 3 semester hours.
 Communication of ideas through processes and techniques of graphic design and illustration. Focused on time-based processes.
- +2316. (ARTS) Painting I** **CIP 50.0708**
2 lecture hours and 4 lab hours per week; 96 total contact hours. Credit: 3 semester hours.
 Exploration of ideas using painting media and techniques. Emphasis on color, composition and self-expression.
- +2323. (ARTS) Life Drawing I** **CIP 50.0705**
2 lecture hours and 4 lab hours per week; 96 total contact hours. Credit: 3 semester hours.
 Basic study of the human form. Introduction to principles of drawing applied to the human figure. The course will aid students to develop the skills to draw the human figure observing correct form and proportion. **Prerequisites:** ARCH 1407 or ARTS 1311 or ARTS 1316 or departmental approval.
- +2341. (ARTS) Art Metals I** **CIP 50.0713**
2 lecture hours and 4 hours lab per week; 96 total contact hours. Credit: 3 semester hours.
 Exploration of ideas using basic techniques in jewelry and metal construction.
- +2346. (ARTS) Ceramics I** **CIP 50.0711**
2 lecture hours and 4 lab hours per week; 96 total contact hours. Credit: 3 semester hours.
 Exploration of ideas using basic ceramic processes. Includes hand-building, bisque, glazing, and firing procedures, as well as the use of the potter's wheel. Hand-building will include a historical reference to slab construction, both soft and hard. Vessels in traditional forms will be constructed using the hand-built style of coil building and pinching. Glazing will be applied to bisque fired projects in traditional brush, pouring, and spray techniques.
- +2347. (ARTS) Ceramics II** **CIP 50.0711**
2 lecture hours and 4 lab hours per week; 96 total contact hours. Credit: 3 semester hours.
 Exploration of ideas using basic ceramic processes. Extends the students' knowledge of technique through the study of basic materials and techniques. Includes hand building, bisque, glazing and firing procedures, as well as a strong focus on the potter's wheel.
- +2348. (ARTS) Digital Art I** **CIP 50.0402**
2 lecture hours and 4 lab hours per week; 96 total contact hours. Credit: 3 semester hours.
 Studio art courses that explore the potential of the computer hardware and software medium for their visual, conceptual, and practical uses in the visual arts.
- +2349. (ARTS) Digital Art II** **CIP 50.0402**
2 lecture hours and 4 lab hours per week; 96 total contact hours. Credit: 3 semester hours.
 Studio art courses that explore the potential of the computer hardware and software medium for their visual, conceptual, and practical uses in the visual arts. Explores the three-dimensional potential of the computer hardware and software medium for their visual, conceptual, and practical uses in the visual arts.

+2356. (ARTS) Photography I **CIP 50.0605**
2 lecture hours and 4 lab hours per week; 96 total contact hours. Credit: 3 semester hours.
 Introduction to the basics of photography. Includes camera operation, techniques, knowledge of chemistry, and presentation skills. Emphasis on design, history, and contemporary trends as a means of developing an understanding of photographic aesthetics.

+2357. (ARTS) Photography II **CIP 50.0605**
2 lecture hours and 4 lab hours per week; 96 total contact hours. Credit: 3 semester hours.
 Extends the students' knowledge of technique and guides them in developing personal outlooks toward specific applications of the photographic process. **Prerequisites:** ARTS 2356 or departmental approval pending portfolio review.

+2366. (ARTS) Watercolor I **CIP 50.0708**
2 lecture hours and 4 lab hours per week; 96 total contact hours. Credit: 3 semester hours.
 This class is an introduction to the fundamentals of transparent watercolor painting as a medium for creative expression.

+2367. (ARTS) Watercolor II **CIP 50.0708**
2 lecture hours and 4 lab hours per week; 96 total contact hours. Credit: 3 semester hours.
 Extends the students' knowledge of creative and technical skills in water base media. **Prerequisites:** ARTS 2366.

+2389. (ARTS) Academic Cooperative **CIP 24.0103**
3 lecture hours; 48 total contact hours. Credit: 3 semester hours.
 An instructional program designed to integrate on-campus study with practical hands-on work experience. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of studio art and/or art history. **Prerequisites:** Departmental approval.

(ARTV) ANIMATION, INTERACTIVE TECHNOLOGY, VIDEO GRAPHICS, AND SPECIAL EFFECTS

#1351. (ARTV) Digital Video **CIP 10.0304**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Producing and editing video and sound for multimedia or web productions. Emphasizes capture, editing, and outputting of video using a digital video workstation.

(BCIS) BUSINESS COMPUTER INFORMATION SYSTEMS

+1301. (BCIS) Microcomputer Applications **CIP 11.0202**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Overview of computer information systems. Introduces computer hardware, software, procedures, systems, and human resources and explores their integration and application in business and other segments in society. The fundamentals of computer problem solving and programming in a higher level programming language may be discussed and applied.

+1305. (BCIS) Business Computer Applications **CIP 11.0202**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Students will study computer terminology, hardware, and software related to the business environment. The focus of this course is on business productivity software applications and professional behavior in computing, including word processing (as needed), spreadsheets, databases, presentation graphics, and business-oriented utilization of the Internet.

+1420. (BCIS) C Programming **CIP 11.0202**
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 hours.
 Introduces the fundamental concepts of structured programming in the C language. Topics include data types; control structures; functions, structures, arrays, pointers, pointer arithmetic, unions, and files; the mechanics of running, testing, and debugging programs; introduction to programming; and introduction to the historical and social context of computing. Cross-listed as COSC 1420.

(BIOL) BIOLOGY

+1108. (BIOL) Biology for Non-Science Majors Laboratory I * **CIP 26.0101**
Core Curriculum Course
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 This laboratory-based course accompanies BIOL 1308 Biology for Non-Science Majors I. Laboratory activities will reinforce a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction. **Prerequisites:** BIOL 1308 with C or better. **Note:** BIOL 1108 represents the lab component of BIOL 1408. Credit will only be awarded for one course from BIOL 1108 and BIOL 1408.

- +1171. (BIOL) Introduction to Biomedical Sciences** **CIP 26.0101**
1 lecture hour per week; 16 total contact hours. Credit: 1 semester hour.
 The course explores career opportunities and academic requirements in the biomedical sciences and related fields including applied biology, various professional programs and the health sciences industry. A seminar approach will be used. The course is designed to assist students interested in careers in any of such fields as: dentistry, medicine, pharmacy, physical therapy, nursing, occupational therapy, veterinary medicine and so on. A Unique Needs course.
- +1308. (BIOL) Biology for Non-Science Majors I *** **CIP 26.0101**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Provides a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction. Lab activities reinforce lecture topics. Note: BIOL 1308 represents the lecture component of BIOL 1408. Credit will only be awarded for one course from BIOL 1308 and BIOL 1408.
- +1322. (BIOL) Nutrition and Diet Therapy *** **CIP 19.0501**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 This course introduces general nutritional concepts in health and disease and includes practical applications of that knowledge. Special emphasis is given to nutrients and nutritional processes including functions, food sources, digestion, absorption, and metabolism. Food safety, availability, and nutritional information including food labels, advertising, and nationally established guidelines are addressed. Cross-listed as HECO 1322.
- +1406. (BIOL) Biology for Science Majors I *** **CIP 26.0101**
Core Curriculum Course
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 Fundamental principles of living organisms will be studied, including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Concepts of cytology, reproduction, genetics, and scientific reasoning are included. Lab activities reinforce lecture topics. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards. **Recommended:** MATH 1314 or co-enrollment in a higher MATH.
- +1407. (BIOL) Biology for Science Majors II *** **CIP 26.0101**
Core Curriculum Course
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 The diversity and classification of life will be studied, including animals, plants, protists, fungi, and prokaryotes. Special emphasis will be given to anatomy, physiology, ecology, and evolution of plants and animals. Lab activities reinforce lecture topics. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards. **Recommended:** MATH 1314 or co-enrollment in a higher MATH.
- +1408. (BIOL) Biology for Non-Science Majors I *** **CIP 26.0101**
Core Curriculum Course
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 Provides a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction. Lab activities reinforce lecture topics. Note: BIOL 1408 (lecture + lab) is the equivalent of both BIOL 1308 (lecture) and BIOL 1108 (lab). Credit will only be awarded for either BIOL 1408 (lecture + lab), or BIOL 1308 (lecture) and BIOL 1108 (lab).
- +1411. (BIOL) General Botany *** **CIP 26.0301**
Core Curriculum Course
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 Fundamental biological concepts relevant to plant physiology, life cycle, growth and development, structure and function, and cellular and molecular metabolism. The role of plants in the environment, evolution, and phylogeny of major plant groups, algae, and fungi. Lab activities reinforce lecture topics. This course is intended for science majors. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards. **Recommended:** MATH 1314 or co-enrollment in a higher MATH.
- +1413. (BIOL) General Zoology *** **CIP 26.0701**
Core Curriculum Course
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 Fundamental biological concepts relevant to animals, including systematics, evolution, structure and function, cellular and molecular metabolism, reproduction, development, diversity, phylogeny, and ecology. Lab activities reinforce lecture topics. This course is intended for science majors. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards. **Recommended:** MATH 1314 or co-enrollment in a higher MATH.

- +2289. (BIOL) Academic Cooperative** **CIP 26.0101**
1 lecture hour and 2 lab hours per week; 48 total contact hours. Credit: 2 semester hours.
 An instructional program designed to integrate on-campus study with practical hands-on work experience in the biological/life sciences. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of living organisms and their systems. **Prerequisites:** Eight hours of college-level biology courses with a GPA of 3.0 or higher and the approval of the instructor or 4 hours of college biology with an A while taking the second 4 hours of college biology concurrently.
- +2306. (BIOL) Environmental Biology *** **CIP 03.0103**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Principles of environmental systems and ecology, including biogeochemical cycles, energy transformations, abiotic interactions, symbiotic relationships, natural resources and their management, lifestyle analysis, evolutionary trends, hazards and risks, and approaches to ecological research. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards.
- +2389. (BIOL) Academic Cooperative** **CIP 26.0101**
1 lecture hour and 6 lab hours per week; 112 total contact hours. Credit: 3 semester hours.
 An instructional program designed to integrate on-campus study with practical hands-on work experience in the biological/life sciences. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of living organisms and their systems. **Prerequisites:** Approval of faculty research mentor.
- +2401. (BIOL) Anatomy and Physiology I *** **CIP 26.0707**
Core Curriculum Course
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 Anatomy and Physiology I is the first part of a two-course sequence. It is a study of the structure and function of the human body including cells, tissues and organs of the following systems: integumentary, skeletal, muscular, nervous, and special senses. Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis. The lab provides a hands-on learning experience for exploration of human system components and basic physiology. Systems to be studied include integumentary, skeletal, muscular, nervous, and special senses. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards. **Recommended:** BIOL 1406.
- +2402. (BIOL) Anatomy and Physiology II *** **CIP 26.0707**
Core Curriculum Course
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 Anatomy and Physiology II is the second part of a two-course sequence. It is a study of the structure and function of human body including the following systems: endocrine, cardiovascular, immune, lymphatic, respiratory, digestive (including nutrition), urinary (including fluid and electrolyte balance), and reproductive (including human development and genetics). Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis. The lab provides a hands-on learning experience for exploration of human system components and basic physiology. Systems to be studied include endocrine, cardiovascular, immune, lymphatic, respiratory, digestive (including nutrition), urinary (including fluid and electrolyte balance), and reproductive (including human development and genetics). **Prerequisites:** BIOL 2401 with C or better.
- +2404. (BIOL) Anatomy and Physiology *** **CIP 26.0707**
Core Curriculum Course
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 Study of the structure and function of human anatomy, including the neuroendocrine, integumentary, musculoskeletal, digestive, urinary, reproductive, respiratory, and circulatory systems. Content may be either integrated or specialized. This integrative, one semester course is designed for specific degree programs and does not replace BIOL 2401 or BIOL 2402. Lab activities reinforce lecture topics. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards.
- +2406. (BIOL) Environmental Biology** **CIP 03.0103**
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 Principles of environmental systems and ecology, including biogeochemical cycles, energy transformations, abiotic interactions, symbiotic relationships, natural resources and their management, lifestyle analysis, evolutionary trends, hazards and risks, and approaches to ecological research. Lab activities reinforce lecture topics. **Prerequisites:** BIOL 1406 or BIOL 1407 or BIOL 1411 or BIOL 1413.
- +2420. (BIOL) Microbiology for Non-Science Majors *** **CIP 26.0503**
Core Curriculum Course
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 Study of the morphology, physiology, and taxonomy of representative groups of pathogenic and nonpathogenic microorganisms. Pure cultures of microorganisms grown on selected media are used in learning lab techniques. Includes a brief preview of food microbes, public health, and immunology. Lab activities reinforce lecture topics. **Prerequisites:** BIOL 1406 or BIOL 2401 or CHEM 1411, all with C or better.

- +2421. (BIOL) Microbiology for Science Majors** **CIP 26.0503**
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 Principles of microbiology, including metabolism, structure, function, genetics, and phylogeny of microbes. The course will also examine the interactions of microbes with each other, hosts, and the environment. Lab activities reinforce lecture topics.
Prerequisites: CHEM 1411 plus one of the following biology sequences for majors: BIOL 1406 and BIOL 1407, or BIOL 1411 and BIOL 1413.
- (BITC) BIOTECHNOLOGY**
- #1191. (BITC) Special Topics in Biological Technology/Technician** **CIP 41.0101**
1 lecture hour per week; 16 total contact hours. Credit: 1 semester hour.
 Topics address recently identified current events, skills, knowledge's, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency.
- #1302. (BITC) Biotechnology Laboratory Methods and Techniques** **CIP 41.0101**
2 lecture hours and 2 lab hours per week; 64 total contact hours. Credit: 3 semester hours.
 Laboratory operations, management, equipment, instrumentation, quality control techniques, and safety procedures. Includes laboratory practice in using pH meters, spectrophotometers, preparing buffers and solutions, and performing measurements and separatory techniques. **Prerequisites:** CHEM 1411 with C or better.
- #1303. (BITC) Principles of Biochemistry** **CIP 41.0101**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Structure, function, and cellular metabolism of various bio-molecules. Concentrates on the intra- and intermolecular conversion of bio-molecules. Knowledge in this area is directly applicable to analysis and processing of bio-molecules and their pertinence to biotechnology as it relates to biopharmaceuticals, biagnostics, fermentation, and bio-manufacturing. **Prerequisites:** CHEM 1411 and BIOL 1406, both with C or better. **Note:** The last semester BITC 1303 will be taught in Spring 2017. Starting with Fall 2017, BITC 1403 will replace it.
- #1340. (BITC) Quality Assurance for the Biosciences** **CIP 41.0101**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Quality assurance principles and applications. Includes quality control and Food and Drug Administration (FDA) regulations to the biotechnology, biopharmaceutical, and biomedical device industries. **Prerequisites:** A student must be college ready according to TSI college-ready standards. **Note:** Starting with Fall 2017, this course will replace BITC 1472.
- #1403. (BITC) Principles of Biochemistry** **CIP 41.0101**
3 lecture hours and 2 lab hours per week; 80 total contact hours. Credit: 4 semester hours.
 Structure, function, and cellular metabolism of various bio-molecules. Concentrates on the intra- and intermolecular conversion of bio-molecules. Knowledge in this area is directly applicable to analysis and processing of bio-molecules and their pertinence to biotechnology as it relates to biopharmaceuticals, biagnostics, fermentation, and bio-manufacturing. **Prerequisites:** CHEM 1411 and BIOL 1406, both with C or better. **Note:** Starting with Fall 2017, this course will replace BITC 1303.
- #1411. (BITC) Introduction to Biotechnology** **CIP 41.0101**
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 An introduction to biotechnology including career exploration, history and applications of biotechnology, molecular biology, bioethics, and laboratory safety practices. **Prerequisites:** A student must be college ready according to TSI college-ready standards.
- #1472. (BITC) Local Needs Course: GMP Procedures and Documentation** **CIP 41.0101**
4 lecture hours per week; 64 total contact hours. Credit: 4 semester hours.
 This course introduces the student to the theory and application of CGMP procedures and documentation. The course will cover a brief history of events that prompted drafting and implementation of GMPs regulations, and associated documents required for a firm to comply with these regulations. The course will cover documentation associated with the implementation of a therapeutics manufacturing firm's Quality Systems program such as: SOPs, deviations, Corrective and Preventative Action (CAPA), and Calibration programs. This course is intended to prepare the student for operations in a FDA regulated environment. This course was formerly BITC 2471. **Prerequisites:** A student must be college ready according to TSI college-ready standards. **Note:** The last semester BITC 1472 will be taught in Spring 2017. Starting with Fall 2017, BITC 1340 will replace it.
- #2377. (BITC) Local Needs Course: Product Development to Commercialization** **CIP 41.0101**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 This course is designed to provide students with an overview of drug discovery to commercialization of biologics based therapeutics products. The course provides insight into drug discovery, development, scale-up, production, and FDA regulations governing the drug life cycle. **Prerequisites:** BITC 1340 (formerly BITC 1472 and BITC 2471) with C or better.

#2386. (BITC) Internship – Biology Technician/Biotechnology Laboratory Technician **CIP 41.0101**
15 external hours per week; 240 total contact hours. Credit: 3 semester hours.
 A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. **Prerequisites:** BITC 1191, BITC 1340 (formerly BITC 1472 and BITC 2471), BITC 2377, and BIOL 2420, all with C or better.

#2411. (BITC) Biotechnology Laboratory Instrumentation **CIP 41.0101**
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 Theory, applications, and safe operation of various biotechnology-related analytical instruments. Addresses separation and identification techniques including electrophoresis, spectrophotometry, and chromatography. **Prerequisites:** BITC 1302 with C or better.

#2431. (BITC) Cell Culture Techniques **CIP 41.0101**
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 Theory and applications of cell culture techniques. Laboratory emphasis on the principles and practices of applications such as initiation, cultivation, maintenance, and preservation of cell lines. **Prerequisites:** BIOL 2420 and BITC 1340 (formerly BITC 1472 and BITC 2471), both with C or better.

#2475. (BITC) Local Needs Course: Upstream and Downstream Manufacturing of Biologics **CIP 41.0101**
2 lecture hours and 5 lab hours per week; 112 total contact hours. Credit: 4 semester hours.
 This course provides hands on experience in upstream and downstream manufacturing processes used in the production of a biological based therapeutic product. **Prerequisites:** BIOL 2420, BITC 1340 (formerly BITC 1472 and BITC 2471), BITC 2377, and BITC 2431 or can be co-enrolled in BITC 2431, all with C or better.

(BLIN) BLINN

+0101. (BLIN) First Year Seminar **CIP 32.0101**
1 lecture hour per week; 16 total contact hours. Credit: 1 semester hour.

Not counted toward a degree or certificate.

This course is designed to provide first-year college students with an introduction to Blinn College and successful strategies for transition to college life. Through this course, students will learn about Blinn College values and expectations of students, policies and procedures, resources and support services, and the benefits of higher education in preparing students for the workforce. Emphasis will be placed on developing positive attitudes toward the learning process, acquiring skills necessary for college success, and making appropriate personal, academic, and professional choices.

(BMGT) BUSINESS ADMINISTRATION AND MANAGEMENT

#1327. (BMGT) Principles of Management **CIP 52.0201**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Concepts, terminology, principles, theories, and issues in the field of management. An emphasis will be on the explanation of various theories, processes and functions of management; application of theories to a business environment; identifying leadership roles in organizations; and describing elements of the communication process.

#1391. (BMGT) Special Topics in Business Administration and Management **CIP 52.0201**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency.

#2305. (BMGT) Advanced Communications in Management **CIP 52.0201**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 A study of advanced principles of oral and written communications for managers. An emphasis will be on the application of procedures for writing reports, proposals, and conducting research as well as producing oral presentations.

#2388. (BMGT) Internship – Business Administration and Management **CIP 52.0201**
15 external hours per week; 240 total contact hours. Credit: 3 semester hours.
 A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. The student's internship objectives and project will be established by the instructor and employer supervisor. This may be a paid or unpaid experience. The student is required to attend one hour classroom instruction weekly. Final report and exit exam are required. The internship course is a capstone course and required for program completion. **Prerequisites:** Program Coordinator approval.

(BUSA) INVESTMENTS AND SECURITIES

- #1313. (BUSA) Investments** **CIP 52.0807**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 An introduction to the theory and mechanics of business investment decisions and management of business financial assets. Topics include time value of money, cash flow, capital budgeting, sources of funds, break-even analysis, and investment decisions.

(BUSG) FINANCE, GENERAL

- #2309. (BUSG) Small Business Management / Entrepreneurship** **CIP 52.0703**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Starting, operating, and growing a small business. Includes essential management skills, how to prepare a business plan, accounting, financial needs, staffing, marketing strategies, and legal issues.

(BUSI) BUSINESS

- +1301. (BUSI) Business Principles** **CIP 52.0101**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 This course provides a survey of economic systems, forms of business ownership, and considerations for running a business. Students will learn various aspects of business, management, and leadership functions; organizational considerations; and decision-making processes. Financial topics are introduced, including accounting, money and banking, and securities markets. Also included are discussions of business challenges in the legal and regulatory environment, business ethics, social responsibility, and international business. Emphasized is the dynamic role of business in everyday life.

- +1307. (BUSI) Personal Finance** **CIP 19.0401**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Personal and family accounts, budgets and budgetary control, bank accounts, charge accounts, borrowing, investing, insurance, standards of living, renting or home ownership, and wills and trust plans.

- +2301. (BUSI) Business Law** **CIP 22.0101**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 The course provides the student with foundational information about the U.S. legal system and dispute resolution, and their impact on business. The major content areas will include general principles of law, the relationship of business and the U.S. Constitution, state and federal legal systems, the relationship between law and ethics, contracts, sales, torts, agency law, intellectual property, and business law in the global context. **Prerequisites:** High school coursework in U.S. history and government, or equivalent.

- +2371. (BUSI) Business Legal Environment** **CIP 22.0101**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Role of law in business and society; government regulations of business. Legal reasoning; sources of law; social policy and legal institutions; antitrust; security regulations; consumer protection, environment laws; worker health and safety; employment discrimination and other laws affecting business. A Unique Needs course.

(CDEC) CHILD DEVELOPMENT AND EARLY CHILDHOOD

- #1303. (CDEC) Families, School, and Community** **CIP 19.0706**
3 lecture hours and 1 external hour per week; 64 total contact hours. Credit: 3 semester hours.
 A study of the child, family, community and schools. Includes parent education and involvement, family and community lifestyles, child abuse, and current family life issues. Course content is aligned as applicable with the State Board for Educator Certification Pedagogy and Professional Responsibilities standards. This course requires students to participate in field experiences with children from infancy through age 12 in a variety of settings with varied and diverse populations. It includes 16 hours of field experiences over the course of the semester. Technical Dual Credit course.

- #1311. (CDEC) Educating Young Children** **CIP 19.0706**
3 lecture hours and 1 external hour per week; 64 total contact hours. Credit: 3 semester hours.
 An introduction to the education of the young child. Includes developmentally appropriate practices and programs, theoretical and historical perspectives, ethical and professional responsibilities and current issues. Course content is aligned as applicable with the State Board for Educator Certification Pedagogy and Professional Responsibilities standards. This course requires students to participate in field experiences with children from infancy through age 12 in a variety of settings with varied and diverse populations. It includes 16 hours of field experiences over the course of the semester. Technical Dual Credit course.

- #1313. (CDEC) Curriculum Resources for Early Childhood Programs** **CIP 19.0709**
3 lecture hours and 1 external hour per week; 64 total contact hours. Credit: 3 semester hours.
 A study of the fundamentals of developmentally appropriate curriculum design and implementation in early care and education programs for children birth through age eight. Practical application through direct participation with children.

- #1318. (CDEC) Wellness of the Young Child** **CIP 19.0706**
3 lecture hours and 1 external hour per week; 64 total contact hours. Credit: 3 semester hours.
 A study of the factors that impact the well-being of young children. Includes healthy behavior, food, nutrition, fitness, and safety practices. Focus on local and national standards and legal implications of relevant policies and regulations. Course content is aligned as applicable with the State Board for Educator Certification Pedagogy and Professional Responsibilities standards. This course requires students to participate in field experiences with children from infancy through age 12 in a variety of settings with varied and diverse populations. It includes 16 hours of field experiences over the course of the semester. Technical Dual Credit course.
- #1319. (CDEC) Child Guidance** **CIP 19.0709**
3 lecture hours and 1 external hour per week; 64 total contact hours. Credit: 3 semester hours.
 An exploration of guidance strategies for promoting pro-social behaviors with individual and groups of children. Emphasis on positive guidance principles and techniques, family involvement, and cultural influences. Practical application through direct participation with children.
- #1321. (CDEC) The Infant and Toddler** **CIP 19.0709**
3 lecture hours and 1 external hour per week; 64 total contact hours. Credit: 3 semester hours.
 A study of appropriate infant and toddler programs (birth to age 3), including an overview of development, quality routines, learning environments, materials and activities, and teaching/guidance techniques. Practical application through direct participation with children.
- #1323. (CDEC) Observation and Assessment** **CIP 19.0709**
3 lecture hours and 1 external hour per week; 64 total contact hours. Credit: 3 semester hours.
 A study of observation skills, assessment techniques, and documentation of children's development. Practical application through direct participation with children.
- #1354. (CDEC) Child Growth and Development** **CIP 19.0706**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 A study of the physical, emotional, social, and cognitive factors impacting growth and development of children through adolescence. Course content is aligned as applicable with the State Board for Educator Certification Pedagogy and Professional Responsibilities standards. Technical Dual Credit course.
- #1356. (CDEC) Emergent Literacy for Early Childhood** **CIP 19.0706**
3 lecture hours and 1 external hour per week; 64 total contact hours. Credit: 3 semester hours.
 An exploration of principles, methods, and materials for teaching language and literacy through a play-based integrated curriculum to children from birth through age eight. Practical application through direct participation with children.
- #1358. (CDEC) Creative Arts for Early Childhood** **CIP 19.0709**
3 lecture hours and 1 external hour per week; 64 total contact hours. Credit: 3 semester hours.
 An exploration of principles, methods, and materials for teaching children music, movement, visual arts, and dramatic play through process-oriented experiences to support divergent thinking for children from birth through age eight. Practical application through direct participation with children.
- #1359. (CDEC) Children with Special Needs** **CIP 19.0709**
3 lecture hours and 1 external hour per week; 64 total contact hours. Credit: 3 semester hours.
 A survey of information regarding children with special needs including possible causes and characteristics of exceptionalities, intervention strategies, available resources, referral processes, the advocacy role and legislative issues. Practical application through direct participation with children.
- #2307. (CDEC) Math and Science for Early Childhood** **CIP 19.0709**
3 lecture hours and 1 external hour per week; 64 total contact hours. Credit: 3 semester hours.
 An exploration of principles, methods, and materials for teaching young children math and science concepts and process skills through discovery and play. Practical application through direct participation with children. **Prerequisites:** Appropriate scores on the TSIA or completion of MATH 0308/0309 with C or better.
- #2315. (CDEC) Diverse Cultural/Multilingual Education** **CIP 19.0709**
3 lecture hours and 1 external hour per week; 64 total contact hours. Credit: 3 semester hours.
 An overview of diverse cultural and multilingual education including familial relationships, community awareness, diversity, and the needs of each and every child. Practical application through direct participation with children.
- #2326. (CDEC) Administration of Programs for Children I** **CIP 19.0708**
3 lecture hours and 1 external hour per week; 64 total contact hours. Credit: 3 semester hours.
 Application of management procedures for early care and education programs. Includes planning, operating, supervising, and evaluating programs. Topics cover philosophy, types of programs, policies, fiscal management, regulations, staffing, evaluation, and communication. Practical application through direct participation with children. **Prerequisites:** Six hours of child development coursework.

- #2328. (CDEC) Administration of Programs for Children II** **CIP 19.0708**
3 lecture hours and 1 external hour per week; 64 total contact hours. Credit: 3 semester hours.
 An in-depth study of the skills and techniques in managing early care and education programs, including legal and ethical issues, personnel management, team building, leadership, conflict resolution, stress management, advocacy, professionalism, fiscal analysis, technical applications in programs, and planning parent education/partnerships. Practical application through direct participation with children. **Prerequisites:** Six hours of child development coursework.
- #2336. (CDEC) Administration of Programs for Children III** **CIP 19.0708**
3 lecture hours and 1 external hour per week; 64 total contact hours. Credit: 3 semester hours.
 An advanced study of the skills and techniques in administering early child care and education programs. Topics will include defining and applying adult learning theory and practice, planning staff development, and demonstrating skills in supervision of curriculum planning and delivery. Practical application through direct participation with children. **Prerequisites:** Six hours of child development coursework.
- #2341. (CDEC) The School Age Child** **CIP 19.0709**
3 lecture hours and 1 external hour per week; 64 total contact hours. Credit: 3 semester hours.
 The study of appropriate age programs for the school age child (5-13 years), including an overview of development, learning environments, materials and activities, and guidance techniques. Practical application through direct participation with children.
- #2366. (CDEC) Practicum/Field Experience – Child Care Provider/Assistant** **CIP 19.0709**
21 external hours per week; 336 total contact hours. Credit: 3 semester hours.
 Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. As outlined in the learning plan, students will apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the occupation and the business/industry and will demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation and the business/industry. This course is the capstone course for the Child Care Worker Certificate. Students should enroll in this course once the majority of coursework has been completed for the certificate.
- #2367. (CDEC) Practicum/Field Experience – Child Care Provider/Assistant** **CIP 19.0709**
21 external hours per week; 336 total contact hours. Credit: 3 semester hours.
 Practical, general workplace training supported by an individual learning plan developed by the employer, college, and student. As outlined in the learning plan, the students will apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the occupation and the business/industry and will demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation and the business/industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the college and that are directly related to specific occupational outcomes. This course is the capstone course for the Child Development AAS degree. Students should enroll in this course once the majority of coursework has been completed for the degree. **Prerequisites:** A student must be college ready in math according to TSI college-ready standards.
- (CHEM) CHEMISTRY**
- +1405. (CHEM) Introductory Chemistry I *** **CIP 40.0501**
Core Curriculum Course
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 Survey course introducing chemistry. Topics may include inorganic, organic, biochemistry, food/physiological chemistry, and environmental/consumer chemistry. Designed for non-science and allied health students. Cannot be substituted for CHEM 1411.
- +1407. (CHEM) Introductory Chemistry II** **CIP 40.0501**
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 Survey course introducing chemistry. Topics may include inorganic, organic, biochemistry, food/physiological chemistry, and environmental/consumer chemistry. Designed for non-science and allied health students.
- +1411. (CHEM) General Chemistry I *** **CIP 40.0501**
Core Curriculum Course
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 Fundamental principles of chemistry for majors in the sciences, health sciences, and engineering; topics include measurements, fundamental properties of matter, states of matter, chemical reactions, chemical stoichiometry, periodicity of elemental properties, atomic structure, chemical bonding, molecular structure, solutions, properties of gases, and in introduction to thermodynamics and descriptive chemistry. The lab experiments are designed to support theoretical principles presented in lecture and include an introduction of the scientific method, experimental design, data collection and analysis, and the preparation of lab reports.
Prerequisites: MATH 1314 or MATH 1414 or higher MATH, with C or better, or an appropriate score on an approved test.

- +1412. (CHEM) General Chemistry II *** **CIP 40.0501**
Core Curriculum Course
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 Chemical equilibrium; phase diagrams and spectrometry; acid- base concepts; thermodynamics; kinetics; electrochemistry; nuclear chemistry; an introduction to organic chemistry and descriptive inorganic chemistry. The lab experiments are designed to support theoretical principles presented in lecture and include an introduction of the scientific method, experimental design, chemical instrumentation, data collection and analysis, and the preparation of lab reports. **Prerequisites:** CHEM 1470 (formerly CHEM 1410) or CHEM 1411, with C or better.
- +1470. (CHEM) General Chemistry for Engineers** **CIP 40.0501**
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 This is a course designed for engineering majors which will incorporate the major concepts and principles of both CHEM 1411 and CHEM 1412. Applications of these principles will be emphasized. The major areas which will be covered are: matter and energy relationships, structure of matter, solutions, acids and bases, oxidation-reduction, electrochemistry, thermodynamics, kinetics, chemical equilibria, and nuclear chemistry. **Prerequisites:** MATH 1314 or MATH 1414, with C or better, or an appropriate score on an approved test. A Unique Needs course.
- +2289. (CHEM) Academic Cooperative** **CIP 40.0101**
1 lecture hour and 2 lab hours per week; 48 total contact hours. Credit: 2 semester hours.
 An instructional program designed to integrate on campus study with practical hands on experience in chemistry. In conjunction with class seminars, the individual students will set specific goals and objectives in the scientific study of inanimate objects, processes of matter and energy, and associated phenomena. This course may be repeated once for credit. **Prerequisites:** Eight hours of college-level chemistry courses with a GPA of 3.0 or higher and the approval of the instructor or 4 hours of college-level chemistry with an A while taking the second 4 hours of chemistry concurrently.
- +2389. (CHEM) Academic Cooperative** **CIP 40.0101**
1 lecture hour and 6 lab hours per week; 112 total contact hours. Credit: 3 semester hours.
 An instructional program designed to integrate on campus study with practical hands on experience in chemistry. In conjunction with class seminars, the individual students will set specific goals and objectives in the scientific study of inanimate objects, processes of matter and energy, and associated phenomena. **Prerequisites:** Approval of faculty research mentor.
- +2423. (CHEM) Organic Chemistry I** **CIP 40.0504**
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 Fundamental principles of organic chemistry will be studied, including the structure, bonding, properties, and reactivity of organic molecules; and properties and behavior of organic compounds and their derivatives. Emphasis is placed on organic synthesis and mechanisms. Includes study of covalent and ionic bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups and synthesis of simple molecules. Lab activities will reinforce fundamental principles of organic chemistry. Methods for the purification and identification of organic compounds will be examined. This course is intended for students in science or pre-professional programs. **Prerequisites:** CHEM 1412 with C or better.
- +2425. (CHEM) Organic Chemistry II** **CIP 40.0504**
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 Advanced principles of organic chemistry will be studied, including the structure, properties, and reactivity of aliphatic aromatic organic molecules; and properties and behavior of organic compounds and their derivatives. Emphasis is placed on organic synthesis and mechanisms. Includes study of covalent and ionic bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and synthesis of simple molecules. Lab activities will reinforce fundamental principles of organic chemistry. This course is intended for students in science or pre-professional programs. **Prerequisites:** CHEM 2423 with C or better.
- (CJLE) CRIMINAL JUSTICE/LAW ENFORCEMENT**
- #1506. (CJLE) Basic Peace Officer I** **CIP 43.0107**
3 lecture hours and 7 lab hours per week; 160 total contact hours. Credit: 5 semester hours.
 Basic preparation for a new peace officer. Should be taken in conjunction with Basic Peace Officer II, III, IV, and V (supplement) to satisfy the Texas Commission on Law Enforcement approved Basic Peace Officer Training Academy. *****THIS COURSE MAY BE OFFERED ONLY BY INSTITUTIONS LICENSED AS A POLICE ACADEMY BY Texas Commission on Law Enforcement.***** This class is an introduction to fitness and wellness, history of policing, professionalism and ethics, United States Constitution and Bill of Rights, criminal justice system, Texas Penal Code, Texas Code of Criminal Procedure, civil process, and stress management. **Prerequisites:** All students must complete academy application process. Admission to Blinn College does not guarantee admission to the police academy. **Co-enrolled:** CJLE 1512, CJLE 1518, and CJLE 1524.

- #1512. (CJLE) Basic Peace Officer II** **CIP 43.0107**
2 lecture hours and 9 lab hours per week; 176 total contact hours. Credit: 5 semester hours.
 Basic preparation for a new peace officer. Should be taken in conjunction with Basic Peace Officer I, III, IV, and V (supplement) to satisfy the Texas Commission on Law Enforcement approved Basic Peace Officer Academy. *****THIS COURSE MAY BE OFFERED ONLY BY INSTITUTIONS LICENSED AS A POLICE ACADEMY BY Texas Commission on Law Enforcement.***** It covers field note-taking, report writing, "use of force" law and concepts, problem-solving, multiculturalism, professional policing approaches, patrol procedures, victims of crime, family violence, HMR, crowd management, HAZMAT, and criminal investigation. **Prerequisites:** All students must complete academy application process. Admission to Blinn College does not guarantee admission to the police academy. **Co-enrolled:** CJLE 1506, CJLE 1518, and CJLE 1524.
- #1518. (CJLE) Basic Peace Officer III** **CIP 43.0107**
2 lecture hours and 9 lab hours per week; 176 total contact hours. Credit: 5 semester hours.
 Basic preparation for a new peace officer. Should be taken in conjunction with Basic Peace Officer I, II, IV, and V (supplement) to satisfy the Texas Commission on Law Enforcement approved Basic Peace Officer Academy. *****THIS COURSE MAY BE OFFERED ONLY BY INSTITUTIONS LICENSED AS A POLICE ACADEMY BY Texas Commission on Law Enforcement.***** It covers laws pertaining to controlled substances, crowd management, personal property, and crime scene investigation. **Prerequisites:** All students must complete academy application process. Admission to Blinn College does not guarantee admission to the police academy. **Co-enrolled:** CJLE 1506, CJLE 1512, and CJLE 1524.
- #1524. (CJLE) Basic Peace Officer IV** **CIP 43.0107**
2 lecture hours and 9 lab hours per week; 176 total contact hours. Credit: 5 semester hours.
 Basic preparation for a new peace officer. Should be taken in conjunction with Basic Peace Officer I, II, III, and V (supplement) to satisfy the Texas Commission on Law Enforcement approved Basic Peace Officer Training Academy. *****THIS COURSE MAY BE OFFERED ONLY BY INSTITUTIONS LICENSED AS A POLICE ACADEMY BY Texas Commission on Law Enforcement.***** It covers laws directly related to police field work. Course topics include Texas Transportation Code, intoxicated driver, Texas Penal Code, elements of crimes, Texas Family Code, Texas Alcohol Beverage Code, and civil liability. It requires the demonstration and practice of the skills of a police officer including patrol; driving; traffic-stops; use of force; mechanics of an arrest; firearm safety; and emergency medical care. It also includes study of techniques and procedures used by police officers on patrol. It includes controlled substance identification, handling abnormal persons, traffic collision investigation, note-taking and report writing, vehicle operation, traffic direction, crowd control, and jail operations. **Prerequisites:** All students must complete academy application process. Admission to Blinn College does not guarantee admission to the police academy. **Co-enrolled:** CJLE 1506, CJLE 1512, and CJLE 1518.
- (CJSA) CRIMINAL JUSTICE/SAFETY STUDIES**
- #1312. (CJSA) Crime in America** **CIP 43.0104**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 American crime problems in historical perspective; social and public policy factors affecting crime; impact and crime trends; social characteristics of specific crimes; prevention of crime. Technical Dual Credit course.
- #1322. (CJSA) Introduction to Criminal Justice** **CIP 43.0104**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 History and philosophy of criminal justice and ethical considerations; crime defined and its nature and impact; overview of criminal justice system; law enforcement; court system; prosecution and defense; trial process; and corrections. **NOTE:** This course must be successfully completed prior to enrollment into any 2000 level Criminal Justice course. Technical Dual Credit course.
- #1327. (CJSA) Fundamentals of Criminal Law** **CIP 43.0104**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 A study of the nature of criminal law; philosophical and historical development; major definitions and concepts; classification of crime; elements of crimes and penalties using Texas statutes as illustrations; and criminal responsibility. Technical Dual Credit course.
- #2334. (CJSA) Contemporary Issues in Criminal Justice** **CIP 43.0104**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 A series of lectures and class participation exercises presenting selected topics currently confronting criminal justice personnel and the public they serve. A variety of contemporary topics may be covered or an extensive survey of one central theme will be analyzed. Check with the coordinator regarding the topics to be covered in any given semester. **Prerequisites:** CRIJ 1301 or CJSA 1322 or Program Coordinator approval.
- #2388. (CJSA) Internship – Criminal Justice/Safety Studies** **CIP 43.0104**
12 external hours per week; 192 total contact hours. Credit: 3 semester hours.
 An experience external to the college for an advanced student in a specialized field involving a written agreement between the educational institution and a business or industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the college and that are directly related to specific occupational outcomes. This may be paid or unpaid experience. Classroom activities include employability and personal life skills topics. **Prerequisites:** Must successfully complete 12 hours or more of criminal justice courses in either CRIJ or CJSA. Must be 20 years old or turn 20 during the semester of internship and have no criminal record, not be on academic probation, and be in good standing with Blinn College. Some exceptions to age and record will be considered.

(COMM) COMMUNICATION

- +1307. (COMM) Introduction to Mass Communication** **CIP 09.0102**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Study of the media by which entertainment and information messages are delivered. Includes an overview of the traditional mass media: their functions, structures, supports, and influences. This introductory course focuses on both theories and models of communication, on the contributions of the behavioral sciences and related fields, and on the role of mass media in a dynamic society.
- +2311. (COMM) News Gathering and Writing I** **CIP 09.0401**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Fundamentals of writing news for the mass media. Includes instruction in methods and techniques for gathering, processing, and delivering news in a professional manner.

(COSC) COMPUTER SCIENCE

- +1420. (COSC) C Programming** **CIP 11.0201**
4 lecture hours per week; 64 total contact hours. Credit: 4 semester hours.
 Introduces the fundamental concepts of structured programming in the C language. Topics include data types; control structures; functions, structures, arrays, pointers, pointer arithmetic, unions, and files; the mechanics of running, testing, and debugging programs; introduction to programming; and introduction to the historical and social context of computing. Cross-listed as BCIS 1420.
- +1430. (COSC) Computer Programming** **CIP 11.0201**
4 lecture hours per week; 64 total contact hours. Credit: 4 semester hours.
 Introduction to computer programming in various programming languages. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes coverage of language syntax, data and file structures, input/output devices, and disks/files.
- +1436. (COSC) Programming Fundamentals I** **CIP 11.0201**
4 lecture hours per week; 64 total contact hours. Credit: 4 semester hours.
 Introduces the fundamental concepts of structured programming and provides a comprehensive introduction to programming for computer science and technology majors. Topics include software development methodology, data types, control structures, functions, arrays, and the mechanics of running, testing, and debugging. This course assumes computer literacy.
- +1437. (COSC) Programming Fundamentals II** **CIP 11.0201**
4 lecture hours per week; 64 total contact hours. Credit: 4 semester hours.
 This course focuses on the object-oriented programming paradigm, emphasizing the definition and use of classes along with fundamentals of object-oriented design. The course includes basic analysis of algorithms, searching and sorting techniques, and an introduction to software engineering processes. Students will apply techniques for testing and debugging software. **Prerequisites:** COSC 1436.
- +2425. (COSC) Computer Organization** **CIP 11.0201**
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 The organization of computer systems is introduced using assembly language. Topics include basic concepts of computer architecture and organization, memory hierarchy, data types, computer arithmetic, control structures, interrupt handling, instruction sets, performance metrics, and the mechanics of testing and debugging computer systems. Embedded systems and device interfacing are introduced. **Prerequisites:** COSC 1436.
- +2436. (COSC) Programming Fundamentals III** **CIP 11.0201**
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 Further applications of programming techniques, introducing the fundamental concepts of data structures and algorithms. Topics include recursion, fundamental data structures (including stacks, queues, linked lists, hash tables, trees and graphs), and algorithmic analysis. **Prerequisites:** COSC 1437.

(CRIJ) CRIMINAL JUSTICE

- +1301. (CRIJ) Introduction to Criminal Justice** **CIP 43.0104**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 This course provides a historical and philosophical overview of the American criminal justice system, including the nature, extent, and impact of crime; criminal law; and justice agencies and processes. Must be successfully completed prior to enrollment into any 2000 level Criminal Justice course.

- +1306. (CRIJ) Court Systems and Practices** **CIP 22.0101**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 This course is a study of the court system as it applies to the structures, procedures, practices and sources of law in American courts, using federal and Texas statutes and case law. Overview of the judiciary in the criminal justice system; structure of American court system; prosecution; right of counsel; pretrial release; grand juries; adjudication process; types and rules of evidence; sentencing.
- +1307. (CRIJ) Crime in America** **CIP 45.0401**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 American crime problems in historical perspective; social and public policy factors affecting crime; impact and crime trends; social characteristics of specific crimes; prevention of crime.
- +1310. (CRIJ) Fundamentals of Criminal Law** **CIP 22.0101**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 This course is the study of criminal law including application of definitions, statutory elements, defenses and penalties using Texas statutes, the Model Penal Code, and case law. The course also analyzes the philosophical and historical development of criminal law and criminal culpability.
- +1313. (CRIJ) Juvenile Justice System** **CIP 43.0104**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 A study of the juvenile justice process to include specialized juvenile law, role of the juvenile law, role of the juvenile courts, role of police agencies, role of correctional agencies, and theories concerning delinquency. Studies the information pertaining to the juvenile justice system in Texas and the United States.
- +2301. (CRIJ) Community Resources in Corrections** **CIP 43.0104**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 An introductory study of the role of the community in corrections; community programs for adults and juveniles; administration of community programs; legal issues; future trends in community treatment. **Prerequisites:** CRIJ 1301 or CJSA 1322.
- +2313. (CRIJ) Correctional Systems and Practices** **CIP 43.0104**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 This course is a survey of institutional and non-institutional corrections. Emphasis will be placed on the organization and operation of correctional systems; treatment and rehabilitation; populations served; Constitutional issues; and current and future issues. **Prerequisites:** CRIJ 1301 or CJSA 1322.
- +2314. (CRIJ) Criminal Investigation** **CIP 43.0104**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Investigative theory; collection and preservation of evidence; sources of information; interview and interrogation; uses of forensic sciences; case and trial preparation. **Prerequisites:** CRIJ 1301 or CJSA 1322.
- +2323. (CRIJ) Legal Aspects of Law Enforcement** **CIP 43.0104**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Police authority; responsibilities; constitutional constraints; laws of arrest, search, and seizure; police liability.
- +2328. (CRIJ) Police Systems and Practices** **CIP 43.0104**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 This course examines the establishment, role, and function of police in a democratic society. It will focus on types of police agencies and their organizational structure, police-community interaction, police ethics, and use of authority.

(CZEC) CZECH LANGUAGE

Students who have never taken a foreign language or who have completed less than one year of a foreign language in high school should enroll in 1411. Students who have had a course or courses in a foreign language may take a departmental test to determine in which course they should enroll.

- +1411. (CZEC) Beginning Czech I** **CIP 16.0406**
3 lecture hours and 2 lab hours per week; 80 total contact hours. Credit: 4 semester hours.
 Fundamental skills in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture.
- +1412. (CZEC) Beginning Czech II** **CIP 16.0406**
3 lecture hours and 2 lab hours per week; 80 total contact hours. Credit: 4 semester hours.
 Fundamental skills in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture. **Prerequisites:** CZEC 1411.

(DHYG) DENTAL HYGIENE/HYGIENIST

- #1161. (DHYG) Clinical - Dental Hygiene/Hygienist** **CIP 51.0602**
4 clinical hours per week; 64 total contact hours. Credit: 1 semester hour.
 A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Intermediate level clinical course. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, and evaluation are the responsibility of the college faculty. Clinical experiences are unpaid learning experiences. **Prerequisites:** Completion of first and second semester DHYG courses, all with 75% or higher.
- #1207. (DHYG) General and Dental Nutrition** **CIP 51.0602**
2 lecture hours and 1 lab hour per week; 48 total contact hours. Credit: 2 semester hours.
 General nutrition and nutritional biochemistry emphasizing the effect nutrition has on oral health. Implementation of these concepts will assist the patient in attaining and maintaining optimum oral health. **Prerequisites:** Completion of first, second, and third semester DHYG courses, all with 75% or higher. **Co-enrolled:** DHYG 1311, DHYG 2262, and DHYG 2231.
- #1215. (DHYG) Community Dentistry** **CIP 51.0602**
1 lecture hours and 4 lab hours per week; 80 total contact hours. Credit: 2 semester hours.
 The principles and concepts of community public health and dental health education emphasizing community assessment, educational planning, implementation, and evaluation, including methods and materials used in teaching dental health education in various community settings. **Prerequisites:** Completion of first, second, third, and fourth semester DHYG courses, all with 75% or higher. **Co-enrolled:** DHYG 2153 and DHYG 2363.
- #1219. (DHYG) Dental Materials** **CIP 51.0602**
1 lecture hours and 4 lab hours per week; 80 total contact hours. Credit: 2 semester hours.
 The physical and chemical properties of dental materials including the application and manipulation of the various materials used in dentistry. **Prerequisites:** Completion of first semester DHYG courses, all with 75% or higher. **Co-enrolled:** DHYG 1260, DHYG 1235, DHYG 1339, and DHYG 2201.
- #1235. (DHYG) Pharmacology for the Dental Hygienist** **CIP 51.0602**
2 lecture hours and 1 lab hour per week; 48 total contact hours. Credit: 2 semester hours.
 Classification of drugs and their uses, actions, interactions, side effects, contraindications, with emphasis on dental applications. **Prerequisites:** Completion of first semester DHYG courses, all with 75% or higher. **Co-enrolled:** DHYG 1260, DHYG 1219, DHYG 1339, and DHYG 2201.
- #1260. (DHYG) Clinical – Dental Hygiene/Hygienist** **CIP 51.0602**
12 clinical hours per week; 192 total contact hours. Credit: 2 semester hours.
 A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Introductory level course. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, and evaluation are the responsibility of the college faculty. Clinical experiences are unpaid learning experiences. **Prerequisites:** Completion of first semester DHYG courses, all with 75% or higher. **Co-enrolled:** DHYG 1235, DHYG 1219, DHYG 1339, and DHYG 2201.
- #1301. (DHYG) Orofacial Anatomy, Histology and Embryology** **CIP 51.0602**
2 lecture hours and 4 lab hours per week; 96 total contact hours. Credit: 3 semester hours.
 The histology and embryology of oral tissues, gross anatomy of the head and neck, tooth morphology, and individual tooth identification. **Prerequisite:** Admissions into the Dental Hygiene Program. **Co-enrolled:** DHYG 1304, DHYG 1431, and DHYG 1327.
- #1304. (DHYG) Dental Radiology** **CIP 51.0602**
2 lecture hours and 4 lab hours per week; 96 total contact hours. Credit: 3 semester hours.
 Fundamentals of oral radiography, including techniques, interpretation, quality assurance, and ethics. **Prerequisite:** Admissions into the Dental Hygiene Program. **Co-enrolled:** DHYG 1301, DHYG 1431, and DHYG 1327.
- #1311. (DHYG) Periodontology** **CIP 51.0602**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours
 Normal and diseased periodontium including the structural, functional, and environmental factors. Emphasis on etiology, pathology, treatment modalities, and therapeutic and preventive periodontics. **Prerequisites:** Completion of first, second, and third semester DHYG courses, all with 75% or higher. **Co-enrolled:** DHYG 1207, DHYG 2262, and DHYG 2231.
- #1327. (DHYG) Preventive Dental Hygiene Care** **CIP 51.0602**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.
 The role of the dental hygienist as a therapeutic oral health care provider with emphasis on concepts of disease management, health promotion, communication and behavior modification. **Prerequisite:** Admissions into the Dental Hygiene Program. **Co-enrolled:** DHYG 1304, DHYG 1301, and DHYG 1431.

- #1339. (DHYG) General and Oral Pathology** **CIP 51.0602**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Disturbances in human body development, diseases of the body, and disease prevention measures with emphasis on the oral cavity and associated structures. **Prerequisite:** Completion of first semester DHYG courses, all with 75% or higher. **Co-enrolled:** DHYG 1260, DHYG 1235, DHYG 1219, and DHYG 2201.
- #1431. (DHYG) Preclinical Dental Hygiene** **CIP 51.0602**
2 lecture hours and 8 lab hours per week; 160 total contact hours. Credit: 4 semester hours.
 Foundational knowledge for performing clinical skills on patients with emphasis on procedures and rationale for performing dental hygiene care. Introduction to ethical principles as they apply to dental hygiene care. **Prerequisite:** Admissions into the Dental Hygiene Program. **Co-enrolled:** DHYG 1304, DHYG 1301, and DHYG 1327.
- #2153. (DHYG) Dental Hygiene Practice** **CIP 51.0602**
1 lecture hour and 1 lab hour per week; 32 total contact hours. Credit: 1 semester hour.
 Emphasis on the laws governing the practice of dentistry and dental hygiene, moral standards, and ethical standards established by the dental hygiene profession. Practice settings for the dental hygienist, office operations, and preparation for employment. **Prerequisites:** Completion of first, second, third, and fourth semester DHYG courses, all with 75% or higher. **Co-enrolled:** DHYG 1215 and DHYG 2363.
- #2201. (DHYG) Contemporary Dental Hygiene Care I** **CIP 51.0602**
2 lecture hours and 1 lab hour per week; 48 total contact hours. Credit: 2 semester hours.
 Dental hygiene care for the medically or dentally compromised patient including supplemental instrumentation techniques. **Prerequisites:** Completion of first semester DHYG courses, all with 75% or higher. **Co-enrolled:** DHYG 1260, DHYG 1235, DHYG 1219, and DHYG 1339.
- #2231. (DHYG) Contemporary Dental Hygiene Care II** **CIP 51.0602**
2 lecture hours and 1 lab hour per week; 48 total contact hours. Credit: 2 semester hours.
 A continuation of Contemporary Dental Hygiene Care I. Dental Hygiene care for medically or dentally compromised patient including advanced instrumentation techniques. **Prerequisites:** Completion of first, second, and third semester DHYG courses, all with 75% or higher. **Co-enrolled:** DHYG 1207, DHYG 2262, and DHYG 1311.
- #2262. (DHYG) Clinical – Dental Hygiene/Hygienist** **CIP 51.0602**
12 clinical hours per week; 192 total contact hours. Credit: 2 semester hours.
 A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Intermediate level clinical course. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, and evaluation are the responsibility of the college faculty. External rotations are utilized for enhanced learning. These experiences are unpaid learning opportunities. **Prerequisites:** Completion of first, second, and third semester DHYG courses, all with 75% or higher. **Co-enrolled:** DHYG 1207, DHYG 2231, and DHYG 1311.
- #2363. (DHYG) Clinical – Dental Hygiene/Hygienist** **CIP 51.0602**
18 clinical hours per week; 288 total contact hours. Credit: 3 semester hours.
 A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Advanced level clinical course. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, and evaluation are the responsibility of the college faculty. External rotations are utilized for enhanced learning. These experiences are unpaid learning opportunities. **Prerequisites:** Completion of first, second, third, and fourth semester DHYG courses, all with 75% or higher. **Co-enrolled:** DHYG 1215 and DHYG 2153.

(DIRW) DEVELOPMENTAL INTEGRATED READING/WRITING

- +0238 (DIRW) Integrated Reading and Writing** **CIP 32.0108**
Individualized, modular curriculum; non-course based option (NCBO). Credit: 2 semester hours.
Not counted toward a degree or certificate.
 DIRW 0238 is an individualized curriculum for students whose test scores demonstrate high proficiency but do not meet state requirements for placement into college level course work. This course will present an individualized and concentrated review of the Reading Process with emphasis on learning and applying reading strategies essential to success in academic courses, and the Writing Process, including grammar and sentence structure as needed by the student. The course will be delivered in a non-course based format, with a significant independent study component. As a result, students must be able to thrive in a self-directed study environment. Students earn Pass or Fail, and must pass the course to be TSI college-ready in reading and writing. **Prerequisites:** Appropriate scores on the TSIA. **Note:** Students who drop or are dropped from DIRW 0238 for non-attendance will also be dropped from ENGL 1301. Students who do not pass DIRW 0238 and/or the co-enrolled course will be enrolled in DIRW 0326. **Co-enrolled:** ENGL 1301.

- +0325. (DIRW) Fundamentals of Academic Literacy** **CIP 32.0108**
3 lecture hours and 2 lab hours per week; 80 total contact hours. Credit: 3 semester hours.
Not counted toward a degree or certificate.
 This is a combined lecture/lab, performance-based course designed to develop students' reading comprehension, vocabulary, and academic writing skills by teaching the fundamentals of written language that contributes to clear, concise, well-organized sentences, paragraphs, and essays. Emphasis is placed on improving reading efficiency and recognition and comprehension of implied or stated purpose of a text. This course fulfills TSI requirements for level I reading and writing (previously developmental ENGL 0320 and READ 0305). **Prerequisites:** Appropriate scores on the TSIA for READ 0305 and ENGL 0320, or completion of READ 0304 with C or better.
Note: International students should see paired co-enrolled courses ESOL 0335 and ESOL 0324.
- +0326. (DIRW) Developmental Integrated Reading and Writing** **CIP 32.0108**
3 lecture hours and 2 lab hours per week; 80 total contact hours. Credit: 3 semester hours.
Not counted toward a degree or certificate.
 DIRW 0326 is a combined lecture/lab, performance-based course designed to develop students' critical reading and academic writing skills. The focus of the course will be on applying critical reading skills for organizing, analyzing, and retaining material and developing written work appropriate to the audience, purpose, situation, and length of the assignment. The course integrates preparation in basic academic reading skills with basic skills in writing a variety of academic essays. The course fulfills TSI requirements for level II reading and writing (previously developmental ENGL 0321 and READ 0306). **Prerequisites:** Appropriate scores on the TSIA for READ 0306 and ENGL 0321, or completion of DIRW 0325 with C or better, or completion of ENGL 0320 and READ 0305, both with C or better.
Note: International students should see ESOL 0326.
- +0327. (DIRW) Developmental Integrated Reading and Writing (Paired IRW Course)** **CIP 32.0108**
3 lecture hours and 1 lab hours per week; 64 total contact hours. Credit: 3 semester hours.
Not counted toward a degree or certificate.
 This is a combined lecture/lab, performance-based course designed to develop students' critical reading and academic writing skills. The focus of the course will be on applying critical reading skills for organizing, analyzing, and retaining material and developing written work appropriate to the audience, purpose, situation, and length of the assignment. The course integrates preparation in basic academic reading skills with basic skills in writing a variety of academic essays. The course fulfills TSI requirements for reading and writing. DIRW 0327 learning activities will support reading and writing for the paired course. **Prerequisites:** Appropriate scores on the TSIA, or completion of DIRW 0325 with C or better, or completion of READ 0305 and ENGL 0320, both with C or better, or completion of ESOL 0335 and ESOL 0324, both with C or better. **Co-enrolled:** Concurrent enrollment in a designated paired credit course.
- (DRAM) DRAMA**
- +1120. (DRAM) Theater Practicum I** **CIP 50.0506**
4 lab hours per week; 64 total contact hours. Credit: 1 semester hour.
 Practicum in theater open to all students with emphasis on technique and procedures with experience gained in play productions. Students will participate in additional performance and production requirements.
- +1121. (DRAM) Theater Practicum II** **CIP 50.0506**
4 lab hours per week; 64 total contact hours. Credit: 1 semester hour.
 Practicum in theater open to all students with emphasis on technique and procedures with experience gained in play productions. Student participation grade will include additional performance and production requirements.
- +1161. (DRAM) Musical Theater I** **CIP 50.0903**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 Cross-listed with MUSI 1159, Musical Theater I, this course involves the study of works from the musical theatre repertoire. This group consists of singers and/or actors with prior musical experience. Auditions take place every semester. This ensemble represents Blinn College by performing numerous concerts both on and off campus. **Prerequisites:** Audition and/or departmental approval.
- +1162. (DRAM) Musical Theater II** **CIP 50.0903**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 Cross-listed with MUSI 2159, Musical Theater II, this course involves the study of works from the musical theatre repertoire. This group consists of singers and/or actors with prior musical experience. Auditions take place every semester. This ensemble represents Blinn College by performing numerous concerts both on and off campus. **Prerequisites:** Audition and departmental approval.
- +1310. (DRAM) Introduction to Theater *** **CIP 50.0501**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Survey of theater including its history, dramatic works, stage techniques, production procedures, and relation to other art forms. Participation in productions may be required.
- +1330. (DRAM) Stagecraft I** **CIP 50.0502**
2 lecture hours and 2 lab hours per week; 64 total contact hours. Credit: 3 semester hours.
 Study and application of the methods and components of theatrical production which may include one or more of the following: theater facilities, scenery construction and painting, properties, lighting, costume, makeup, sound, and theatrical management.

- +1341. (DRAM) Makeup** **CIP 50.0502**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Design and execution of makeup for the purpose of developing believable characters. Includes discussion of basic makeup principles and practical experience of makeup application.
- +1342. (DRAM) Introduction to Costume** **CIP 50.0502**
2 lecture hours and 2 lab hours per week; 64 total contact hours. Credit: 3 semester hours.
 Principles and techniques of costume design and construction for theatrical productions.
- +1351. (DRAM) Acting I** **CIP 50.0506**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 An introduction to the fundamental principles and tools of acting as used in auditions, rehearsals, and performances. This may include ensemble performing, character and script analysis, and basic theater terminology. This exploration will emphasize the development of the actor's instrument: voice, body and imagination.
- +1352. (DRAM) Acting II** **CIP 50.0506**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Exploration and further training within the basic principles and tools of acting, including an emphasis on critical analysis of oneself and others. The tools include ensemble performing, character and script analysis, and basic theater terminology. This will continue the exploration of the development of the actor's instrument: voice, body and imagination.
- +2120. (DRAM) Theater Practicum III** **CIP 50.0506**
4 lab hours per week; 64 total contact hours. Credit: 1 semester hour.
 Practicum in theater open to all students with emphasis on technique and procedures with experience gained in play productions. Student participation grade will include additional performance and production requirements.
- +2121. (DRAM) Theater Practicum IV** **CIP 50.0506**
4 lab hours per week; 64 total contact hours. Credit: 1 semester hour.
 Practicum in theater open to all students with emphasis on technique and procedures with experience gained in play productions. Student participation grade will include additional performance and production requirements.
- +2331. (DRAM) Stagecraft II** **CIP 50.0502**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Continued study and application of the methods and components of theatrical production which may include one or more of the following: theater facilities, scenery construction and painting, properties, lighting, costume, makeup, sound and theatrical management.
- +2336. (DRAM) Voice for the Theater** **CIP 50.0506**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Application of the performer's use of the voice as a creative instrument of effective communication. Encourages an awareness of the need for vocal proficiency and employs techniques designed to improve the performer's speaking abilities.
- +2361. (DRAM) History of the Theater I *** **CIP 50.0505**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Study of the history of the theater from primitive times through the Renaissance.
- +2362. (DRAM) History of the Theater II *** **CIP 50.0505**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Study of the history of the theater from the Renaissance through today.
- +2366. (DRAM) Introduction to Cinema *** **CIP 50.0602**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Survey and analyze cinema including history, film techniques, production procedures, selected motion pictures, and cinema's impact on and reflection of society. Cross-listed as COMM 2366.
- +2389. (DRAM) Academic Cooperative** **CIP 24.0103**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 An instructional program designed to integrate on-campus study with practical hands-on work experience. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of drama.

(ECON) ECONOMICS**+2301. (ECON) Principles of Macroeconomics *****CIP 45.0601***Core Curriculum Course***3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.**

An analysis of the economy as a whole including measurement and determination of Aggregate Demand and Aggregate Supply, national income, inflation, and unemployment. Other topics include international trade, economic growth, business cycles, and fiscal policy and monetary policy.

+2302. (ECON) Principles of Microeconomics ***CIP 45.0601***Core Curriculum Course***3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.**

Analysis of the behavior of individual economic agents, including consumer behavior and demand, producer behavior and supply, price and output decisions by firms under various market structures, factor markets, market failures, and international trade. A study of micro-economic principles with emphasis on price theory, labor problems, and international economic relations. Special attention is given to the allocation of resources and distribution of income in a market economy.

(EDUC) EDUCATION**+0100. (EDUC) Journey to Success****CIP 32.0101****1 lecture hour per week; 16 total contact hours. Credit: 1 semester hour.***Not counted toward a degree or certificate.*

This course is a study of the factors that impact learning, including self-awareness, inter-personal behavior and decision-making, and an exploration of practical learning strategies that will help students become successful learners. Assessment instruments (e.g., learning inventories) are used to help students identify their own strengths and weaknesses as strategic learners, and a combination of theoretical and practical learning activities are employed to encourage active learning both in and outside of the classroom.

+1300. (EDUC) Learning Framework**CIP 42.2701****3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.**

A study of the research and theory in the psychology of learning, cognition, and motivation; factors that impact learning, and application of learning strategies. Theoretical models of strategic learning, cognition, and motivation serve as the conceptual basis for the introduction of college-level student academic strategies. Students use assessment instruments (e.g., learning inventories) to help them identify their own strengths and weaknesses as strategic learners. Students are ultimately expected to integrate and apply the learning skills discussed across their own academic programs and become effective and efficient learners. Students developing these skills should be able to continually draw from the theoretical models they have learned. **Prerequisites:** A student must be college ready in reading and writing according to TSI college-ready standards.

+1301. (EDUC) Introduction to the Teaching Profession**CIP 13.0101****3 lecture hours and 1 external hour per week; 64 total contact hours. Credit: 3 semester hours.**

An enriched integrated pre-service course and content experience that provides active recruitment and institutional support of students interested in a teaching career, especially in high need fields. Students are provided opportunities to participate in field observations at all levels of P-12 schools with varied and diverse student populations. Students are supported by college and school faculty for the purpose of introduction to and analysis of the culture of schooling and classrooms. This course is aligned as applicable with the State Board for Educator Certification Pedagogy and Professional Responsibilities standards. The course requires sixteen hours of field experience in P-12 schools. **Prerequisites:** A student must be college ready in reading and writing according to TSI college-ready standards or administrative approval.

+2301. (EDUC) Introduction to Special Populations**CIP 13.1001****3 lecture hours and 1 external hour per week; 64 total contact hours. Credit: 3 semester hours.**

An enriched integrated pre-service course and content experience that provides active recruitment and institutional support of students interested in the high need teaching field of special populations including language, gender, socioeconomic status, ethnic and academic diversity and equity with an emphasis on factors that facilitate learning. Students are provided opportunities to participate in early field observations of P-12 classrooms with special populations. This course is aligned as applicable with the State Board for Educator Certification Pedagogy and Professional Responsibilities standards. The course requires sixteen hours of field experience in P-12 classrooms with special populations. **Prerequisites:** EDUC 1301 with C or better.

(EMSP) EMERGENCY MEDICAL SERVICES PROGRAMS**#1260. (EMSP) Clinical – Emergency Medical Technology/Technician****CIP 51.0904****8 clinical hours per week; 128 total contact hours. Credit: 2 semester hours.**

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Students participate in the following areas: 32 hours in the Emergency Department, 16 hours in Labor & Delivery, and 60 hours EMS on the ambulance. Student must earn a B or better in both co-enrolled courses to successfully complete EMT training. **Prerequisites:** A student must be college ready according to TSI college-ready standards. Students must meet the EMS Program and the Division of Health Sciences requirements for clinical rotations. Contact the EMS Program for details. **Co-enrolled:** EMSP 1501.

- #1305. (EMSP) Emergency Care Attendant** **CIP 51.0904**
3 lecture hours and 2 lab hours per week; 80 total contact hours. Credit: 3 semester hours.
 Preparation for certification as an Emergency Care Attendant (ECA)/Emergency Medical Responder (EMR). The student will display a working knowledge of clinical information and related topics relevant to the practice of pre-hospital emergency medical care at the EMR level; demonstrate the ability to competently perform all applicable skills; and exhibit attitudes and behavior consistent with the ethics and professionalism expected of the emergency care attendant. **Prerequisites:** A student must be college ready according to TSI college-ready standards.
- #1338. (EMSP) Introduction to Advanced Practice** **CIP 51.0904**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.
 Fundamental elements associated with emergency medical services to include preparatory practices, pathophysiology, medication administration, and related topics. **Prerequisites:** Admissions into the Paramedic Technology Certificate cohort. **Co-enrolled:** EMSP 1355, EMSP 1356, EMSP 2306, and EMSP 2260.
- #1355. (EMSP) Trauma Management** **CIP 51.0904**
2 lecture hours and 2 lab hours per week; 64 total contact hours. Credit: 3 semester hours.
 Knowledge and skills in the assessment and management of patients with traumatic injuries. **Prerequisites:** Admissions into the Paramedic Technology Certificate cohort. **Co-enrolled:** EMSP 1338, EMSP 1356, EMSP 2306, and EMSP 2260.
- #1356. (EMSP) Patient Assessment and Airway Management** **CIP 51.0904**
2 lecture hours and 3 lab hours per week; 80 total contact hours. Credit: 3 semester hours.
 Knowledge and skills required to perform patient assessment, airway management, and artificial ventilation. **Prerequisites:** Admissions into the Paramedic Technology Certificate cohort. **Co-enrolled:** EMSP 1338, EMSP 1355, EMSP 2306, and EMSP 2260.
- #1391. (EMSP) Special Topics in Emergency Medical Technology/Technician** **CIP 51.0904**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Learning outcomes/ objectives are determined by local occupational needs, and business and industry trends. **Prerequisites:** Current EMT certification. A student must be college ready according to TSI college-ready standards.
- #1501. (EMSP) Emergency Medical Technician** **CIP 51.0904**
4 lecture hours and 4 lab hours per week; 128 total contact hours. Credit: 5 semester hours.
 Preparation for certification as an Emergency Medical Technician (EMT). Includes all the skills necessary to provide emergency medical care at a basic life support level with an ambulance service or other specialized services. The student will display a working knowledge of clinical information and related topics relevant to the practice of pre-hospital emergency medical care of the EMT level; demonstrate the ability to competently perform all applicable skills; and exhibit attitudes and behavior consistent with the ethics and professionalism expected of the EMT. Student must earn a B or better in both co-enrolled courses to successfully complete EMT training. **Prerequisites:** A student must be college ready according to TSI college-ready standards. **Co-enrolled:** EMSP 1260.
- #2143. (EMSP) Assessment Based Management** **CIP 51.0904**
4 lab hours per week; 64 total contact hours. Credit: 1 semester hour.
 A summarative experience covering comprehensive, assessment-based patient care management for the paramedic level. Includes specific care when dealing with pediatric, adult, geriatric, and special-needs patients. **Prerequisites:** Completion of first and second semester EMSP courses, all with B or better. **Co-enrolled:** EMSP 2362 and EMSP 2305.
- #2260. (EMSP) Clinical – Emergency Medical Technology/Technician** **CIP 51.0904**
12 clinical hours per week; 192 total contact hours. Credit: 2 semester hours.
 A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. Direct supervision is provided by the clinical professional. Students may participate in the following areas: Emergency Room, Operating Room and the Ambulance. **Prerequisites:** Admissions into the Paramedic Technology Certificate cohort. Students must meet the EMS Program and the Division of Health Sciences requirements for clinical rotations. **Co-enrolled:** EMSP 1338, EMSP 1355, EMSP 2306, and EMSP 1356.
- #2261. (EMSP) Clinical – Emergency Medical Technology/Technician** **CIP 51.0904**
12 clinical hours per week; 192 total contact hours. Credit: 2 semester hours.
 A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. Direct supervision is provided by the clinical professional. Students participate in the following areas: Emergency Room, Operating Room, Clinic/ICU, Mental Health, and the Ambulance. **Prerequisites:** Completion of first semester EMSP courses, all with B or higher. Students must meet the EMS Program and the Division of Health Sciences requirements for clinical rotations. **Co-enrolled:** EMSP 2444, EMSP 2434, and EMSP 2330.

- #2300. (EMSP) Methods of Teaching-Emergency Medical Service** **CIP 51.0904**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Focuses on instructional preparation, presentation, and evaluation, also essential knowledge, skills, and practices required to provide quality EMS educational programs applicable to the adult learner. **Prerequisites:** Current EMT certification. A student must be college ready according to TSI college-ready standards.
- #2305. (EMSP) EMS Operations** **CIP 51.0904**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Knowledge and skills to safely manage multi-casualty incidents and rescue situations; utilize air medical resources; identify hazardous materials and other specialized incidents. A detailed study of the knowledge and skills necessary to reach competence to safely manage the scene of an emergency. **Prerequisites:** Completion of first and second semester EMSP courses, all with B or better. **Co-enrolled:** EMSP 2143 and EMSP 2362.
- #2306. (EMSP) Emergency Pharmacology** **CIP 51.0904**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.
 A study of drug classification, actions, therapeutic uses, adverse effects, routes of administration, and calculation of dosages. **Prerequisites:** Admissions into the Paramedic Technology Certificate cohort. **Co-enrolled:** EMSP 1338, EMSP 1355, EMSP 2260, and EMSP 1356.
- #2330. (EMSP) Special Populations** **CIP 51.0904**
2 lecture hours and 2 lab hours per week; 64 total contact hours. Credit: 3 semester hours.
 Knowledge and skills necessary to assess and manage ill or injured patients in diverse populations to include neonatology, pediatrics, geriatrics, and other related topics. A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of ill or injured patients in nontraditional populations. **Prerequisites:** Completion of first semester EMSP courses, all with B or better. **Co-enrolled:** EMSP 2444, EMSP 2434, and EMSP 2261.
- #2362. (EMSP) Clinical – Emergency Medical Technology/Technician** **CIP 51.0904**
15 clinical hours per week; 240 total contact hours. Credit: 3 semester hours.
 A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Students participate in a single preceptorship with an assigned EMS Agency. A minimum of 240 hours EMS must be completed. The student is evaluated by competency performance and may perform additional time to complete competencies. **Prerequisites:** Completion of first and second semester EMSP courses, all with B or better. Students must meet the EMS Program and the Division of Health Sciences requirements for clinical rotations. **Co-enrolled:** EMSP 2143 and EMSP 2305.
- #2434. (EMSP) Medical Emergencies** **CIP 51.0904**
3 lecture hours and 2 lab hours per week; 80 total contact hours. Credit: 4 semester hours.
 Knowledge and skills in the assessment and management of patients with medical emergencies, including medical overview, neurology, gastroenterology, immunology, pulmonology, urology, hematology, endocrinology, toxicology, and other related topics. **Prerequisites:** Completion of first semester EMSP courses, all with B or better. **Co-enrolled:** EMSP 2444, EMSP 2330, and EMSP 2261.
- #2444. (EMSP) Cardiology** **CIP 51.0904**
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 Assessment and management of patients with cardiac emergencies. Includes single and multi-lead ECG interpretation. A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of patients with cardiac emergencies. **Prerequisites:** Completion of first semester EMSP courses, all with B or better. **Co-enrolled:** EMSP 2434, EMSP 2330, and EMSP 2261.
- (ENGL) ENGLISH**
- +0320. (ENGL) Fundamentals of Grammar and Writing** **CIP 32.0108**
3 lecture hours and 2 lab hours per week; 80 total contact hours. Credit: 3 semester hours.
Not counted toward a degree or certificate.
 English 0320 teaches the fundamentals of written language that contribute to clear, concise, well-organized paragraphs. This course emphasizes the correct use of grammar and mechanics in the construction of idiomatically correct simple, compound, complex, and compound-complex sentences. **Prerequisites:** Appropriate scores on the TSIA. **Note:** International students should see paired co-enrolled courses ESOL 0335 and ESOL 0324.

- +1301. (ENGL) Composition I *** **CIP 23.1301**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Intensive study of and practice in writing processes, from invention and researching to drafting, revising, and editing, both individually and collaboratively. Emphasis on effective rhetorical choices, including audience, purpose, arrangement, and style. Focus on writing the academic essay as a vehicle for learning, communicating, and critical analysis. This writing-intensive first-semester freshman composition course includes (1) study of and practice in all phases of the writing process, both individually and collaboratively, and (2) study of and practice in the strategies and techniques for developing research-based expository and persuasive texts. Essays including a 1500-word documented library research-based paper, are required. **Prerequisites:** A student must be college ready in reading and writing according to TSI college-ready standards.
- +1302. (ENGL) Composition II *** **CIP 23.1301**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Intensive study of and practice in the strategies and techniques for developing research-based expository and persuasive texts. Emphasis on effective and ethical rhetorical inquiry; teamwork; critical reading of verbal, visual, and multimedia texts; systematic evaluation, synthesis, and documentation of information sources; and critical thinking about evidence and conclusions. This reading and writing intensive prerequisite for sophomore English offerings further develops the analytical, thinking, and research skills underlying academic success through the study of literature. The student's writing of genre-based essays, including researched papers, reinforces the thinking skills associated with interpretation, explication, evaluation, analysis, and synthesis. Essays, including a 1500-2000 word documented library research-based paper, are required. **Prerequisites:** ENGL 1301 with D or better.
- +2307. (ENGL) Creative Writing I** **CIP 23.1302**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Practical experience in the techniques of imaginative writing. May include fiction, nonfiction, poetry, screenwriting, or drama. This creative writing course is designed to introduce students to the craft of writing short prose; it places students in a workshop setting that promotes close analysis of published fiction, relies on peer workshops, and fosters original, publishable work. **Prerequisites:** ENGL 1301 and 1302, or departmental approval.
- +2308. (ENGL) Creative Writing II** **CIP 23.1302**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Practical experience in the techniques of imaginative writing. May include fiction, nonfiction, poetry, screenwriting, or drama. This creative writing course is designed to introduce students to the craft of writing poetry; it places students in a workshop setting that promotes close analysis of published poetry, relies on peer workshops, and fosters original, publishable work. **Prerequisites:** ENGL 1301 and 1302, or departmental approval.
- +2311. (ENGL) Technical and Business Writing *** **CIP 23.1303**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Intensive study of and practice in professional settings. Focus on the types of documents necessary to make decisions and take action on the job, such as proposals, reports, instructions, policies and procedures, e-mail messages, letters, and descriptions of products and services. Practice individual and collaborative processes involved in the creation of ethical and efficient documents. **Prerequisites:** ENGL 1301 with C or better.
- +2322. (ENGL) British Literature I *** **CIP 23.1404**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 A survey of the development of British literature from the Anglo-Saxon period to the Eighteenth Century. Students will study works of prose, poetry, drama, and fiction in relation to their historical, linguistic, and cultural contexts. Texts will be selected from a diverse group of authors and traditions. This survey introduces students to the principal authors, works, and trends that comprise the canon of British literature from the Anglo-Saxon period through the eighteenth century. Papers are required. **Prerequisites:** ENGL 1301 and 1302.
- +2323. (ENGL) British Literature II *** **CIP 23.1404**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 A survey of the development of British literature from the Romantic period to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions. **Prerequisites:** ENGL 1301 and 1302.
- +2327. (ENGL) American Literature I *** **CIP 23.1402**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 A survey of American literature from the period of exploration and settlement through the Civil War. Students will study works of prose, poetry, drama and fiction in relation to their historical and cultural contexts. Texts will be selected from among a diverse group of authors for what they reflect and reveal about the evolving American experience and character. **Prerequisites:** ENGL 1301 and 1302.

- +2328. (ENGL) American Literature II *** **CIP 23.1402**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 A survey of American literature from the Civil War to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from among a diverse group of authors for what they reflect and reveal about the evolving American experience and character. **Prerequisites:** ENGL 1301 and 1302.
- +2332. (ENGL) World Literature I *** **CIP 16.0104**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 A survey of world literature from the ancient world through the sixteenth century. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions. **Prerequisites:** ENGL 1301 and 1302.
- +2333. (ENGL) World Literature II *** **CIP 16.0104**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 A survey of world literature from the seventeenth century to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions. **Prerequisites:** ENGL 1301 and 1302.
- (ENGR) ENGINEERING**
- +1201. (ENGR) Introduction to Engineering** **CIP 14.0101**
2 lecture hours and 1 lab hour per week; 48 total contact hours. Credit: 2 semester hours.
 An introduction to the engineering profession with emphasis on technical communication and team-based engineering design. **Prerequisites:** MATH 1316, MATH 1414 or higher, with C or better, an appropriate score on an approved placement test, or co-enrollment in MATH 1414.
- +1304. (ENGR) Engineering Graphics I** **CIP 15.1301**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.
 Introduction to computer-aided drafting using CAD software and sketching to generate two- and three-dimensional drawings based on the conventions of engineering graphical communication; topics include spatial relationships, multi-view projections and sectioning, dimensioning, graphical presentation of data, and fundamentals of computer graphics. **Prerequisites:** MATH 1314.
- +2301. (ENGR) Engineering Mechanics – Statics** **CIP 14.1101**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Basic theory of engineering mechanics, using calculus, involving the description of forces, moments, and couples acting on stationary engineering structures; equilibrium in two and three dimensions; free-body diagrams; friction; centroids; centers of gravity; and moments of inertia. **Prerequisites:** PHYS 2425 with C or better, and MATH 2414 or can be co-enrolled.
- +2302. (ENGR) Engineering Mechanics – Dynamics** **CIP 14.1101**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Basic theory of engineering mechanics, using calculus, involving the motion of particles, rigid bodies, and systems of particles; Newton's Laws; work and energy relationships; principles of impulse and momentum; application of kinetics and kinematics to the solution of engineering problems. **Prerequisites:** ENGR 2301.
- +2304. (ENGR) Programming for Engineers** **CIP 11.0201**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Programming principles and techniques for matrix and array operations, equation solving, and numeric simulations applied to engineering problems and visualization of engineering information; platforms include spreadsheets, symbolic algebra packages, engineering analysis software, and laboratory control software.
- +2308. (ENGR) Engineering Economics** **CIP 14.0101**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Methods used for determining the comparative financial desirability of engineering alternatives. Provides the student with the basic tools required to analyze engineering alternatives in terms of their worth and cost, an essential element of engineering practice. The student is introduced to the concept of the time value of money and the methodology of basic engineering economy techniques. The course will address some aspects of sustainability and will provide the student with the background to enable them to pass the Engineering Economy portion of the Fundamentals of Engineering exam. **Prerequisites:** MATH 2413.

+2333. (ENGR) Elementary Chemical Engineering**CIP 14.0701****3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.**

This course is the foundation for nearly all future chemical engineering courses and analysis. A strong foundation in mathematics, physics, and chemistry is required for application to the solution of problems in industrial chemistry. Students will receive an introduction to chemical engineering calculations, unit equations, process stoichiometry, material and energy balances, and states of matter, and will apply the laws of conservation of mass and energy to reacting and non-reacting, simple and complex chemical systems. **Prerequisites:** ENGR 1201, CHEM 1412 or CHEM 1470, MATH 2414, and PHYS 2425.

+2334. (ENGR) Chemical Engineering Thermodynamics I**CIP 14.0701****3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.**

Fundamental concepts of energy and thermodynamics (e.g., temperature, thermodynamic equilibrium, and heat) will be introduced; the course emphasizes techniques in the application of the fundamentals of thermodynamics to various processes as they frequently occur in chemical and biomolecular engineering. Provides the basic skills and tools necessary in designing and analyzing real-life engineering systems. Serves as preparation for other advanced courses in thermodynamics, energy conversion, heat transfer, etc. **Prerequisites:** MATH 2415.

+2406. (ENGR) Introduction to Digital Systems**CIP 14.1001****3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.**

Introduction to theory and design of digital logic, circuits, and systems. Number systems, operations and codes; logic gates; Boolean Algebra and logic simplification; Karnaugh maps; combinational logic; functions of combinational Logic; flip-flops and related devices; counters; shift registers; sequential logic; memory and storage. Basic laboratory experiments supporting theoretical principles involving design, construction, and analysis of combinational and sequential digital circuits and systems, including logic gates, adders, multiplexers, encoders, decoders, arithmetic logic units, latches, flip-flops, registers, and counters; preparation of laboratory reports. **Prerequisites:** MATH 1314 or MATH 1414, with C or better, or an appropriate score on an approved placement test.

(ENGT) ENGINEERING TECHNOLOGY**+1407. (ENGT) Digital Fundamentals****CIP 15.0303****3 lecture hours and 2 lab hours per week; 80 total contact hours. Credit: 4 semester hours.**

Analysis, design, and simulation of combinational and sequential systems using: classical Boolean algebra techniques, lab hardware experiments and computer simulation. Introduction to programmable logic devices (PLDs) and application-specific integrated circuits using software tool to the design and analysis of digital logic circuits and systems. Standard instrumentation used in testing digital circuits and systems will be introduced. This course is included in the Field of Study curriculum for Engineering Technology. **Prerequisites:** MATH 1314.

(ESOL) DEVELOPMENTAL ENGLISH AS A SECOND LANGUAGE**+0238 (ESOL) Integrated Reading and Writing****CIP 32.0108****Individualized, modular curriculum; non-course based option (NCBO). Credit: 2 semester hours.***Not counted toward a degree or certificate.*

ESOL 0238 is an individualized curriculum for students whose post-course assessment or placement score demonstrates high proficiency but does not meet standards of efficiency and effectiveness for college level coursework. This course will present an individualized and concentrated study of specific integrated reading and writing skills and strategies needed by identified students. This course will be delivered in a non-course format, with a significant independent study component. As a result, students must be able to thrive in a self-directed study environment. Students earn a Pass or Fail, and must pass the course to be TSI college-ready in reading and writing. **Prerequisites:** Appropriate scores on the TSIA. **Note:** Students who drop or are dropped from ESOL 0238 for non-attendance will also be dropped from ENGL 1301. Students who do not pass ESOL 0238 and/or the co-enrolled course have the option to repeat it, or enroll in ESOL 0326 if not successfully taken previously. **Co-enrolled:** ENGL 1301.

+0324. (ESOL) Fundamentals of Reading and Vocabulary**CIP 32.0108****3 lecture hours and 2 lab hours per week; 80 total contact hours. Credit: 3 semester hours.***Not counted toward a degree or certificate.*

ESOL 0324 is for non-native English speaking students to develop and refine receptive English language skills necessary to succeed in college level (or credit) courses. Listening/reading comprehension is enhanced using strategic techniques with authentic discourse. The course is designed to improve enrollees' reading proficiency, comprehension, and vocabulary, both academic and personal. Multisensory learning experiences in whole group, small group, and individual settings serve to facilitate literacy development. ESOL 0324 is equivalent to READ 0305. **Prerequisites:** Non-native English speaker and appropriate scores on TSIA, or completion of READ 0304 with C or better. **Co-enrolled:** ESOL 0335.

- +0326. (ESOL) Developmental Integrated Reading and Writing for English as a Second Language** **CIP 32.0108**
3 lecture hours and 2 lab hours per week; 80 total contact hours. Credit: 3 semester hours.
Not counted toward a degree or certificate.
 ESOL 0326 is a combined lecture/lab, performance-based course designed to develop students' critical reading and academic writing skills. The focus of the course will be on applying critical reading skills for organizing, analyzing and retaining material, and developing written work appropriate to the audience, purpose, situation and length of the assignment. The course integrates preparation in basic academic reading skills with basic skills in writing a variety of academic essays. The course fulfills TSI requirements for level II reading and writing (previously developmental ENGL 0321 and READ 0306). Completion of ESOL 0326 with C or better is equivalent to completion of DIRW 0326 with C or better. **Prerequisites:** Non-native English speaker and appropriate scores on the TSIA, or completion of ENGL 0320 and READ 0305, both with C or better, or completion of ESOL 0335 and ESOL 0324, both with C or better, or completion of DIRW 0325 with C or better. **Co-enrolled:** STDY 0311 – see advisor for designated section.
- +0335. (ESOL) ESOL English** **CIP 32.0108**
3 lecture hours and 2 lab hours per week; 80 total contact hours. Credit: 3 semester hours.
Not counted toward a degree or certificate.
 ESOL 0335 is for non-native English speaking students to develop and refine productive English language skills necessary to succeed in college level (or credit) courses. Emphasis is on grammar, composition, and oral communication. Completion of ESOL 0335 with C or better is equivalent to completion of ENGL 0320 with C or better. **Prerequisites:** Non-native English speaker and appropriate scores on the TSIA. **Co-enrolled:** ESOL 0324.
- +0345. (ESOL) ESOL Conversation/Listening** **CIP 32.0108**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
Not counted toward a degree or certificate.
 ESOL 0345 is an English conversation and listening comprehension course with an academic focus. The course presents audiovisual materials and lectures over academic subjects (specifically American history and biology) as topics of discussion to help nonnative speakers improve their listening comprehension, their ability to understand academic concepts, and their ability to discuss those concepts in audience-appropriate English. **Prerequisites:** Non-native English speaker and appropriate scores on the TSIA.
- (FIRS) FIRE SCIENCE**
- #1103. (FIRS) Firefighter Agility and Fitness Preparation** **CIP 43.0203**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 Physical ability testing methods. Rigorous training in skills and techniques needed in typical fire department physical ability tests. This is a course held at Brayton Fire Field. **Prerequisites:** Must have EMT certification and be accepted into the Fire Academy. **Co-enrolled:** FIRS 1301, FIRS 1313, FIRS 1319, FIRS 1329, FIRS 1407, FIRS 1323, and FIRS 1333.
- #1301. (FIRS) Firefighter Certification I** **CIP 43.0203**
2 lecture hours and 2 lab hours per week; 64 total contact hours. Credit: 3 semester hours
 One in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification II, III, IV, V, VI, and VII to satisfy the Texas Commission on Fire Protection (TCEP) curriculum for Basic Structural Fire Suppression, Course #100. ****THIS COURSE MAY BE OFFERED ONLY BY INSTITUTIONS CERTIFIED AS A TRAINING FACILITY BY THE TEXAS COMMISSION ON FIRE PROTECTION.**** This is a course held at Brayton Fire Field. **Prerequisites:** Must have EMT certification and be accepted into the Fire Academy. **Co-enrolled:** FIRS 1103, FIRS 1313, FIRS 1319, FIRS 1329, FIRS 1407, FIRS 1323, and FIRS 1333.
- #1313. (FIRS) Firefighter Certification III** **CIP 43.0203**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours
 One in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, II, IV, V, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. ****THIS COURSE MAY BE OFFERED ONLY BY INSTITUTIONS CERTIFIED AS A TRAINING FACILITY BY THE TEXAS COMMISSION ON FIRE PROTECTION.**** Preparation for certification as a basic firefighter. This is a course held at Brayton Fire Field. **Prerequisites:** Must have EMT certification and be accepted into the Fire Academy. **Co-enrolled:** FIRS 1103, FIRS 1301, FIRS 1319, FIRS 1329, FIRS 1407, FIRS 1323, and FIRS 1333.
- #1319. (FIRS) Firefighter Certification IV** **CIP 43.0203**
2 lecture hours and 2 lab hours per week; 64 total contact hours. Credit: 3 semester hours.
 One in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, II, III, V, VI, and VII to satisfy the Texas commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. ****THIS COURSE MAY BE OFFERED ONLY BY INSTITUTIONS CERTIFIED AS A TRAINING FACILITY BY THE TEXAS COMMISSION ON FIRE PROTECTION.**** This is a course held at Brayton Fire Field. **Prerequisites:** Must have EMT certification and be accepted into the Fire Academy. **Co-enrolled:** FIRS 1103, FIRS 1301, FIRS 1313, FIRS 1329, FIRS 1407, FIRS 1323, and FIRS 1333.

- #1323. (FIRS) Firefighter Certification V** **CIP 43.0203**
2 lecture hours and 3 lab hours per week; 80 total contact hours. Credit: 3 semester hours.
 One in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, II, III, IV, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. ****THIS COURSE MAY BE OFFERED ONLY BY INSTITUTIONS CERTIFIED AS A TRAINING FACILITY BY THE TEXAS COMMISSION ON FIRE PROTECTION. **** This is a course held at Brayton Fire Field. **Prerequisites:** Must have EMT certification and be accepted into the Fire Academy. **Co-enrolled:** FIRS 1103, FIRS 1301, FIRS 1313, FIRS 1319, FIRS 1329, FIRS 1407, and FIRS 1333.
- #1329. (FIRS) Firefighter Certification VI** **CIP 43.0203**
2 lecture hours and 2 lab hours per week; 64 total contact hours. Credit: 3 semester hours.
 One in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, II, III, IV, V, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. ****THIS COURSE MAY BE OFFERED ONLY BY INSTITUTIONS CERTIFIED AS A TRAINING FACILITY BY THE TEXAS COMMISSION ON FIRE PROTECTION. **** This is a course held at Brayton Fire Field. **Prerequisites:** Must have EMT certification and be accepted into the Fire Academy. **Co-enrolled:** FIRS 1103, FIRS 1301, FIRS 1313, FIRS 1319, FIRS 1407, FIRS 1323, and FIRS 1333.
- #1333. (FIRS) Firefighter Certification VII** **CIP 43.0203**
2 lecture hours and 4 lab hours per week; 96 total contact hours. Credit: 3 semester hours.
 One in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, II, III, IV, V, and VI to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. ****THIS COURSE MAY BE OFFERED ONLY BY INSTITUTIONS CERTIFIED AS A TRAINING FACILITY BY THE TEXAS COMMISSION ON FIRE PROTECTION. **** This is a course held at Brayton Fire Field. **Prerequisites:** Must have EMT certification and be accepted into the Fire Academy. **Co-enrolled:** FIRS 1103, FIRS 1301, FIRS 1313, FIRS 1319, FIRS 1329, FIRS 1407, and FIRS 1323.
- #1407. (FIRS) Firefighter Certification II** **CIP 43.0203**
3 lecture hours and 2 lab hours per week; 80 total contact hours. Credit: 4 semester hours.
 One in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, III, IV, V, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. ****THIS COURSE MAY BE OFFERED ONLY BY INSTITUTIONS CERTIFIED AS A TRAINING FACILITY BY THE TEXAS COMMISSION ON FIRE PROTECTION. **** This is a course held at Brayton Fire Field. **Prerequisites:** Must have EMT certification and be accepted into the Fire Academy. **Co-enrolled:** FIRS 1103, FIRS 1301, FIRS 1313, FIRS 1319, FIRS 1329, FIRS 1323, and FIRS 1333.
- (FIRT) FIRE PROTECTION AND SAFETY TECHNOLOGY/TECHNICIAN**
- #1303. (FIRT) Fire and Arson Investigation I** **CIP 43.0201**
2 lecture hours and 3 lab hours per week; 80 total contact hours. Credit: 3 semester hours
 Basic fire and arson investigation practices. Emphasis on fire behavior principles related to fire cause and origin determination.
- #1307. (FIRT) Fire Prevention Codes and Inspections** **CIP 43.0201**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours
 Study of local building and fire prevention codes. Emphasis on fire prevention inspections, practices and procedures.
- #1309. (FIRT) Fire Administration I** **CIP 43.0202**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours
 Introduction to the organization and management of a fire department and the relationship of government agencies to the fire service. Emphasis on fire service leadership from the perspective of the company officer.
- #1319. (FIRT) Firefighter Health and Safety** **CIP 43.0201**
2 lecture hours and 3 lab hours per week; 80 total contact hours. Credit: 3 semester hours
 Firefighter occupational safety and health in emergency and non-emergency situations. This course meets Fire and Emergency Services Higher Education (FESHE) Model Curriculum core requirements.
- #1329. (FIRT) Building Codes and Construction** **CIP 43.0201**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours
 Examination of building codes and requirements, construction types, and building materials. Includes walls, floorings, foundations, and various roof types and the associated dangers of each. This course meets Fire and Emergency Services Higher Education (FESHE) Model Curriculum core requirements.

#1333. (FIRT) Fire Chemistry I **CIP 43.0201**
2 lecture hours and 3 lab hours per week; 80 total contact hours. Credit: 3 semester hours
 Chemical nature and properties of compound as related to the fire service. Fundamental laws of chemistry, states of matter, gas laws, chemical bonding, and thermodynamics. This course meets Fire and Emergency Services Higher Education (FESHE) Model Curriculum core requirements.

#2309. (FIRT) Firefighting Strategies and Tactics I **CIP 43.0202**
2 lecture hours and 3 lab hours per week; 80 total contact hours. Credit: 3 semester hours.
 Analysis of the nature of fire problems and selection of initial strategies and tactics including an in-depth study of efficient and effective use of staffing and equipment to mitigate the emergency.

(FREN) FRENCH LANGUAGE

Students who have never taken a foreign language or who have completed less than one year of a foreign language in high school should enroll in 1411. Students who have had a course or courses in a foreign language may take a departmental test to determine in which course they should enroll.

+1411. (FREN) Beginning French I **CIP 16.0901**
3 lecture and 2 lab hours per week; 80 total contact hours. Credit: 4 semester hours.
 Fundamental skills in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture.

+1412. (FREN) Beginning French II **CIP 16.0901**
3 lecture and 2 lab hours per week; 80 total contact hours. Credit: 4 semester hours.
 Fundamental skills in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture. This course is a continuation of FREN 1411. **Prerequisites:** FREN 1411 or departmental approval.

+2311. (FREN) Intermediate French I **CIP 16.0901**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture. **Prerequisites:** FREN 1412 or departmental approval.

+2312. (FREN) Intermediate French II **CIP 16.0901**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture. This course is a continuation of FREN 2311. **Prerequisites:** FREN 1411, FREN 1412, and FREN 2311 or departmental approval.

(GEOG) GEOGRAPHY

+1301. (GEOG) Physical Geography * **CIP 45.0701**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 This course introduces students to the processes that drive Earth's physical systems. Students will explore the relationships among these physical systems, with emphasis on weather and climate, water, ecosystems, geologic processes and landform development, and human interactions with the physical environment. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards.

+1302. (GEOG) Human Geography * **CIP 45.0701**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 This course introduces students to fundamental concepts, skills, and practices of human geography. Place, space, and scale serve as a framework for understanding patterns of human experience. Topics for discussion may include globalization, population and migration, culture, diffusion, political and economic systems, language, religion, gender, and ethnicity. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards.

+1303. (GEOG) World Regional Geography * **CIP 45.0701**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Study of major world regions with emphasis on prevailing conditions and developments, including emerging conditions and trends, and the awareness of diversity of ideas and practices found in those regions. Course content may include one or more regions. Attention will be focused on the relationship of aspects of the physical environment and human activities to location. Major topics of discussion will include: culture, religion, language, landforms, climate, agriculture, and economic activities. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards.

- +2289. (GEOG) Academic Cooperative: Introduction to Geographic Research** **CIP 45.0101**
1 lecture hour and 2 lab hours per week; 48 total contact hours. Credit: 2 semester hours.
 An instructional program designed to integrate on-campus study with practical hands-on experience in geography. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of human social behavior and/or social institutions. This course is designed to provide undergraduate geography majors with an introduction to research question formulation and some of the different methods and approaches used to answer geographic questions. Emphasis will be placed on understanding career endpoints. As a part of this course, students will develop an understanding of both the scope of topics within geography and the research methods used in this discipline. **Prerequisites:** Completion of at least one GEOG course with B or better. A student must be college ready according to TSI college-ready standards.
- +2312. (GEOG) Economic Geography *** **CIP 45.0701**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Analytical study of the historical development of particular economic distributions as they relate to social, cultural, political, and physical factors. Includes critical inquiry into the reasons for locations of various types of economic activity, production, and marketing. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards. Cross listed as ECON 2311.
- +2389. (GEOG) Academic Cooperative: Geographic Information Systems** **CIP 45.0101**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 An instructional program designed to integrate on-campus study with practical hands-on experience in geography. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of human social behavior and/or social institutions. This course will provide an introduction to geographic information systems (GIS), which includes a history of GIS, real-world applications of GIS, basic GIS data and structures, and geospatial visualization and modeling. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards.
- +2470. (GEOG) Introduction to Geographic Information Systems** **CIP 45.0101**
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 GIS (Geographic Information Systems) is a computer-based tool that uses spatial data to analyze and solve real-world problems. This course is designed to introduce the student to the basic principles and techniques of GIS and the principles of geography and cartography. The lab component of this course will focus on GIS data collection, entry, storage, analysis, and output using GIS software. **Prerequisites:** A student must be college ready according to TSI college-ready standards. A Unique Needs course.
- (GEOLOGY) GEOLOGY**
- +1305. (GEOLOGY) Environmental Science** **CIP 03.0103**
Approval pending for inclusion in the AY 2017/2018 Core Curriculum.
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 A survey of the forces, including humans, that shape our physical and biologic environment, and how they affect life on Earth. Introduction to the science and policy of global and regional environmental issues, including pollution, climate change, and sustainability of land, water, and energy resources. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards. Cross-listed with ENVR 1301.
- +1403. (GEOLOGY) Physical Geology *** **CIP 40.0601**
Core Curriculum Course
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 Introduction to the study of the materials and processes that have modified and shaped the surface and interior of Earth over time. These processes are described by theories based on experimental data and geologic data gathered from field observations. Lab activities will cover methods to collect and analyze earth science data. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards.
- +1404. (GEOLOGY) Historical Geology *** **CIP 40.0601**
Core Curriculum Course
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 A comprehensive survey of the history of life and major events in the physical development of Earth as interpreted from rocks and fossils. Lab activities will introduce methods used by scientists to interpret the history of life and major events in the physical development of Earth from rocks and fossils. **Prerequisites:** GEOL 1403 or departmental approval.
- +1445. (GEOLOGY) Oceanography *** **CIP 40.0601**
Core Curriculum Course
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 Survey of oceanography and related sciences. Topics include the origin of the ocean basins; geologic processes in marine environments; waves, tides, and coastal processes; the ocean's role in climate variability and climate change; organisms that live in the ocean, their ecological communities and their interactions; and marine resources and human influences on the oceans. Lab work includes the physics of waves, currents, and tides; seawater chemistry; geological analysis of seafloor materials; bathymetric charts and maps, and marine life. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards.

- +2289. (GEOL) Academic Cooperative** **CIP 40.0101**
1 lecture hour and 2 lab hours per week; 48 total contact hours. Credit: 2 semester hours.
 A student-centered instructional program designed to integrate on-campus study with practical hands-on experience in the geosciences under supervision of faculty mentor. This course may be repeated once for credit. **Prerequisites:** Eight hours of college-level geology courses with a GPA of 3.0 or higher and the approval of the instructor, or 4 hours of college-level geology with an A while taking the second 4 hours of college-level geology concurrently.
- (GERM) GERMAN LANGUAGE**
- Students who have never taken a foreign language or who have completed less than one year of a foreign language in high school should enroll in 1411. Students who have had a course or courses in a foreign language may take a departmental test to determine in which course they should enroll.
- +1411. (GERM) Beginning German I** **CIP 16.0501**
3 lecture hours and 2 lab hours per week; 80 total contact hours. Credit: 4 semester hours.
 Fundamental skills in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture.
- +1412. (GERM) Beginning German II** **CIP 16.0501**
3 lecture hours and 2 lab hours per week; 80 total contact hours. Credit: 4 semester hours.
 Fundamental skills in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture. This course is a continuation of GERM 1411. **Prerequisites:** GERM 1411 or departmental approval.
- +2311. (GERM) Intermediate German I** **CIP 16.0501**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture. **Prerequisites:** GERM 1411 and 1412 or departmental approval.
- +2312. (GERM) Intermediate German II** **CIP 16.0501**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture. This course is a continuation of GERM 2311. **Prerequisites:** GERM 1411, GERM 1412, and GERM 2311 or departmental approval.
- (GOVT) GOVERNMENT**
- +2304. (GOVT) Introduction to Political Science** **CIP 45.1001**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Introductory survey of the discipline of political science focusing on the scope, and methods of the field, and the substantive topics in the discipline including the theoretical foundations of politics, political interaction, political institutions and how political systems function. **Prerequisites:** A student must be college ready according to TSI college-ready standards.
- +2305. (GOVT) Federal Government *** **CIP 45.1002**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Origin and development of the U.S. Constitution, structure and powers of the national government including the legislative, executive, and judicial branches, federalism, political participation, the national election process, public policy, civil liberties and civil rights. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards.
- +2306. (GOVT) Texas Government *** **CIP 45.1002**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Origin and development of the Texas constitution, structure and powers of state and local government, federalism and inter-governmental relations, political participation, the election process, public policy, and the political culture of Texas. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards.
- +2389. (GOVT) Academic Cooperative: Urban Planning** **CIP 45.0101**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Urban Planning – Building Better Cities. An instructional program designed to integrate on-campus study with practical hands-on experience in government. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of human social behavior and/or social institutions. This course is designed to provide undergraduates with an introduction to the scope and field of urban planning. Particular attention will be paid to different methods and approaches used to answer current and future urban planning challenges. Emphasis will be placed on understanding career endpoints and research opportunities. **Prerequisites:** GOVT 2306 with B or better. A student must be college ready according to TSI college-ready standards.

(HAMG) HOSPITALITY ADMINISTRATION/MANAGEMENT, GENERAL

- #1321. (HAMG) Introduction to Hospitality Industry** **CIP 52.0901**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 An exploration of the elements and career opportunities within the multiple segments of the hospitality industry. Topics include discussing current issues facing the hospitality industry and discussing the impact of customer service.
- #2330. (HAMG) Convention and Group Management and Services** **CIP 52.0901**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 An application of the essential components of successful convention and meeting planning. Topics include identifying the economic impact of the conventions industry; describing and comparing the various types of conventions, exhibitions, conferences, and the marketing tools used for pre-planning strategies; identifying the requirements for food and beverage service, meeting room set-ups, and post-meeting evaluations.
- #2388. (HAMG) Internship - Hospitality Administration/Management, General** **CIP 52.0901**
15 external hours per week; 240 total contact hours. Credit: 3 semester hours.
 A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. Students enrolled must be employed and perform and apply various hospitality and/or management duties in the field. The student's internship objectives and project will be established by the instructor and employer supervisor. This may be a paid or unpaid experience. The student is required to attend one hour classroom instruction weekly. Final report and exit exam are required. The internship course is a capstone course and required for program completion.
Prerequisites: Program Coordinator approval.

(HECO) HOME ECONOMICS

- +1322. (HECO) Nutrition and Diet Therapy** **CIP 19.0501**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Study of the chemical, physical, and sensory properties of food; nutritional quality; and food use and diet applications. Cross-listed as BIOL 1322. Does not meet Core Curriculum requirements for Blinn College.

(HIST) HISTORY

- +1301. (HIST) United States History I *** **CIP 54.0102**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 A survey of the social, political, economic, cultural, and intellectual history of the United States from the pre-Columbian era to the Civil War/Reconstruction period. United States History I includes the study of pre-Columbian, colonial, revolutionary, early national, slavery and sectionalism, and the Civil War/Reconstruction eras. Themes that may be addressed in United States History I include: American settlement and diversity, American culture, religion, civil and human rights, technological change, economic change, immigration and migration, and creation of the federal government. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards.
- +1302. (HIST) United States History II *** **CIP 54.0102**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 A survey of the social, political, economic, cultural, and intellectual history of the United States from the Civil War/Reconstruction era to the present. United States History II examines industrialization, immigration, world wars, the Great Depression, Cold War and post-Cold War eras. Themes that may be addressed in United States History II include: American culture, religion, civil and human rights, technological change, economic change, immigration and migration, urbanization and suburbanization, the expansion of the federal government, and the study of U.S. foreign policy. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards.
- +2301. (HIST) Texas History *** **CIP 54.0102**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 A survey of the political, social, economic, cultural, and intellectual history of Texas from the pre-Columbian era to the present. Themes that may be addressed in Texas History include: Spanish colonization and Spanish Texas; Mexican Texas; the Republic of Texas; statehood and secession; oil, industrialization, and urbanization; civil rights; and modern Texas. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards.

- +2311. (HIST) Western Civilization I** **CIP 54.0101**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 A survey of the social, political, economic, cultural, religious, and intellectual history of Europe and the Mediterranean world from human origins to the 17th century. Themes that should be addressed in Western Civilization I include the cultural legacies of Mesopotamia, Egypt, Greece, Rome, Byzantium, Islamic civilizations, and Europe through the Middle Ages, Renaissance, and Reformations. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards. HIST 1301 and HIST 1302, or departmental approval.
- +2312. (HIST) Western Civilization II** **CIP 54.0101**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 A survey of the social, political, economic, cultural, religious, and intellectual history of Europe and the Mediterranean world from the 17th century to the modern era. Themes that should be addressed in Western Civilization II include absolutism and constitutionalism, growth of nation states, the Enlightenment, revolutions, classical liberalism, industrialization, imperialism, global conflict, the Cold War, and globalism. **Prerequisites:** HIST 1301 and HIST 1302, or departmental approval. A student must be college ready in reading according to TSI college-ready standards.
- +2313. (HIST) History of England I** **CIP 54.0101**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Survey of the political, social, economic, military, cultural, and intellectual development of England from prehistoric period to 1714. **Prerequisites:** Sophomore standing recommended.
- +2314. (HIST) History of England II** **CIP 54.0101**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Survey of the political, social, economic, military, cultural, and intellectual development of England from 1714 to the present. **Prerequisites:** Sophomore standing recommended.
- +2321. (HIST) World Civilizations I** **CIP 54.0101**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 A survey of the social, political, economic, cultural, religious, and intellectual history of the world from the emergence of human cultures through the 15th century. The course examines major cultural regions of the world in Africa, the Americas, Asia, Europe, and Oceania and their global interactions over time. Themes include the emergence of early societies, the rise of civilizations, the development of political and legal systems, religion and philosophy, economic systems and trans-regional networks of exchange. The course emphasizes the development, interaction and impact of global exchange. **Prerequisites:** HIST 1301 and HIST 1302, or departmental approval.
- +2322. (HIST) World Civilizations II** **CIP 54.0101**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 A survey of the social, political, economic, cultural, religious, and intellectual history of the world from the 15th century to the present. The course examines major cultural regions of the world in Africa, the Americas, Asia, Europe, and Oceania and their global interactions over time. Themes include maritime exploration and transoceanic empires, nation/state formation and industrialization, imperialism, global conflicts and resolutions, and global economic integration. The course emphasizes the development, interaction and impact of global exchange. **Prerequisites:** HIST 1301 and HIST 1302, or departmental approval.

(HITT) HEALTH INFORMATION TECHNOLOGY

- #1301. (HITT) Health Data Content and Structure** **CIP 51.0707**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.
 Introduction to systems and processes for collecting, maintaining, and disseminating primary and secondary health related information including content of health record, documentation requirements, registries, indices, licensing, regulatory agencies, forms, and screens. The student must achieve 70% or higher to complete the course.
- #1302. (HITT) The Culture of Health Care** **CIP 51.0707**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Addresses job expectations in health care settings. Discusses how care is organized inside a practice setting, privacy laws, and professional and ethical issues encountered in the workplace. Federal Prison Campus course.
- #1305. (HITT) Medical Terminology I** **CIP 51.0707**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Study of medical terms through word origin and structure. Introduction to abbreviations and symbols, surgical and diagnostic procedures, and medical specialties. The student must achieve 70% or higher to complete the course.
- #1311. (HITT) Health Information Systems** **CIP 51.0707**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.
 Introduction to health IT standards, health-related data structures, software applications and enterprise architecture in health care and public health. The student must achieve 70% or higher to complete the course.

- #1312. (HITT) History of Health Information Technology in the U.S.** **CIP 51.0707**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Traces the development of IT systems in health care and public health, beginning with the experiments of the 1950s and 1960s and culminating in the HITECH Act. Introduces the concept of meaningful use. Federal Prison Campus course. **Prerequisites:** HITT 1302.
- #1341. (HITT) Coding and Classification Systems** **CIP 51.0713**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.
 Application of basic medical coding rules, principles, guidelines, and conventions. The student must achieve 70% or higher to complete the course. **Prerequisites:** HITT 1305 or can be co-enrolled.
- #1342. (HITT) Ambulatory Coding** **CIP 51.0713**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.
 Fundamentals of ambulatory coding rules, conventions, and guidelines. The student must achieve 70% or higher to complete the course. **Prerequisites:** HITT 1305, HITT 1341, MDCA 1302, and BIOL 2404. A student must be college ready in reading according to TSI college-ready standards.
- #1345. (HITT) Health Care Delivery Systems** **CIP 51.0707**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Examination of delivery systems including organization, financing, accreditation, licensure, and regulatory agencies. The student must achieve 70% or higher to complete the course. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards. **Corequisites:** HITT 1301.
- #1349. (HITT) Pharmacology** **CIP 51.0707**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Overview of the basic concepts of the pharmacological treatment of various diseases affecting major body systems. The student must achieve 70% or higher to complete the course. **Prerequisites:** HITT 1305.
- #1353. (HITT) Legal and Ethical Aspects of Health Information** **CIP 51.0707**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Concepts of privacy, security, confidentiality, ethics, healthcare legislation, and regulations relating to the maintenance and use of health information. The student must achieve 70% or higher to complete the course. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards.
- #1361. (HITT) Clinical – Health Information/Medical Records Technology/Technician** **CIP 51.0707**
12 external hours per week; 192 total contact hours. Credit: 3 semester hours.
 A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. The student must achieve 70% or higher to complete the course. **Prerequisites:** Approval of Program Director.
- #2339. (HITT) Health Information Organization and Supervision** **CIP 51.0707**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Principles of organization and supervision of human, financial, and physical resources. The student must achieve 70% or higher to complete the course. **Prerequisites:** HITT 1301, HITT 1345, and HITT 1353.
- #2340. (HITT) Advanced Medical Billing and Reimbursement** **CIP 51.0713**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.
 Skill development coding to prepare reimbursement forms in various health care settings for submission to payers. The student must achieve 70% or higher to complete the course. **Prerequisites:** HITT 1341 and HITT 1342. A student must be college ready in reading according to TSI college-ready standards. **Corequisites:** HITT 2435.
- #2343. (HITT) Quality Assessment and Performance Improvement** **CIP 51.0707**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Study of quality standards and methodologies in the health information management environment. Topics include licensing, accreditation, compilation and presentation of data in statistical formats, quality management and performance improvement functions, utilization management, risk management, and medical staff data quality issues, and approaches to assessing patient safety issues and implementation of quality management and reporting through electronic systems. The student must achieve 70% or higher to complete the course. **Prerequisites:** HITT 1301, HITT 1345, and HITT 1353.
- #2346. (HITT) Advanced Medical Coding** **CIP 51.0713**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.
 Advanced concepts of ICD and CPT coding rules, conventions, and guidelines in complex case studies. Investigation of government regulations and changes in health care reporting. Federal Prison Campus course. **Prerequisites:** POFM 1300 and POFM 2310.

#2435. (HITT) Coding and Reimbursement Methodologies**CIP 51.0713****4 lecture hours and 1 lab hour per week; 80 total contact hours. Credit: 4 semester hours.**

Advanced coding techniques with emphasis on case studies, health records, and federal regulations regarding prospective payment systems and methods of reimbursement. The student must achieve 70% or higher to complete the course. **Prerequisites:** HITT 1341 and HITT 1342.

#2460. (HITT) Clinical – Health Information/Medical Records Technology/Technician**CIP 51.0707****16 external hours per week; 256 total contact hours. Credit: 4 semester hours.**

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. The student must achieve 70% or higher to complete the course. **Prerequisites:** HITT 2435.

(HPRS) HEALTH SERVICES/ALLIED HEALTH/HEALTH SCIENCES**#1205. (HPRS) Essentials of Medical Law/Ethics for Health Professionals****CIP 51.0000****2 lecture hours per week; 32 total contact hours. Credit: 2 semester hours.**

Introduction to the relationship between legal aspects and ethics in health care, with emphasis on the ethical and legal responsibilities of health care professionals. This course examines the ethical obligations of health care professionals including hypothetical problems; discusses current legal and ethical issues in health care; and identifies governmental regulations.

#2300. (HPRS) Pharmacology for Health Professions**CIP 51.0000****3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.**

A study of drug classifications, actions, therapeutic uses, adverse effects, routes of administration, and calculation of dosages. **Prerequisites:** Admissions into the Surgical Technology Certificate Program or Program Director approval.

#2301. (HPRS) Pathophysiology**CIP 51.0000****3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.**

Study of the pathology and general health management of diseases and injuries across the life span. Topics include etiology, symptoms, and the physical and psychological reactions to diseases and injuries. **Prerequisites:** BIOL 2401 and ADN Program approval.

#2321. (HPRS) Medical Law and Ethics for Health Professionals**CIP 51.0000****3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.**

Principles, procedures, and regulations governing the legal and ethical relationships among physicians, patients, and health care professionals. Includes current ethical issues related to the various healthcare professions and patient confidentiality. Federal Prison Campus course. **Prerequisites:** HITT 1312.

(HRPO) HUMAN RESOURCES MANAGEMENT/PERSONNEL ADMINISTRATION**#2301. (HRPO) Human Resources Management****CIP 52.1001****3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.**

Behavioral and legal approaches to the management of human resources in organizations. Emphasis on describing and explaining the development of human resources management; evaluating current methods of job analysis, recruitment, selection, training/development, performance management, promotion, and separation; discussion of management's ethical, social, and legal responsibilities; assessment of methods of compensation and benefits planning; and analyzing the role of strategic human resource planning in support of organizational mission and objectives.

#2307. (HRPO) Organizational Behavior**CIP 52.1003****3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.**

The analysis and application of organizational theory, group dynamics, motivation theory, leadership concepts, and the integration of interdisciplinary concepts from the behavioral sciences. An emphasis on the explanation of organizational theory as it relates to management practices, employee relations, and structure of the organization to fits its environment and operation; analysis of leadership styles and determining their effectiveness in employee situations; identifying methods in resolving organizational problems; describing the impact of corporate culture on employee behavior; and analyzing team dynamics, team building strategies, and cultural diversity.

(IBUS) INTERNATIONAL BUSINESS/TRADE/COMMERCE**#1305. (IBUS) Introduction to International Business and Trade****CIP 52.1101****3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.**

A study of the techniques for entering the international marketplace. Emphasis on the impact and dynamics of sociocultural, demographic, economic, technological, and political-legal factors in the foreign trade environment. Topics include patterns of world trade, internationalization of the firm, and operating procedures of the multinational enterprise.

(IMED) EDUCATIONAL/INSTRUCTIONAL MEDIA DESIGN

#1316. (IMED) Web Design I **CIP 11.0801**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.
 Instruction in web design and related graphic design issues including mark-up languages, web sites, and browsers. Students will identify how the Internet functions with specific attention to the World Wide Web and file transfer; apply design techniques in the creation and optimization of graphics and other embedded elements; demonstrate the use of World Wide Web Consortium (W3C) formatting and layout standards; and design, create, test, and maintain a web site.

#2309. (IMED) Internet Commerce **CIP 11.0801**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.
 An overview of the Internet as a marketing and sales tool with emphasis on developing a prototype for electronic commerce. Topics include dynamic data integration, data collection, and on-line transactions. Students will perform audience analysis; state marketing objectives; analyze design strategies for secure data transfer; design a web project to use real-time processing capabilities intended to interact with a database.

#2315. (IMED) Web Design II **CIP 11.0801**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.
 A study of mark-up language advanced layout techniques for creating web pages. Emphasis on identifying the target audience and producing web sites according to accessibility standards, cultural appearance, and legal issues. Students will demonstrate the use of World Wide Web Consortium (W3C) standards for style, accessibility, layout, and formatting; build web pages with dynamic customization capabilities; develop web sites designed for usability and cultural diversity; and utilize design strategies to increase the success of locating the site via search engines.

(ITNW) COMPUTER SYSTEMS NETWORKING AND TELECOMMUNICATIONS

#1325. (ITNW) Fundamentals of Networking Technologies **CIP 11.1002**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.
 Instruction in networking technologies and their implementation. Topics include the OSI reference model, network protocols, transmission media, and networking hardware and software.

#1353. (ITNW) Supporting Network Server Infrastructure **CIP 11.0901**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.
 Skills development in installing, configuring, managing, and supporting a network infrastructure. **Prerequisites:** ITNW 1354 (previously ITNW 1454), or departmental approval.

#1354. (ITNW) Implementing and Supporting Servers **CIP 11.0901**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.
 Implement, administer, and troubleshoot information systems that incorporate servers in a networked computing environment. **Prerequisites:** ITNW 1325 and ITSC 1325, or departmental approval.

#2335. (ITNW) Network Troubleshooting and Support **CIP 11.0901**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.
 Troubleshoot and support networks with emphasis on solving real world problems in a hands-on environment. Topics include troubleshooting and research techniques, available resources, and network management hard/software. **Prerequisites:** ITNW 1325 and ITSC 1325, or departmental approval.

#2350. (ITNW) Enterprise Network **CIP 11.0901**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.
 A case study in Convergence Technologies requiring a network engineer to study a problem and design a network solution for an enterprise network. **Prerequisites:** ITNW 1353 (previously ITNW 1453).

#2388. (ITNW) Internship – Computer Systems Networking and Telecommunications **CIP 11.0901**
9 external hours per week; 144 total contact hours. Credit: 3 semester hours.
 A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. This internship is a capstone course and a requirement for award completion and should be taken near the last of study. **Prerequisites:** Program Coordinator approval.

(ITSC) COMPUTER AND INFORMATION SCIENCES

#1316. (ITSC) Linux Installation and Configuration **CIP 11.0101**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.
 Introduction to Linux operating system. Includes Linux installation, basic administration, utilities and commands, upgrading, networking, security, and application installation. Emphasizes hands-on setup, administration, and management of Linux. **Prerequisites:** ITNW 1325 and ITSC 1325.

- #1325. (ITSC) Personal Computer Hardware** **CIP 47.0104**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Current personal computer hardware including assembly, upgrading, setup, configuration and troubleshooting.
- #2325. (ITSC) Advanced Linux** **CIP 11.0101**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.
 Provides instruction in Advance Open-source Linux operating system. Develops LDAP directory services to all your clients, support users remotely, installing and configuring network services. Students will install, administer, and manage advance network environment using a Linux system. Demonstrate advance skills and proficiency with Linus utilities, configurations, deploy secure networks. Integrate Linux networks with existing networks. **Prerequisites:** ITSC 1316 (previously ITSC 1416).
- (ITSE) COMPUTER PROGRAMMING/PROGRAMMER**
- #2302. (ITSE) Intermediate Web Programming** **CIP 11.0801**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.
 Server-side and client-side techniques for Web development. **Prerequisites:** ITSE 2309 (previously ITSE 2409), or departmental approval.
- #2309. (ITSE) Database Programming** **CIP 11.0802**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.
 Database development using database programming techniques emphasizing database structures, modeling, and database access. **Prerequisites:** ITNW 1325 and ITSC 1325 or departmental approval.
- (ITSW) DATA PROCESSING AND DATA PROCESSING TECHNOLOGY/TECHNICIAN**
- #1301. (ITSW) Introduction to Word Processing** **CIP 11.0602**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.
 An overview of the production of documents, tables, and graphics.
- #1304. (ITSW) Introduction to Spreadsheets** **CIP 11.0301**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.
 Instruction in the concepts, procedures, and application of electronic spreadsheets.
- #1307. (ITSW) Introduction to Database** **CIP 11.0301**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.
 Introduction to database theory and the practical applications of a database. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards.
- #1310. (ITSW) Introduction to Presentation Graphics Software** **CIP 11.0301**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.
 Instruction in the utilization of presentation software to produce multimedia presentations. Graphics, text, sound, animation, and/or video may be used in presentation development.
- (ITSY) COMPUTER AND INFORMATION SYSTEMS SECURITY**
- #1342. (ITSY) Information Technology Security** **CIP 11.1003**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit 3 semester hours.
 Instruction in security for network hardware, software, and data, including physical security; backup procedures; relevant tools; encryption; and protection from viruses. **Prerequisites:** ITNW 1454 or departmental approval.
- (LGLA) LEGAL ASSISTANT/PARALEGAL**
- #1303. (LGLA) Legal Research** **CIP 22.0302**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Presents Legal Research techniques emphasizing the paralegal's role. Legal Research is a prerequisite course for LGLA 2388 Internship, or equivalent substitute internship course. These prerequisite requirements may not be waived without the prior approval of the Program Coordinator and the Dean. **Prerequisites:** Appropriate scores on the TSIA or completion of READ 0304 with C or better.
- #1305. (LGLA) Legal Writing** **CIP 22.0302**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Fundamentals of legal writing techniques including case and fact analysis, citation formats, and legal writing styles emphasizing the paralegal's role in legal writing. **Prerequisites:** LGLA 1307.

- #1307. (LGLA) Introduction to Law and the Legal Professions** **CIP 22.0302**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Overview of the law and the legal professions including legal concepts, systems, and terminology; substantive areas of law and the federal and state judicial systems; ethical obligations and regulations; professional trends and issues with emphasis on the paralegal's role. Paralegal students are recommended to take this course in their first semester but variations in course sequences may be approved to accommodate individual scheduling.
- #1345. (LGLA) Civil Litigation** **CIP 22.0302**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Presents fundamental concepts and procedures of civil litigation including pretrial, trial, and post-trial phases of litigation and emphasizes paralegal's role in civil litigation.
- #1351. (LGLA) Contracts** **CIP 22.0302**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Presents fundamental concepts of contract law including formation, performance, and enforcement of contracts under the common law and the Uniform Commercial Code with emphasis on the paralegal's role in contract law. **Prerequisites:** Appropriate scores on the TSIA or completion of READ 0304 with C or better.
- #1353. (LGLA) Wills, Trusts and Probate Administration** **CIP 22.0302**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Presents fundamental concepts of the law of wills, trusts, and probate administration with emphasis on the paralegal's role. **Prerequisites:** Appropriate scores on the TSIA or completion of READ 0304 with C or better.
- #1355. (LGLA) Family Law** **CIP 22.0302**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Fundamental concepts of family law including formal and informal marriages, divorce, annulment, marital property, and the parent-child relationship with emphasis on the paralegal's role in family law.
- #2303. (LGLA) Torts and Personal Injury Law (Fall Only)** **CIP 22.0302**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Fundamental concepts of tort and personal injury law including intentional torts, negligence, and strict liability with emphasis on the paralegal's role. **Prerequisites:** Appropriate scores on the TSIA or completion of READ 0304 with C or better.
- #2307. (LGLA) Law Office Management (Spring Only)** **CIP 22.0302**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Fundamentals of principles and structure of management, administration, and substantive systems in the law office including law practice technology as applied to paralegals. **Prerequisites:** Appropriate scores on the TSIA or completion of READ 0304 with C or better.
- #2313. (LGLA) Criminal Law and Procedure** **CIP 22.0302**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Fundamental concepts of criminal law and procedure from arrest to final disposition including principles of federal and state law emphasizing the role of the paralegal in the criminal justice system. **Prerequisites:** Appropriate scores on the TSIA or completion of READ 0304 with C or better.
- #2337. (LGLA) Mediation** **CIP 22.0302**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Fundamental concepts of mediation and alternative dispute resolution emphasizing the paralegal's role assisting in the mediation process.
- #2388. (LGLA) Internship – Legal Assistant/Paralegal** **CIP 22.0302**
15 external hours per week; 240 total contact hours. Credit: 3 semester hours.
 A work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. A learning plan is developed by the college and the employer. This may be a paid or unpaid experience. Under certain circumstances, a student may be enrolled concurrently in LGLA 2388 and LGLA 1305 to satisfy the prerequisite. Such concurrent enrollment must have the prior approval of the Dean or designee. Students must complete at least the minimum required on-site internship hours under appropriate site supervision. This internship is a capstone course and a requirement for program completion. **Prerequisites:** Program Coordinator approval.

(MATH) MATHEMATICS

- +0110 (MATH) Developmental Mathematics NCBO Option** **CIP 32.0104**
1 lab hour per week; 16 total contact hours. Credit: 1 semester hour.
Not counted toward a degree or certificate.
 The NCBO supports students in developing skills, strategies, and reasoning needed to succeed in mathematics, including communication and appropriate use of technology. Topics include the study of numeracy and the real number system; algebraic concepts, notation, and reasoning; quantitative relationships; mathematical models; and problem solving. This course is delivered in a face-to-face format with directed review, just-in-time instruction, and an emphasis on math specific study skills. Students earn a Pass or Fail, and must pass both MATH 0110 and MATH 1332 to be TSI college-ready in mathematics. **Prerequisites:** Appropriate scores on the TSIA or departmental approval. **Co-enrolled:** MATH 1332. **Note:** Students who drop or are dropped from MATH 0110 for non-attendance will also be dropped from MATH 1332. Students who do not pass MATH 0110 and/or the co-enrolled course will be enrolled in MATH 0312.
- +0111 (MATH) Fundamentals of Mathematics for Business and Social Sciences NCBO Option** **CIP 32.0104**
1 lab hour per week; 16 total contact hours. Credit: 1 semester hour.
Not counted toward a degree or certificate.
 A study of relations and functions, inequalities, algebraic expressions and equations (absolute value, polynomial, radical, rational), with a special emphasis on linear and quadratic expressions and equations. This course is delivered in a face-to-face format with directed review, just-in-time instruction, and an emphasis on math specific study skills. Students earn a Pass or Fail, and must pass both MATH 0111 and MATH 1324 to be TSI college-ready in mathematics. **Prerequisites:** Appropriate scores on the TSIA or departmental approval. **Co-enrolled:** MATH 1324. **Note:** Students who drop or are dropped from MATH 0111 for non-attendance will also be dropped from MATH 1324. Students who do not pass MATH 0111 and/or the co-enrolled course will be enrolled in MATH 0311.
- +0112 (MATH) Intermediate Algebra NCBO Option** **CIP 32.0104**
1 lab hour per week; 16 total contact hours. Credit: 1 semester hour.
Not counted toward a degree or certificate.
 A study of relations and functions, inequalities, algebraic expressions and equations (absolute value, polynomial, radical, rational), with a special emphasis on linear and quadratic expressions and equations. This course will be delivered in a non-course format, with a significant independent study component. As a result, students must be able to thrive in a self-directed study environment. Students earn a Pass or Fail, and must pass both MATH 0112 and the required co-enrolled credit MATH course to be TSI college-ready in mathematics. **Prerequisites:** Appropriate scores on the TSIA or departmental approval. **Co-enrolled:** MATH 1414 or MATH 1325. **Note:** Students who drop or are dropped from MATH 0112 for non-attendance will also be dropped from the required co-enrolled credit MATH course. Students who do not pass MATH 0112 and/or the co-enrolled course will be enrolled in MATH 0312.
- +0308. (MATH) Pre-Algebra without Lab** **CIP 32.0104**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
Not counted toward a degree or certificate.
 A study of fundamental operations of arithmetic on the rational number system, including an emphasis of signed number arithmetic, solving simple linear equations, and percent applications. **Prerequisites:** Appropriate scores on the TSIA.
- +0310. (MATH) Introductory Algebra** **CIP 32.0104**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
Not counted toward a degree or certificate.
 A study of solving linear equations and linear inequalities in one variable, solving equations and linear inequalities, graphing linear equations and linear inequalities, finding and applying slopes of lines, using properties of exponents, performing operations with polynomials, factoring polynomials, and solving quadratic equations by factoring. **Prerequisites:** Appropriate scores on the TSIA, or completion of MATH 0308 or MATH 0309 with C or better.
- +0311. (MATH) Fundamentals of Mathematics for Business and Social Sciences** **CIP 32.0104**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
Not counted toward a degree or certificate.
 A study of algebraic properties, concepts, and procedures; and solving linear and non-linear functions and models (including cost, revenue, profit, demand, and supply), solving linear systems of equations, matrices, and mathematics of finance (including simple interest, annuities, and loans). Students must pass MATH 0311 with a C or better to be TSI college-ready in mathematics. This course is designed to prepare students to matriculate to non-STEM related college-level mathematics. **Prerequisites:** Appropriate scores on the TSIA, or completion of MATH 0310 with C or better.
- +0312. (MATH) Intermediate Algebra** **CIP 32.0104**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
Not counted toward a degree or certificate.
 A study of relations and functions, inequalities, algebraic expressions and equations (absolute value, polynomial, radical, rational), with a special emphasis on linear and quadratic expressions and equations. Students must pass MATH 0312 with a C or better to be TSI college-ready in mathematics. This course is designed to prepare students to matriculate to STEM related college-level mathematics. **Prerequisites:** Appropriate scores on the TSIA, or completion of MATH 0310 with C or better.

- +1314. (MATH) College Algebra *** **CIP 27.0101**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 In-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included. **Prerequisites:** A student must be college ready in math according to TSI college-ready standards, or MATH 0312 with C or better, or an appropriate score on an approved placement test.
- +1316. (MATH) Plane Trigonometry *** **CIP 27.0101**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 In-depth study and applications of trigonometry including definitions, identities, inverse functions, solutions of equations, graphing, and solving triangles. Additional topics such as vectors, polar coordinates and parametric equations may be included. **Prerequisites:** MATH 1314 or MATH 1414, with C or better, or an appropriate score on an approved placement test.
- +1324. (MATH) Mathematics for Business and Social Sciences *** **CIP 27.0301**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 The application of common algebraic functions, including polynomial, exponential, logarithmic, and rational, to problems in business, economics, and the social sciences. The applications include mathematics of finance, including simple and compound interest and annuities; systems of linear equations; matrices; linear programming; and probability, including expected value. **Prerequisites:** A student must be college ready in math according to TSI college-ready standards, or MATH 0312 with C or better, or an appropriate score on an approved placement test.
- +1325. (MATH) Calculus for Business and Social Sciences *** **CIP 27.0301**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 This course is the basic study of limits and continuity, differentiation, optimization and graphing, and integration of elementary functions, with emphasis on applications in business, economics, and social sciences. This course is not a substitute for MATH 2413, Calculus I. **Prerequisites:** MATH 1314 or MATH 1414 or MATH 1324 or MATH 2412 or higher MATH, or an appropriate score on an approved placement test.
- +1332. (MATH) Contemporary Mathematics I *** **CIP 27.0101**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Topics may include introductory treatments of sets, logic, number systems, number theory, relations, functions, probability and statistics. Appropriate applications are included. **Prerequisites:** A student must be college ready in math according to TSI college-ready standards, or MATH 0312 with C or better, or an appropriate score on an approved placement test.
- +1342. (MATH) Elementary Statistical Methods *** **CIP 27.0501**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Collection, analysis, presentation, and interpretation of data, and probability. Analysis includes descriptive statistics, correlation and regression, confidence intervals and hypothesis testing. Use of appropriate technology is strongly recommended. **Prerequisites:** A student must be college ready in math according to TSI college-ready standards or an appropriate score on an approved placement test.
- +1350. (MATH) Fundamentals of Mathematics I** **CIP 27.0101**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Concepts of sets, functions, numeration systems, number theory and properties of the natural numbers, integers, rational, and real number systems with an emphasis on problem solving and critical thinking. **Prerequisites:** MATH 1314, or MATH 1414, or MATH 1324, or MATH 1325, or MATH 2412, or higher MATH, or an appropriate score on an approved placement test.
- +1351. (MATH) Fundamentals of Mathematics II** **CIP 27.0101**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Concepts of geometry, probability and statistics, as well as applications of the algebraic properties of real numbers to concepts of measurement with an emphasis on problem solving and critical thinking. This course is designed specifically for students who seek middle grade (4 through 8) teacher certification. **Prerequisites:** MATH 1314, or MATH 1414, or MATH 1324, or MATH 1325, or MATH 1350, or MATH 2412, or higher MATH, or an appropriate score on an approved placement test.

- +1414. (MATH) College Algebra *** **CIP 27.0101**
Core Curriculum Course
4 lecture hours per week; 64 total contact hours. Credit: 4 semester hours.
 In-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included. **Prerequisites:** A student must be college ready in math according to TSI college-ready standards or an appropriate score on an approved placement test.
- +2318. (MATH) Linear Algebra** **CIP 27.0101**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Introduces and provides models for application of the concepts of vector algebra. Topics include finite dimensional vector spaces and their geometric significance; representing and solving systems of linear equations using multiple methods, including Gaussian elimination and matrix inversion; matrices; determinants; linear transformations; quadratic forms; eigenvalues and eigenvector; and applications in science and engineering. **Prerequisites:** MATH 2414.
- +2320. (MATH) Differential Equations** **CIP 27.0101**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Ordinary differential equations, including linear equations, systems of equations, equations with variable coefficients, existence and uniqueness of solutions, series solutions, singular points, transform methods, and boundary value problems; application of differential equations to real-world problems. **Prerequisites:** MATH 2414, or MATH 2415, or departmental approval.
- +2412. (MATH) Pre-Calculus Math *** **CIP 27.0101**
Core Curriculum Course
4 lecture hours per week; 64 total contact hours. Credit: 4 semester hours.
 In-depth study of algebra, trigonometry, and other topics for calculus readiness including algebraic functions and their graphs, inverse functions, polynomial functions, rational and irrational functions, exponential and logarithmic functions, trigonometric functions, inverse trigonometric functions, Law of Sines, Law of Cosines, and analytic geometry. **Prerequisites:** MATH 1316 or an appropriate score on an approved placement test, or departmental approval.
- +2413. (MATH) Calculus I *** **CIP 27.0101**
Core Curriculum Course
4 lecture hours per week; 64 total contact hours. Credit: 4 semester hours.
 Limits and continuity, the Fundamental Theorem of Calculus; definition of the derivative of a function and techniques of differentiation; applications of the derivative to maximizing or minimizing a function; the chain rule, mean value theorem, and rate of change problems; curve sketching; definite and indefinite integration of algebraic, trigonometric, and transcendental functions, with an application to calculation of areas. **Prerequisites:** MATH 1316 and MATH 1414, or MATH 2412, or an appropriate score on an approved placement test, or departmental approval.
- +2414. (MATH) Calculus II** **CIP 27.0101**
4 lecture hours per week; 64 total contact hours. Credit: 4 semester hours.
 Differentiation and integration of transcendental functions; parametric equations and polar coordinates; techniques of integration; sequences and series; and, improper integrals. **Prerequisites:** MATH 2413 or departmental approval.
- +2415. (MATH) Calculus III** **CIP 27.0101**
4 lecture hours per week; 64 total contact hours. Credit: 4 semester hours.
 Advanced topics in calculus, including vectors and vector-valued functions, partial differentiation, Lagrange multipliers, multiple integrals, and Jacobians; application of the line integral, including Green's Theorem, the Divergence Theorem, and Stokes' Theorem. **Prerequisites:** MATH 2414 or departmental approval.

(MDCA) MEDICAL/CLINICAL ASSISTANT

- #1302. (MDCA) Human Disease/Pathophysiology** **CIP 51.0801**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 A study of anatomy and physiology with emphasis on human pathophysiology, including etiology, prognosis, medical treatment, signs and symptoms of common diseases of all body systems. The student must achieve 70% or higher to complete the course. **Prerequisites:** A student must be college ready in reading by TSI college-ready standards; and HITT 1305 or may be co-enrolled.

(MRKG) BUSINESS MARKETING AND MARKETING MANAGEMENT

- #1311. (MRKG) Principles of Marketing** **CIP 52.1401**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Introduction to the marketing mix functions and process. Includes identification of consumer and organizational needs and explanation of environmental issues. Emphasis on identify the marketing mix components; explanation of the environmental factors which influence consumer and organizational decision-making processes; and outlining a marketing plan.

#2333. (MRKG) Principles of Selling**CIP 52.1401****3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.**

Overview of the selling process. Identification of the elements of the communication process between buyers and sellers. Examination of the legal and ethical issues of organizations which affect salespeople. Emphasis on defining the selling process and its application to all forms of sales; identifying the elements of the communication process between buyers and sellers in business; and examining ethical issues and legal restrictions of business.

(MUAP) APPLIED MUSIC

Private study of piano, voice, brass, woodwind and percussion instruments is available to all students who participate in the parent performing ensemble (concert band, symphonic band, marching band, chorus, choral ensemble and jazz ensemble). Non-music majors take one semester credit hour courses (which includes 30 minutes of individual instruction per week) and music majors are required to take two semester credit hour courses (which include an hour of individual instruction per week). Pre-advisement in the Music Department is required.

+1101-1102. (MUAP) Individual Instruction: String Instruments**CIP 50.0903****1 lecture hour per week; 16 total contact hours. Credit: 1 semester hour.**

Individual instruction in voice or brass, percussion, woodwind, stringed, or keyboard instruments. These courses are open to non-majors in violin, viola, violoncello, acoustic, or electric bass. The lessons will emphasize technique, sight reading, collaborative performing, and repertoire. Class includes 30 minutes of individual and 30 minutes of group instruction per week. Students are required to dedicate at least 3 external hours per week to individual practice. **Note:** Student is required to own the instrument. For non-music major freshmen.

+1117-1118. (MUAP) Individual Instruction: Woodwind Instruments**CIP 50.0903****1 lecture hour per week; 16 total contact hours. Credit: 1 semester hour.**

Individual instruction in voice or brass, percussion, woodwind, stringed, or keyboard instruments. Open to non-music majors who are enrolled in the band program. Material to include scales, etudes, solos and ensemble music assigned to the parent ensemble. Class includes 30 minutes of individual and 30 minutes of group instruction per week. Students are required to dedicate at least 3 external hours per week to individual practice. **Prerequisites:** Must be auditioned member of the band program with a background in instrumental music in high school. For non-music major freshmen.

+1137-1138. (MUAP) Individual Instruction: Brass Instruments**CIP 50.0903****1 lecture hour per week; 16 total contact hours. Credit: 1 semester hour.**

Individual instruction in voice or brass, percussion, woodwind, stringed, or keyboard instruments. Open to non-music majors who are enrolled in the band program. Material to include scales, etudes, solos, and ensemble music assigned to the parent ensemble. Class includes 30 minutes of individual and 30 minutes of group instruction per week. Students are required to dedicate at least 3 external hours per week to individual practice. **Prerequisites:** Must be an auditioned member of the band program with a background in instrumental music in high school. For non-music major freshmen.

+1157-1158. (MUAP) Individual Instruction: Percussion Instruments**CIP 50.0903****1 lecture hour per week; 16 total contact hours. Credit: 1 semester hour.**

Individual instruction in voice or brass, percussion, woodwind, stringed, or keyboard instruments. Open to non-music majors enrolled in the band program. Material will include instruction on snare, mallet and timpani and is designed to develop technique and reading skills through selected etudes, scales, and solo material unique to the specific instrument. Class includes 30 minutes of individual and 30 minutes of group instruction per week. Students are required to dedicate at least 3 external hours per week to individual practice. **Prerequisites:** Must be an auditioned member of the band program with a background in instrumental music in high school. For non-music major freshmen.

+1169-1170. (MUAP) Individual Instruction: Piano Study**CIP 50.0903****1 lecture hour per week; 16 total contact hours. Credit: 1 semester hour.**

Individual instruction in voice or brass, percussion, woodwind, stringed, or keyboard instruments. Open to non-music majors only through audition and/or counseling by the music/piano faculty. Study materials to include scales, solo repertoire, and the classics. Class includes 30 minutes of individual and 30 minutes of group instruction per week. Students are required to dedicate at least 3 external hours per week to individual practice. For non-music major freshmen.

+1181-1182. (MUAP) Individual Instruction: Voice Study**CIP 50.0903****1 lecture hour per week; 16 total contact hours. Credit: 1 semester hour.**

Individual instruction in voice or brass, percussion, woodwind, stringed, or keyboard instruments. This is for non-music majors only. Emphasis is on individual vocal technique and solo repertoire commensurate with vocal ability. Student must be enrolled in choral program concurrently. Class includes 30 minutes of individual and 30 minutes of group instruction per week. Students are required to dedicate at least 3 external hours per week to individual practice. **Prerequisites:** Departmental approval. For non-music major freshmen.

- +1217-1218. (MUAP) Individual Instruction: Woodwind Instruments** **CIP 50.0903**
2 lecture hours per week; 32 total contact hours. Credit: 2 semester hours.
 Individual instruction in voice or brass, percussion, woodwind, stringed, or keyboard instruments. Required of music majors playing a woodwind instrument. Material to include: scales, etudes, solos unique to the specific instrument with attention to technique, range, tone quality, articulation and musicianship in general. Class includes 50 minutes of individualized and 50 minutes of group instruction per week. Students are required to dedicate at least 6 external hours per week to individual practice. **Prerequisites:** Must be an auditioned member of the band program with a background in instrumental music in high school. For music major freshmen.
- +1237-1238. (MUAP) Individual Instruction: Brass Instruments** **CIP 50.0903**
2 lecture hours per week; 32 total contact hours. Credit: 2 semester hours.
 Individual instruction in voice or brass, percussion, woodwind, stringed, or keyboard instruments. Required of music majors playing a brass instrument. Material to include: scales, etudes, solos, unique to the specific instrument with attention to technique, range, tone quality, articulation and musicianship in general. Class includes 50 minutes of individualized and 50 minutes of group instruction per week. Students are required to dedicate at least 6 external hours per week to individual practice. **Prerequisites:** Must be an auditioned member of the band program with a background in instrumental music in high school. For music major freshmen.
- +1257-1258. (MUAP) Individual Instruction: Percussion Instruments** **CIP 50.0903**
2 lecture hours per week; 32 total contact hours. Credit: 2 semester hours.
 Individual instruction in voice or brass, percussion, woodwind, stringed, or keyboard instruments. Required of music majors with percussion as their performing instrument. Material will include instruction on snare, mallet and timpani and is designed to refine and further develop reading and performance skills in each area of percussion in order to develop the well-rounded percussionist. Class includes 50 minutes of individualized and 50 minutes of group instruction per week. Students are required to dedicate at least 6 external hours per week to individual practice. **Prerequisites:** Must be an auditioned member of the band program with a background in instrumental music in high school. For music major freshmen.
- +1269-1270. (MUAP) Individual Instruction: Piano Study** **CIP 50.0903**
2 lecture hours per week; 32 total contact hours. Credit: 2 semester hours.
 Individual instruction in voice or brass, percussion, woodwind, stringed, or keyboard instruments. Priority for enrollment in MUAP 1269-1270 is given to piano majors, and then non-music majors by audition only. Study materials include scales, etudes, solo repertoire, and the classics. Class includes 50 minutes of individualized and 50 minutes of group instruction per week. Students are required to dedicate at least 6 external hours per week to individual practice. **Corequisites:** Piano Majors must also enroll in MUEN 1141, 1142, 2141 or 2142. For music major freshmen.
- +1281-1282. (MUAP) Individual Instruction: Voice Study** **CIP 50.0903**
2 lecture hours per week; 32 total contact hours. Credit: 2 semester hours.
 Individual instruction in voice or brass, percussion, woodwind, stringed, or keyboard instruments. Emphasis will be on vocal production and repertoire appropriate for the voice part. Class includes 50 minutes of individualized and 50 minutes of group instruction per week. Students are required to dedicate at least 6 external hours per week to individual practice. **Prerequisites:** Music majors enrolled in the choral program and departmental approval. For music major freshmen.
- +2101-2102. (MUAP) Individual Instruction: String Instruments** **CIP 50.0903**
1 lecture hour per week; 16 total contact hours. Credit: semester 1 semester hour.
 Individual instruction in voice or brass, percussion, woodwind, stringed, or keyboard instruments. These courses are open to music-majors in violin, viola, violoncello, acoustic, or electric bass. The lessons will emphasize technique, sight reading, collaborative performing, and repertoire. Material is an extension of MUAP 1101-1102. 2102 is an extension of 2101. Class includes 30 minutes of individual and 30 minutes of group instruction per week. Students are required to dedicate at least 3 external hours per week to individual practice. **Prerequisites:** MUAP 1101-1102. **Co-enrolled:** MUAP 2101 is required for enrollment in MUAP 2102. **Note:** Student is required to own the instrument. For non-music major sophomores.
- +2117-2118. (MUAP) Individual Instruction: Woodwind Instruments** **CIP 50.0903**
1 lecture hour per week; 16 total contact hours. Credit: 1 semester hour.
 Individual instruction in voice or brass, percussion, woodwind, stringed, or keyboard instruments. Open to non-music majors who are enrolled in the band program. Material is an extension of MUAP 1117 and MUAP 1118 with continued development of technique, range, tone quality and concept of articulation. Class includes 30 minutes of individual and 30 minutes of group instruction per week. Students are required to dedicate at least 3 external hours per week to individual practice. **Prerequisites:** MUAP 1117-1118 and must be an auditioned member of the band program. For non-music major sophomores.
- +2137-2138. (MUAP) Individual Instruction: Brass Instruments** **CIP 50.0903**
1 lecture hour per week; 16 total contact hours. Credit: 1 semester hour.
 Individual instruction in voice or brass, percussion, woodwind, stringed, or keyboard instruments. Open to non-music majors who are enrolled in the band program. Material is an extension of MUAP 1137-1138 with continued development of technique, range, tone quality, and concept of articulation. Class includes 30 minutes of individual and 30 minutes of group instruction per week. Students are required to dedicate at least 3 external hours per week to individual practice. **Prerequisites:** MUAP 1137-1138 and must be an auditioned member of the band program. For non-music major sophomores.

- +2157-2158. (MUAP) Individual Instruction: Percussion Instruments** **CIP 50.0903**
1 lecture hour per week; 16 total contact hours. Credit: 1 semester hour.
 Individual instruction in voice or brass, percussion, woodwind, stringed, or keyboard instruments. Open to non-music majors enrolled in the band program. Material is an extension of MUAP 1157 and 1158 designed to further develop playing and reading skills of the well-rounded percussionist. Class includes 30 minutes of individual and 30 minutes of group instruction per week. Students are required to dedicate at least 3 external hours per week to individual practice. **Prerequisites:** MUAP 1157-1158 and must be an auditioned member of the band program. For non-music major sophomores.
- +2169-2170. (MUAP) Individual Instruction: Piano Study** **CIP 50.0903**
1 lecture hour per week; 16 total contact hours. Credit: 1 semester hour.
 Individual instruction in voice or brass, percussion, woodwind, stringed, or keyboard instruments. Open to non-music majors only through audition and/or counseling by the music/piano faculty. Study materials include scales, etudes, solo repertoire, and the classics. Class includes 30 minutes of individual and 30 minutes of group instruction per week. Students are required to dedicate at least 3 external hours per week to individual practice. **Prerequisites:** MUAP 1169-1170. For non-music major sophomores.
- +2181-2182. (MUAP) Individual Instruction: Voice Study** **CIP 50.0903**
1 lecture hour per week; 16 total contact hours. Credit: 1 semester hour.
 Individual instruction in voice or brass, percussion, woodwind, stringed, or keyboard instruments. This is for second year students (non-majors) wishing to explore more of their vocal range and repertoire with increased difficulty. Class includes 30 minutes of individual and 30 minutes of group instruction per week. Students are required to dedicate at least 3 external hours per week to individual practice. **Prerequisites:** MUAP 1181-1182, enrollment in the choral program, and departmental approval. For non-music major sophomores.
- +2217-2218. (MUAP) Individual Instruction: Woodwind Instruments** **CIP 50.0903**
2 lecture hours per week; 32 total contact hours. Credit: 2 semester hours.
 Individual instruction in voice or brass, percussion, woodwind, stringed, or keyboard instruments. Required of music majors playing a woodwind instrument. Material is an extension of MUAP 1217 and 1218 with continued refinement of playing skills and preparation of recital and audition material for the four year school during the spring semester. Class includes 50 minutes of individualized and 50 minutes of group instruction per week. Students are required to dedicate at least 6 external hours per week to individual practice. **Prerequisites:** MUAP 1217-1218 and must be an auditioned member of the band program. For music major sophomores.
- +2237-2238. (MUAP) Individual Instruction: Brass Instruments** **CIP 50.0903**
2 lecture hours per week; 32 total contact hours. Credit: 2 semester hours.
 Individual instruction in voice or brass, percussion, woodwind, stringed, or keyboard instruments. Required of music majors playing a brass instrument. Material is an extension of MUAP 1237 and MUAP 1238 with continued refinement of playing skills and preparation of recital and audition material for the four year school during the spring semester. Class includes 50 minutes of individualized and 50 minutes of group instruction per week. Students are required to dedicate at least 6 external hours per week to individual practice. **Prerequisites:** MUAP 1237-1238 and must be an auditioned member of the band program. For music major sophomores.
- +2257-2258. (MUAP) Individual Instruction: Percussion Instruments** **CIP 50.0903**
2 lecture hours per week; 32 total contact hours. Credit: 2 semester hours.
 Individual instruction in voice or brass, percussion, woodwind, stringed, or keyboard instruments. Required of music majors with percussion as their performing instrument. Material is an extension of MUAP 1257 and 1258 with attention to preparation of recital and audition material for the four year school in the Spring semester. Class includes 50 minutes of individualized and 50 minutes of group instruction per week. Students are required to dedicate at least 6 external hours per week to individual practice. **Prerequisites:** MUAP 1257-1258 and must be an auditioned member of the band program. For music major sophomores.
- +2269-2270. (MUAP) Individual Instruction: Piano Study** **CIP 50.0903**
2 lecture hours per week; 32 total contact hours. Credit: 2 semester hours.
 Individual instruction in voice or brass, percussion, woodwind, stringed, or keyboard instruments. Priority for MUAP 2269-2270 is given to piano majors, and then non-music majors by audition only. Study materials to include scales, etudes, solo repertoire, and the classics. Class includes 50 minutes of individualized and 50 minutes of group instruction per week. Students are required to dedicate at least 6 external hours per week to individual practice. **Prerequisites:** MUAP 1269-1270. For music major sophomores. **Corequisites:** Piano majors must also enroll in MUEN 1141, 1142, 2141 or 2142.
- +2281-2282. (MUAP) Individual Instruction: Voice Study** **CIP 50.0903**
2 lecture hours per week; 32 total contact hours. Credit: 2 semester hours.
 Individual instruction in voice or brass, percussion, woodwind, stringed, or keyboard instruments. This is for second-year students wishing to prepare for four-year college auditions. Students will be expected to be on a higher level of preparation, similar to what would be expected at the four-year university level. Class includes 50 minutes of individualized and 50 minutes of group instruction per week. Students are required to dedicate at least 6 external hours per week to individual practice. **Prerequisites:** MUAP 1281-1282, enrolled in choral program, and departmental approval. For music major sophomores.

(MUEN) MUSIC ENSEMBLE

- +1124. (MUEN) Marching Band** **CIP 50.0903**
4 lab hours per week; 64 total contact hours. Credit: 1 semester hour.
 Concert band, marching band, campus band, lab band (jazz/stage), symphony or orchestral group. Open to music majors and non-music majors with a background in instrumental music (including a recommendation of high school director) through audition on their respective instrument. Audition music should consist of region band etudes, class I solos, scales and sight reading. Color Guard prepares a representative routine to demonstrate ability. Performances at all home football games, select away games, annual Buccaneer Marching Festival, exhibition performances and local parades. Marching Band participation requires three additional hours of group practice/rehearsal per week. **Prerequisites:** Auditioned member of the band program and a recommendation.
- +1125. (MUEN) Wind Symphony/Symphonic Band** **CIP 50.0903**
4 lab hours per week; 64 total contact hours. Credit: 1 semester hour.
 Concert band, marching band, campus band, lab band (jazz/stage), symphony or orchestral group. Open to music majors and non-music majors with a background in instrumental music (including a recommendation of high school director) through audition on their respective instrument. Audition music should consist of region band etudes, class I solos, scales and sight reading. Performances include campus concerts for Wind Symphony and Symphonic Band and off campus concerts annually scheduled at area high schools on the annual concert tour for Wind Symphony. Wind Symphony/ Symphonic Band participation requires three additional hours of group practice/rehearsal per week. **Prerequisites:** Auditioned member of the band program and a recommendation.
- +1126-1127. (MUEN) Jazz Ensemble** **CIP 50.0903**
4 lab hours per week; 64 total contact hours. Credit: 1 semester hour.
 Concert band, marching band, campus band, lab band (jazz/stage), symphony or orchestral group. Members selected through the audition process with priority given to members of the marching/concert band. Music includes: jazz, big band, Latin, rock and contemporary jazz. Performances: on campus concerts, annual Blinn Jazz Festival, and various functions in the community including appearances at area high schools. **Prerequisites:** Auditioned member of the band program and a recommendation.
- +1131-1132. (MUEN) Steel Band** **CIP 50.0903**
2 lab hours per week; 32 total contact hours. Credit: 1 semester hour.
 Smaller instrumental ensembles: wind, string, percussion, piano, or lab (jazz, rock, fusion, or contemporary). Members are selected through an audition with priority given to members of the marching/symphonic-concert bands. Music includes traditional Caribbean music and additional arrangements of classical and contemporary music for steel drum ensemble. Performances include campus concerts and various functions in the community. **Prerequisites:** Auditioned member of the band program and the required ensemble.
- +1133. (MUEN) Woodwind Ensemble** **CIP 50.0903**
2 lab hour per week; 32 total contact hours. Credit: 1 semester hour.
 Smaller instrumental ensembles: wind, string, percussion, piano, or lab (jazz, rock, fusion, or contemporary). Required and limited to woodwind players in the marching/concert band. Ensembles grouped in sections: flutes, clarinets, saxophones, double reeds or upper woodwinds and low woodwinds. Music consists of excerpts from the symphonic literature and selected arrangements unique to the individual grouping of instruments. Ensemble participation requires an additional hour of practice/rehearsal per week. **Prerequisites:** Auditioned member of the band program and the required ensemble.
- +1134-1135. (MUEN) Brass Ensemble** **CIP 50.0903**
2 lab hour per week; 32 total contact hours. Credit: 1 semester hour.
 Smaller instrumental ensembles: wind, string, percussion, piano, or lab (jazz, rock, fusion, or contemporary). Required and limited to brass players in the marching/concert band. Ensembles grouped in sections: trumpets, French horns, tuba/euphonium, trombones, or high brass and low brass. Music consists of excerpts from the symphonic literature and selected arrangements unique to the individual grouping of instruments. Ensemble participation requires an additional hour of practice/rehearsal per week. **Prerequisites:** Auditioned member of the band program and the required ensemble.
- +1136. (MUEN) Woodwind Ensemble** **CIP 50.0903**
2 lab hour per week; 32 total contact hours. Credit: 1 semester hour.
 Smaller instrumental ensembles: wind, string, percussion, piano, or lab (jazz, rock, fusion, or contemporary). Required and limited to woodwind players in the marching/concert band. Ensembles grouped in sections: flutes, clarinets, saxophones, double reeds or upper woodwinds and low woodwinds. Music consists of excerpts from the symphonic literature and selected arrangements unique to the individual grouping of instruments. Ensemble participation requires an additional hour of practice/rehearsal per week. **Prerequisites:** Auditioned member of the band program and the required ensemble.
- +1137. (MUEN) Marching Auxiliaries** **CIP 50.0903**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 This course is for members of the Blinn College Drumline and Color Guard. Students in this course will focus on warm-ups, routines, and specialized works specific to each unit. Percussionists will focus on developing fundamental rudimental skills and refine their marching abilities through advanced warm-ups, cadences, and show music. Color Guard members will work on the fundamentals of modern technique, and refine their skills using warm-ups, specialized routines, and show movements. **Prerequisites:** Auditioned member of the band program and the required ensemble. **Corequisites:** MUEN 1124 or MUEN 2124.

- +1138-1139. (MUEN) Percussion Ensemble** **CIP 50.0903**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 Smaller instrumental ensembles: wind, string, percussion, piano, or lab (jazz, rock, fusion, or contemporary). Open to members of the wind symphony/symphonic band during the Spring semester. Material includes: section preparation of concert literature and selected percussion ensemble pieces. Concert performances may include school visits, and on-campus concerts. **Prerequisites:** Auditioned member of the band program and the required ensemble.
- +1141-1142. (MUEN) Concert Choir** **CIP 50.0903**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 Any major choral group, campus choir, chorus, or swing choir. Open to everyone, this chorus specializes in music of many periods and interests. There is no experience or background in choral music required, nor experience in music reading or singing. The emphasis of this course is to perform quality choral music while teaching group vocal techniques.
- +1152-1153. (MUEN) Women's Chorus** **CIP 50.0903**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 Vocal ensemble, glee club, madrigals, or small swing choir. The Women's Chorus is a select, small ensemble specializing in the performance and study of women's only repertoire. Placement will be done through audition that will focus on singing ability as well as sight-reading skills. **Prerequisites:** Auditioned member of the choral program.
- +1154-1155. (MUEN) Chamber Choir** **CIP 50.0903**
4 lab hours per week 64 total contact hours. Credit: 1 semester hour.
 Vocal ensemble, glee club, madrigals, or small swing choir. This group consists of singers with prior musical experience. Auditions take place every semester and are based on ability to contribute vocally, and/or sight read. Students in this choir work at a faster pace than in Concert Choir, and perform numerous concerts both on and off campus, representing the college. **Prerequisites:** Auditioned member of the choral program.
- +2124. (MUEN) Marching Band** **CIP 50.0903**
4 lab hours per week; 64 total contact hours. Credit: 1 semester hour.
 Concert band, marching band, campus band, lab band (jazz/stage), symphony or orchestral group. Open to music majors and non-music majors with a background in instrumental music (including a recommendation of high school director) through audition on their respective instrument. Audition music should consist of region band etudes, class I solos, scales and sight reading. Color Guard prepares a representative routine to demonstrate ability. Performances at all home football games, select away games, annual Buccaneer Marching Festival, exhibition performances and local parades. Marching Band participation requires three additional hours of group practice/rehearsal per week. **Prerequisites:** Auditioned member of the band program and a recommendation.
- +2125. (MUEN) Wind Symphony/Symphonic Band** **CIP 50.0903**
4 lab hours per week; 64 total contact hours. Credit: 1 semester hour.
 Concert band, marching band, campus band, lab band (jazz/stage), symphony or orchestral group. Open to music majors and non-music majors with a background in instrumental music (including a recommendation of high school director) through audition on their respective instrument. Audition music should consist of region band etudes, class I solos, scales and sight reading. Performances include campus concerts for Wind Symphony and Symphonic Band and off campus concerts annually scheduled at area high schools on the annual concert tour for Wind Symphony. Wind Symphony/ Symphonic Band participation requires three additional hours of group practice/rehearsal per week. **Prerequisites:** Auditioned member of the band program and a recommendation.
- +2126-2127. (MUEN) Jazz Ensemble** **CIP 50.0903**
4 lab hours per week; 64 total contact hours. Credit: 1 semester hour.
 Concert band, marching band, campus band, lab band (jazz/stage), symphony or orchestral group. Members selected through the audition process with priority given to members of the marching/concert band. Music includes: jazz, big band, Latin, rock and contemporary jazz. Performances: on campus concerts, annual Blinn Jazz Festival, and various functions in the community including appearances at area high schools. **Prerequisites:** Auditioned member of the band program and a recommendation.
- +2131-2132. (MUEN) Steel Band** **CIP 50.0903**
2 lab hours per week; 32 total contact hours. Credit: 1 semester hour.
 Smaller instrumental ensembles: wind, string, percussion, piano, or lab (jazz, rock, fusion, or contemporary). Members are selected through an audition with priority given to members of the marching/symphonic-concert bands. Music includes traditional Caribbean music and additional arrangements of classical and contemporary music for steel drum ensemble. Performances include campus concerts and various functions in the community. **Prerequisites:** Auditioned member of the band program and the required ensemble.
- +2133. (MUEN) Woodwind Ensemble** **CIP 50.0903**
2 lab hour per week; 32 total contact hours. Credit: 1 semester hour.
 Smaller instrumental ensembles: wind, string, percussion, piano, or lab (jazz, rock, fusion, or contemporary). Required and limited to woodwind players in the marching/concert band. Ensembles grouped in sections: flutes, clarinets, saxophones, double reeds or upper woodwinds and low woodwinds. Music consists of excerpts from the symphonic literature and selected arrangements unique to the individual grouping of instruments. Ensemble participation requires an additional hour of practice/rehearsal per week. **Prerequisites:** Auditioned member of the band program and the required ensemble.

- +2134-2135. (MUEN) Brass Ensemble** **CIP 50.0903**
2 lab hour per week; 32 total contact hours. Credit: 1 semester hour.
 Smaller instrumental ensembles: wind, string, percussion, piano, or lab (jazz, rock, fusion, or contemporary). Required and limited to brass players in the marching/concert band. Ensembles grouped in sections: trumpets, French horns, tuba/euphonium, trombones, or high brass and low brass. Music consists of excerpts from the symphonic literature and selected arrangements unique to the individual grouping of instruments. Ensemble participation requires an additional hour of practice/rehearsal per week. **Prerequisites:** Auditioned member of the band program and the required ensemble.
- +2136. (MUEN) Woodwind Ensemble** **CIP 50.0903**
2 lab hour per week; 32 total contact hours. Credit: 1 semester hour.
 Smaller instrumental ensembles: wind, string, percussion, piano, or lab (jazz, rock, fusion, or contemporary). Required and limited to woodwind players in the marching/concert band. Ensembles grouped in sections: flutes, clarinets, saxophones, double reeds or upper woodwinds and low woodwinds. Music consists of excerpts from the symphonic literature and selected arrangements unique to the individual grouping of instruments. Ensemble participation requires an additional hour of practice/rehearsal per week. **Prerequisites:** Auditioned member of the band program and the required ensemble.
- +2137. (MUEN) Marching Auxiliaries** **CIP 50.0903**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 This course is for members of the Blinn College Drumline and Color Guard. Students in this course will focus on warm-ups, routines, and specialized works specific to each unit. Percussionists will focus on developing fundamental rudimental skills and refine their marching abilities through advanced warm-ups, cadences, and show music. Color Guard members will work on the fundamentals of modern technique, and refine their skills using warm-ups, specialized routines, and show movements. **Prerequisites:** Auditioned member of the band program and the required ensemble. **Corequisites:** MUEN 1124 or MUEN 2124.
- +2138-2139. (MUEN) Percussion Ensemble** **CIP 50.0903**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 Smaller instrumental ensembles: wind, string, percussion, piano, or lab (jazz, rock, fusion, or contemporary). Open to members of the wind symphony/symphonic band during the Spring semester. Material includes: section preparation of concert literature and selected percussion ensemble pieces. Concert performances may include school visits, and on-campus concerts. **Prerequisites:** Auditioned member of the band program and the required ensemble.
- +2141-2142. (MUEN) Concert Choir** **CIP 50.0903**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 Any major choral group, campus choir, chorus, or swing choir. Open to everyone, this chorus specializes in music of many periods and interests. There is no experience or background in choral music required, nor experience in music reading or singing. The emphasis of this course is to perform quality choral music while teaching group vocal techniques.
- +2152-2153. (MUEN) Women's Chorus** **CIP 50.0903**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 Vocal ensemble, glee club, madrigals, or small swing choir. The Women's Chorus is a select, small ensemble specializing in the performance and study of women's only repertoire. Placement will be done through audition that will focus on singing ability as well as sight-reading skills. **Prerequisites:** Auditioned member of the choral program.
- +2154-2155. (MUEN) Chamber Choir** **CIP 50.0903**
4 lab hours per week 64 total contact hours. Credit: 1 semester hour.
 Vocal ensemble, glee club, madrigals, or small swing choir. This group consists of singers with prior musical experience. Auditions take place every semester and are based on ability to contribute vocally, and/or sight read. Students in this choir work at a faster pace than in Concert Choir, and perform numerous concerts both on and off campus, representing the college. **Prerequisites:** Auditioned member of the choral program.
- (MUSI) MUSIC**
- +1157. (MUSI) Opera Workshop I** **CIP 50.0908**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 Performance of portions of or complete operas and the study of the integration of music, acting, and staging of an opera. This course involves dramatic musical works in the operatic literature. Students will be expected to participate in larger group scenes, duets, and arias from various operas from standard literature. Costuming and staging will be included when available. **Prerequisites:** Audition and departmental approval.
- +1160. (MUSI) Italian Diction** **CIP 50.0908**
1 lecture hour and 1 lab hour per week; 32 total contact hours. Credit: 1 semester hour.
 Study of phonetic sounds of the English, French, German, or Italian languages to promote the ability to sing in those languages. This course provides a framework for singing in Italian through the use of the International Phonetic Alphabet (IPA). **Prerequisites:** Auditioned member of the choral program. **Co-enrolled:** MUEN 1152, MUEN 1153, MUEN 1154, MUEN 1155, MUEN 2152, MUEN 2153, MUEN 2154, or MUEN 2155.

- +1181. (MUSI) Piano Class I** **CIP 50.0907**
2 lab hours per week; 32 total contact hours. Credit: 1 semester hour.
 Class instruction in the fundamentals of keyboard technique for beginning piano students. Introduction to piano playing for first semester music majors without previous advanced keyboard training. **Prerequisites:** Departmental approval. **Corequisites:** Music majors must also enroll in MUSI 1211 and MUSI 1216.
- +1182. (MUSI) Piano Class II** **CIP 50.0907**
2 lab hours per week; 32 total contact hours. Credit: 1 semester hour.
 Class instruction in the fundamentals of keyboard technique for beginning piano students. Continued development of piano playing for the second semester music major. **Prerequisites:** MUSI 1181 or by advanced placement. **Corequisites:** Music majors must also enroll in MUSI 1212 and MUSI 1217.
- +1192. (MUSI) Guitar Class I** **CIP 50.0911**
2 lab hours per week; 32 total contact hours. Credit: 1 semester hour.
 Class instruction in the fundamental techniques of playing guitar. A course primarily for students with limited knowledge in playing the guitar and/or reading music. The course aids students in developing basic guitar techniques and music reading. Lab emphasis is placed upon students playing chords and learning to read guitar music and simple tabulator. **Note:** Students must supply their own instrument and determined to be in good working condition.
- +1211. (MUSI) Music Theory I** **CIP 50.0904**
2 lecture hours and 1 lab hour per week; 48 total contact hours. Credit: 2 semester hours.
 Analysis and writing of tonal melody and diatonic harmony up to and including the chords. Analysis and writing of small compositional forms. Correlated study at the keyboard. A study of music fundamentals for the music major, including notation, harmony, form, and part writing. **Prerequisites:** Appropriate scores on an approved placement exam or an audition. **Corequisites:** Music majors must also enroll in MUSI 1216, MUSI 1181, music major lessons, and parent ensemble.
- +1212. (MUSI) Music Theory II** **CIP 50.0904**
2 lecture hours and 1 lab hour per week; 48 total contact hours. Credit: 2 semester hours.
 Analysis and writing of tonal melody and diatonic harmony up to and including the chords. Analysis and writing of small compositional forms. Correlated study at the keyboard. The continued study of harmony, form, and part writing for the music major. **Prerequisites:** MUSI 1211. **Corequisites:** Music majors must also enroll in MUSI 1217, MUSI 1182, music major lessons, and parent ensemble.
- +1216. (MUSI) Sight Singing and Ear Training I** **CIP 50.0903**
2 lecture hours and 1 lab hour per week; 48 total contact hours. Credit: 2 semester hours.
 Singing tonal music in treble, bass, alto, and tenor clefs. Aural study, including dictation, of rhythm, melody, and diatonic harmony. A study of elementary sight singing and ear training for the music major in which the student learns to apply aurally the skills which are learned in music theory, including dictation of musical phrases and singing simple melodies at sight. **Prerequisites:** Appropriate scores on an approved placement exam or an audition. **Corequisites:** Music majors must also enroll in MUSI 1211, MUSI 1181, music major lessons, and parent ensemble.
- +1217. (MUSI) Sight Singing and Ear Training II** **CIP 50.0903**
2 lecture hours and 1 lab hour per week; 48 total contact hours. Credit: 2 semester hours.
 Singing tonal music in treble, bass, alto, and tenor clefs. Aural study, including dictation, of rhythm, melody, and diatonic harmony. A continuing study of elementary sight singing and ear training for the music major in which the student learns to apply aurally the skills which are learned in music theory, including dictation of musical phrases and singing simple melodies at sight. **Prerequisites:** MUSI 1216. **Corequisites:** Music majors should also enroll in MUSI 1212, MUSI 1182, music major lessons, and parent ensemble.
- +1301. (MUSI) Fundamentals of Music I *** **CIP 50.0904**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Introduction to the basic elements of music theory for non-music majors: scales, intervals, keys, triads, elementary ear training, keyboard harmony, notation, meter, and rhythm. (Does not apply to a music major degree.) Definition of musical terms, major and minor scales, rhythm, intervals, survey of musical instruments in various genres, and a cursory view of major historical figures in music history. Required of elementary education majors, and suitable for a fine arts elective in other fields.
- +1304. (MUSI) Foundations of Music** **CIP 50.0904**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Study of the fundamentals of music for prospective classroom teachers with an introduction to melodic, rhythmic and harmonic elements. Emphasis on participation in singing and reading music.
- +1306. (MUSI) Music Appreciation *** **CIP 50.0902**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Understanding music through the study of cultural periods, major composers, and musical elements. Illustrated with audio recordings and live performances. (Does not apply to a music major degree.)

- +1308. (MUSI) Music Literature *** **CIP 50.0902**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Survey of the principal musical forms and cultural periods as illustrated in the literature of major composers. A survey of music literature from Renaissance through contemporary for the music major. Required for music majors. **Prerequisites:** Basic knowledge of music theory and musical forms.
- +1310. (MUSI) American Music *** **CIP 50.0902**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 General survey of various styles of music in America. Topics may include jazz, ragtime, folk, rock, and contemporary art music. A survey of the history of rock and popular music beginning with their common origins in the 20th century popular and southern folk music, and continuing through the latest trends with discussions that include individual musicians as well as stylistic details.
- +2161. (MUSI) French Diction** **CIP 50.0908**
1 lecture hour and 1 lab hour per week; 32 total contact hours. Credit: 1 semester hour.
 Study of phonetic sounds of the English, French, German, or Italian languages to promote the ability to sing in those languages. The purpose of this course is to provide a framework for singing in French by studying the International Phonetic Alphabet (IPA). While some grammatical rules will be taught, this course does not teach the language. **Prerequisites:** Auditioned member of the choral program.
- +2181. (MUSI) Piano Class III** **CIP 50.0907**
2 lab hours per week; 32 total contact hours. Credit: 1 semester hour.
 Class instruction in the fundamentals of keyboard technique for beginning piano students. Continued development of functional piano playing for the third semester music major. **Prerequisites:** MUSI 1182 or by advanced placement. **Corequisites:** Music majors must also enroll in MUSI 2211 and MUSI 2216.
- +2182. (MUSI) Piano Class IV** **CIP 50.0907**
2 lab hours per week; 32 total contact hours. Credit: 1 semester hour.
 Class instruction in the fundamentals of keyboard technique for beginning piano students. Continued development of functional piano playing for the fourth semester music major. **Prerequisites:** MUSI 1182 or by advanced placement. **Corequisites:** Music majors must also enroll in MUSI 2212 and MUSI 2217.
- +2211. (MUSI) Music Theory III** **CIP 50.0904**
2 lecture hours and 1 lab hour per week; 48 total contact hours. Credit: 2 semester hours.
 Advanced harmony part writing and keyboard analysis and writing of more advanced tonal harmony including chromaticism and extended tertian structures. Introduction to 20th century compositional procedures and survey of the traditional large forms of composition. Correlated study at the keyboard. Advanced study of harmony, musical form, and part writing for the music major. **Prerequisites:** MUSI 1212. **Corequisites:** Music majors must also enroll in MUSI 2216, MUSI 2181, music major lessons, and parent ensemble.
- +2212. (MUSI) Music Theory IV** **CIP 50.0904**
2 lecture hours and 1 lab hour per week; 48 total contact hours. Credit: 2 semester hours.
 Advanced harmony part writing and keyboard analysis and writing of more advanced tonal harmony including chromaticism and extended tertian structures. Introduction to 20th century compositional procedures and survey of the traditional large forms of composition. Correlated study at the keyboard. Continued advanced study of harmony, musical form, and part writing for the music major. **Prerequisites:** MUSI 2211. **Corequisites:** Music majors must also enroll in MUSI 2217, MUSI 2182, music major lessons, and parent ensemble.
- +2216. (MUSI) Sight Singing and Ear Training III** **CIP 50.0904**
2 lecture hours and 1 lab hour per week; 48 total contact hours. Credit: 2 semester hours.
 Singing more difficult tonal music including modal, ethnic, and 20th century materials. Aural study, including dictation of more complex rhythm, melody, chromatic harmony, and extended tertian structures. Advanced study of sight singing and ear training for the music major, including dictation of chord progressions and singing advanced melodies at sight. **Prerequisites:** MUSI 1217. **Corequisites:** Music majors must also enroll in MUSI 2211, MUSI 2181, music major lessons, and parent ensemble.
- +2217. (MUSI) Sight Singing and Ear Training IV** **CIP 50.0904**
2 lecture hours and 1 lab hour per week; 48 total contact hours. Credit: 2 semester hours.
 Singing more difficult tonal music including modal, ethnic, and 20th century materials. Aural study, including dictation of more complex rhythm, melody, chromatic harmony, and extended tertian structures. Continuing advanced study of sight singing and ear training for the music major, including dictation of chord progressions and singing advanced melodies at sight. **Prerequisites:** MUSI 2216. **Corequisites:** Music majors must also enroll in MUSI 2212, MUSI 2182, music major lessons, and parent ensemble.

The majority of music classes are offered on the Brenham Campus.

(NURA) NURSING ASSISTANT/AIDE AND PATIENT CARE ASSISTANT/AIDE

- #1160. (NURA) Clinical – Nursing Assistant/Aide and Patient Care Assistant/Aide** **CIP 51.3902**
3 external hours per week; 48 total contact hours. Credit: 1 semester hours.
 A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. **Co-enrolled:** NURA 1301. Technical Dual Credit course.
- #1301. (NURA) Nurse Aide for Health Care** **CIP 51.3902**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.
 Preparation for entry level nursing assistants to achieve a level of knowledge, skills, and abilities essential to provide basic care to residents of long-term care facilities. Topics include residents' rights, communication, safety, observation, reporting and assisting residents in maintaining basic comfort and safety. Emphasis on effective interaction with members of the health care team. **Co-enrolled:** NURA 1160. Technical Dual Credit course.

(OSHT) OCCUPATIONAL SAFETY AND HEALTH TECHNOLOGY/TECHNICIAN

- #1301. (OSHT) Introduction to Safety and Health** **CIP 15.0701**
2 lecture hours and 3 lab hours per week; 80 total contact hours. Credit: 3 semester hours.
 An introduction to the basic concepts of safety and health.
- #1305. (OSHT) OSHA Regulations – Construction Industry** **CIP 15.0701**
2 lecture hours and 3 lab hours per week; 80 total contact hours. Credit: 3 semester hours.
 A study of Occupational Safety and Health Administration (OSHA) regulations pertinent to the construction industry.

(PHED) PHYSICAL EDUCATION

- +1100. (PHED) Physical Activities: Fitness and Wellness** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 Instruction and participation in physical and recreational activities. A general overview of the human body. Scientific fundamentals of stress, fitness, nutrition, disease, and drug use. Interdisciplinary focus on wellness and longevity. Integrated physical activity experiences centering on principles and applications of the scientific basis of conditioning. Dual Credit course.
- +1101. (PHED) Physical Activities: Ab / Glut Conditioning** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 A fitness course emphasizing total body conditioning (concentrating on abdominal and gluteal muscle groups), proper technique, and overall physical and mental fitness.
- +1102. (PHED) Physical Activities: Beginning Aerobics** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 Beginning aerobics is a basic level fitness class emphasizing the importance of regular exercise, techniques, training effects and execution of a lifetime fitness plan.
- +1104. (PHED) Physical Activities: Beach Volleyball** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 A beginning level course emphasizing techniques for passing, setting, serving, serve receive, hitting, blocking, digging and transition geared for the sand court game. The course will familiarize students with rules, terminology, strategies, and beach volleyball play concepts.
- +1105. (PHED) Physical Activities: Beginning Billiards** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 A beginning level course that introduces fundamentals, exercises, and games to aid beginning and intermediate players in mastering pocket billiards.
- +1107. (PHED) Physical Activities: Beginning Bowling** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 A beginning level course emphasizing the basic fundamental bowling skills, rules, etiquette, safety, terminology and scoring.
- +1109. (PHED) Physical Activities: Cardio Kickboxing** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 A fitness course emphasizing total body conditioning (concentrating on basic kickboxing skills), proper technique, and overall physical and mental fitness.
- +1110. (PHED) Physical Activities: Fitness Conditioning** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 A fitness course emphasizing total body conditioning, cardiovascular and muscular endurance, proper technique and overall physical and mental wellness.

- +1111. (PHED) Physical Activities: Beginning Golf** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 A beginning level course emphasizing basic techniques for executing the golf swing. The course will familiarize students with rules, scoring, handicapping, club/shot selection, and etiquette of the game.
- +1112. (PHED) Physical Activities: Intermediate Golf** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 An extension of beginning golf, this course emphasizes perfecting the basics as well as introducing the pitch shot, middle irons and woods. The student will also be given instruction into Course Management which will provide the student with knowledge of how to plan their strategy to play the course. The grade is based on middle-iron and long-iron skills tests, fairway woods skills tests, driver skills tests, match play type competition, and written examinations. Golf course facility fee.
- +1113. (PHED) Physical Activities: Beginning Ice Skating** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 A beginning level course that emphasizes proper skating techniques, safety and exploring the different types of ice skating.
- +1115. (PHED) Physical Activities: Beginning Jazz Dance** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 Beginning Jazz Dance places an emphasis on basic Jazz and Ballet skills. Students will learn basic skills and techniques, stretching, toning and choreography.
- +1116. (PHED) Physical Activities: Intermediate Jazz Dance** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 Intermediate Jazz Dance builds on the basic Jazz and Ballet skills learned in Beginning Jazz Dance. Students will learn variations of basic leaps and turns, stretching, toning and choreography techniques.
- +1117. (PHED) Physical Activities: Pilates** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 Pilates includes background knowledge of the activity and the application of appropriate basic floor techniques. Students will be introduced to standing Pilates, cardio Pilates, Yoga, and basic dance positions to expand skills learned.
- +1118. (PHED) Physical Activities: Beginning Self Defense** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 A beginning level course designed to build self-defense techniques, tactics, and awareness. Students will learn the importance of maintaining fitness levels, recognizing, assessing, and responding to potentially dangerous situations.
- +1122. (PHED) Physical Activities: Volleyball** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 A beginning level course emphasizing techniques for passing, setting, serving, serve receive, hitting, blocking, digging and transition. The course will familiarize students with rules, terminology, strategies, and team play concepts.
- +1123. (PHED) Physical Activities: Beginning Weight Training** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 A beginning level course that emphasizes fitness, proper lifting technique, safety and correct identity of exercises and muscle groups.
- +1124. (PHED) Physical Activities: Beginning Scuba Diving** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 A beginning level course that emphasizes safety and all the techniques and skills required to take the PADI (Professional Association of Diving Instructors) Open Water Certification. **Prerequisites:** Must be able to swim 200 yards any stroke, no time limit, or snorkel 300 yards, no time limit, and tread water/float for 10 minutes. Students must meet PADI Medical Requirements.
- +1125. (PHED) Physical Activities: Women's Weight Training** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 A beginning level course that emphasizes fitness, proper lifting technique, safety and correct identity of exercises and muscle groups.
- +1126. (PHED) Physical Activities: Beginning Ice Hockey** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 A beginning level course that emphasizes proper skating techniques, stick handling and safety.
- +1127. (PHED) Physical Activities: Yoga** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 A beginning level course emphasizing yoga postures, principles of movement and balance in yoga, breathing techniques, meditation techniques, stress reduction, and relaxation. The course will familiarize students with concepts and guidelines in fitness and wellness and encourage a physically active lifestyle.

- +1128. (PHED) Physical Activities: Basketball** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 A beginning level course emphasizing basic instruction in dribbling, passing, rebounding, and shooting. The course will familiarize students with the rules, terminology, offensive and defensive strategies, and the physical activity benefits of recreational basketball.
- +1130. (PHED) Physical Activities: Women's Step and Water Aerobics** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 Step and Water Aerobics is a basic level fitness class emphasizing the importance of regular exercise techniques, training effects and execution of a lifetime fitness plan achieved by workouts in the water and on land.
- +1131. (PHED) Physical Activities: Beginning Contemporary Dance** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 Beginning Contemporary Dance places an emphasis on basic Jazz, Ballet and Hip Hop skills, combining all three techniques into a new style of dance. Students will learn basic techniques in each style and techniques in combining them into new movement. Stretching, toning and choreography techniques will be learned.
- +1135. (PHED) Physical Activities: Beginning Broomball** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 A beginning level course emphasizing basic broomball skills, rules, etiquette, safety, terminology and scoring to achieve a competent level of participation.
- +1136. (PHED) Physical Activities: Beginning Figure Skating** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 A beginning level course emphasizing a combination of grace and athleticism on the ice. Fundamentals of ice skating will be taught and polished, and students will work to develop new skills such as edges, turns, jumps and spins.
- +1138. (PHED) Physical Activities: Beginning Taekwondo** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 A beginning level course designed to introduce students to Taekwondo, a Korean martial art. Particular emphasis will be placed on forms, which are preset patterns of movements designed to simulate the use of offensive and defensive techniques, and on self-defense.
- +1139. (PHED) Physical Activities: Women's Self Defense** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 A beginning level course designed to build self-defense techniques, tactics, and awareness. Students will learn the importance of maintaining fitness levels, recognizing, assessing and responding to potentially dangerous situations.
- +1140. (PHED) Physical Activities: Beginning Tennis** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 A beginning level course emphasizing fundamental skills of tennis (e.g. forehand and backhand, strokes, serve, return of serve and volley) and becoming familiar with the basic strategies, rules, tournament play and terminology involved with singles and doubles in beginning tennis. Students will also develop knowledge, skills, and physical activity with lifetime personal fitness and wellness.
- +1141. (PHED) Physical Activities: Aerobic Walking** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 This beginning level course introduces students to the basic concepts of walking for health and fitness. Proper techniques of walking (fitness, power, and race) as well as overall general fitness and nutritional guidelines will be stressed.
- +1142. (PHED) Physical Activities: Strength Training for Athletic Performance** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 This course builds upon basic skills and knowledge of weight training. This is an intermediate to experienced level course centered on athletic development and performance. Emphasis will be placed on proper warm-up, compound multi-joint movements, Olympic lifts, metabolic conditioning, proper periodization, prehabilitation, and correct identification of exercises and muscle groups.
- +1164. (PHED) Introduction to Physical Fitness and Wellness *** **CIP 31.0501**
Core Curriculum Course
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 This course will provide an overview of the lifestyle necessary for fitness and health. Students will participate in physical activities and assess their fitness status. Students will be introduced to proper nutrition, weight management, cardiovascular health, flexibility, and strength training.
- +1301. (PHED) Foundations of Kinesiology** **CIP 31.0501**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 The purpose of this course is to provide students with an introduction to human movement that includes the historical development of physical education, exercise science, and sport. This course offers the student both an introduction to the knowledge base, as well as, information on expanding career opportunities.

- +1304. (PHED) Personal Community Health** **CIP 51.1504**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 This course provides an introduction to the fundamentals, concepts, strategies, applications, and contemporary trends related to understanding personal and/or community health issues. This course also focuses on empowering various populations with the ability to practice health living, promote healthy lifestyles, and enhance individual well-being.
- +1306. (PHED) First Aid** **CIP 51.1504**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Instruction and practice for emergency care. Designed to enable students to recognize and avoid hazards within their environment, to render intelligent assistance in case of accident or illness, and to develop skills necessary for the immediate and temporary care of the victim. Successful completion of the course may enable the student to receive a certificate from a nationally recognized agency.
- +1308. (PHED) Sports Officiating** **CIP 31.0101**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 The purpose of the course is to study officiating requirements for sports and games with an emphasis on mechanics, rule interpretation, and enforcement.
- +1321. (PHED) Coaching/Sports/Athletics I** **CIP 31.0505**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Study of history, theories, philosophies, rules, and terminology of competitive sports. Includes coaching techniques.
- +1336. (PHED) Introduction to Recreation I** **CIP 31.0101**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Fundamental theory and concepts of recreational activities with emphasis on programs, planning, and leadership.
- +1346. (PHED) Drug Use and Abuse** **CIP 51.1504**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Study of use, misuse and abuse of drugs and other harmful substances in today's society. Physiological, sociological and psychological factors will be emphasized.
- +2100. (PHED) Physical Activities: Varsity Sports 1** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 Presentation of current scientific and technical information related to a particular activity with emphasis on developing cognitive, affective and psychomotor skills. Each activity Course Syllabus will have a more descriptive definition of purpose and outcomes expected.
- +2101. (PHED) Physical Activities: Varsity Sports 2** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 Presentation of current scientific and technical information related to a particular activity with emphasis on developing cognitive, affective and psychomotor skills. Each activity Course Syllabus will have a more descriptive definition of purpose and outcomes expected.
- +2102. (PHED) Physical Activities: Varsity Sports 3** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 Presentation of current scientific and technical information related to a particular activity with emphasis on developing cognitive, affective and psychomotor skills. Each activity Course Syllabus will have a more descriptive definition of purpose and outcomes expected.
- +2103. (PHED) Physical Activities: Varsity Sports 4** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 Presentation of current scientific and technical information related to a particular activity with emphasis on developing cognitive, affective and psychomotor skills. Each activity Course Syllabus will have a more descriptive definition of purpose and outcomes expected.
- +2104. (PHED) Physical Activities: Varsity Conditioning 1** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 Presentation of current scientific and technical information related to a particular activity with emphasis on developing cognitive, affective and psychomotor skills. Each activity Course Syllabus will have a more descriptive definition of purpose and outcomes expected.
- +2105. (PHED) Physical Activities: Varsity Conditioning 2** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 Presentation of current scientific and technical information related to a particular activity with emphasis on developing cognitive, affective and psychomotor skills. Each activity Course Syllabus will have a more descriptive definition of purpose and outcomes expected.

- +2106. (PHED) Physical Activities: Varsity Conditioning 3** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 Presentation of current scientific and technical information related to a particular activity with emphasis on developing cognitive, affective and psychomotor skills. Each activity Course Syllabus will have a more descriptive definition of purpose and outcomes expected.
- +2107. (PHED) Physical Activities: Varsity Conditioning 4** **CIP 36.0108**
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
 Presentation of current scientific and technical information related to a particular activity with emphasis on developing cognitive, affective and psychomotor skills. Each activity Course Syllabus will have a more descriptive definition of purpose and outcomes expected.
- +2356. (PHED) Care and Prevention of Athletic Injuries** **CIP 51.0913**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Prevention and care of athletic injuries with emphasis on qualities of a good athletic trainer, avoiding accidents and injuries, recognizing signs and symptoms of specific sports injuries and conditions, immediate and long-term care of injuries, and administration procedures in athletic training. **Prerequisites:** PHED 1301, PHED 1306, and BIOL 1406 or BIOL 1408.
- (PHIL) PHILOSOPHY**
- +1301. (PHIL) Introduction to Philosophy *** **CIP 38.0101**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 A study of major issues in philosophy and/or the work of major philosophical figures in philosophy. Topics in philosophy may include theories of reality, theories of knowledge, theories of value, and their practical applications. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards.
- +1304. (PHIL) Introduction to World Religions** **CIP 38.0201**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 A comparative study of world religions, including but not limited to Hinduism, Buddhism, Judaism, Christianity, and Islam. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards.
- +2303. (PHIL) Introduction to Logic** **CIP 38.0101**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 The purpose of the course is to introduce the student to symbolic logic, including syllogisms, propositional and predicate logic, and logical proofs in a system of rules. The course develops critical thinking skills, especially the ability to distinguish correct from incorrect reasoning, by an exploration of the major areas of modern symbolic logic. Among the topics covered are translating statements from natural to symbolic language, truth tables and natural deduction for propositional logic, models, and natural deduction for predicate logic.
- +2306. (PHIL) Introduction to Ethics *** **CIP 38.0101**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 The systematic evaluation of classical and/or contemporary ethical theories concerning the good life, human conduct in society, morals, and standards of value. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards.
- +2321. (PHIL) Philosophy of Religion** **CIP 38.0201**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 A study of the major issues in the philosophy of religion such as the existence and nature of God, the relationships between faith and reason, the nature of religious language, religious experience, and the problem of evil. The course surveys basic religious issues such as the existence and nature of God, religious and mystical experience, miracles, immorality, and the meaning of religious language and symbols. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards.
- (PHRA) PHARMACY TECHNICIAN/ASSISTANT**
- #1143. (PHRA) Pharmacy Technician Certification Review** **CIP 51.0805**
1 lecture hour and 1 lab hour per week; 32 total contact hours. Credit: 1 semester hour.
 A review of major topics covered on the national Pharmacy Technician Certification Examination (PTCE). **Co-enrolled:** PHRA 1301 and PHRA 1313. Technical Dual Credit course.
- #1301. (PHRA) Introduction to Pharmacy** **CIP 51.0805**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.
 An overview of the qualifications, operational guidelines, and job duties of a pharmacy technician. **Co-enrolled:** PHRA 1143 and PHRA 1313. Technical Dual Credit course.

#1313. (PHRA) Community Pharmacy Practice**CIP 51.0805****3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.**

Introduction to the skills necessary to process, prepare, label, and maintain records of prescriptions in a community pharmacy to include customer service, count and pour techniques, prescription calculations, drug selection and preparation, over-the-counter drugs, inventory management and legal parameters. **Co-enrolled:** PHRA 1143 and PHRA 1301. Technical Dual Credit course.

(PHYS) PHYSICS**+1401. (PHYS) College Physics I *****CIP 40.0801***Core Curriculum Course***3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.**

Fundamental principles of physics, using algebra and trigonometry; the principles and applications of classical mechanics and thermodynamics, including harmonic motion, mechanical waves and sound, physical systems, Newton's Laws of Motion, and gravitation and other fundamental forces; with emphasis on problem solving. Lab activities will reinforce fundamental principles of physics, using algebra and trigonometry with an emphasis on problem solving. **Prerequisites:** MATH 1314 and MATH 1316, or MATH 2312, or MATH 2412.

+1402. (PHYS) College Physics II ***CIP 40.0801***Core Curriculum Course***3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.**

Fundamental principles of physics, using algebra and trigonometry; the principles and applications of electricity and magnetism, including circuits, electrostatics, electromagnetism, waves, sound, light, optics, and modern physics topics; with emphasis on problem solving. Lab activities will reinforce fundamental principles of physics, using algebra and trigonometry with an emphasis on problem solving. **Prerequisites:** PHYS 1401.

+1403. (PHYS) Stars and Galaxies ***CIP 40.0201***Core Curriculum Course***3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.**

Study of stars, galaxies, and the universe outside our solar system.

+1410. (PHYS) Elementary Physics ***CIP 40.0801***Core Curriculum Course***3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.**

A conceptual level survey (with a minimum of mathematics) of topics in physics intended for liberal arts and other non-science majors. Topics include mechanics, heat, wave motion, electricity, magnetism, light, atomic and nuclear physics, and relativity. This course is designed for students who do not intend to do further work in natural sciences, engineering, mathematics or medicine.

+2289. (PHYS) Academic Cooperative**CIP 40.0101****1 lecture hour and 2 lab hours per week; 48 total contact hours. Credit: 2 semester hours.**

A student-centered instructional program designed to integrate on-campus study with practical hands-on experience in physics under the supervision of a faculty mentor. This course may be repeated once for credit. **Prerequisites:** Eight hours of college-level physics courses with a GPA of 3.0 or higher and the approval of the instructor or 4 hours of college-level physics with an A while taking the second 4 hours of physics concurrently.

+2425. (PHYS) University Physics I ***CIP 40.0101***Core Curriculum Course***3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.**

A calculus-based course in classical mechanics primarily designed for students majoring in engineering and physical sciences. Topics covered include classical mechanics and an introduction to thermodynamics. Lab experiments support theoretical principles presented in the lecture with an emphasis on experimental design, data collection and analysis, and preparation of lab reports. **Prerequisites:** MATH 2413.

+2426. (PHYS) University Physics II**CIP 40.0101****3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.**

A continuation of Physics 2425. A calculus-based course primarily designed for students majoring in engineering and physical sciences. Topics covered include electricity, magnetism and optics. Lab experiments support theoretical principles presented in the lecture with an emphasis on experimental design, data collection and analysis, and preparation of lab reports. **Prerequisites:** PHYS 2425 and MATH 2414.

(PLAB) PHLEBOTOMY TECHNICIAN/PHLEBOTOMIST

- #1323. (PLAB) Phlebotomy** **CIP 51.1009**
3 lecture hour and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hour.
 Skill development in the performance of a variety of blood collection methods using proper techniques and standard precautions. Includes vacuum collection devices, syringes, capillary skin puncture, butterfly needles and blood culture, and specimen collection on adults, children, and infants. Emphasis on infection prevention, patient identification, specimen labeling, quality assurance, specimen handling, processing, accessioning, professionalism, ethics, and medical terminology. **Co-enrolled:** PLAB 1360. Technical Dual Credit course.
- #1360. (PLAB) Clinical – Phlebotomy/ Phlebotomist** **CIP 51.1009**
9 external hours per week; 144 total contact hours. Credit: 3 semester hour.
 A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, concepts. Direct supervision is provided by the clinical professional. **Co-enrolled:** PLAB 1323. Technical Dual Credit course.

(POFI) BUSINESS/OFFICE AUTOMATION/TECHNOLOGY/DATA ENTRY

- #2331. (POFI) Desktop Publishing** **CIP 52.0407**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.
 In-depth coverage of desktop publishing terminology, text editing, and use of design principles. Emphasis on layout techniques, graphics, multiple page displays, and business applications. This course is designed to be repeated multiple times to improve student proficiency.
- #2340. (POFI) Advanced Word Processing** **CIP 52.0407**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.
 Advanced techniques in merging, macros, graphics, and desktop publishing. Includes extensive formatting for technical document. Emphasis on business applications. **Prerequisites:** ITSW 1301.

(POFM) MEDICAL ADMINISTRATIVE/EXECUTIVE ASSISTANT

- #1300. (POFM) Basic Medical Coding** **CIP 51.0716**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Presentation and application of basic coding rules, principles, guidelines, and conventions utilizing various coding systems. Federal Prison Campus course. **Prerequisites:** HITT 1305 and SCIT 1307.
- #1327. (POFM) Medical Insurance** **CIP 51.0716**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Survey of medical insurance including the life cycle of various claim forms, terminology, patient relations, and legal and ethical issues. Federal Prison Campus course. **Prerequisites:** POFM 1300 and POFM 2310.
- #2310. (POFM) Intermediate Medical Coding** **CIP 51.0716**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Assignment and application of various coding guidelines with emphasis on physician billing and regulatory requirements. Includes code selection for Evaluation and Management (E/M) and Medical/Surgical cases. Federal Prison Campus course. **Prerequisites:** POFM 1300.

(POFT) GENERAL OFFICE OCCUPATIONS AND CLERICAL SERVICES

- #1301. (POFT) Business English** **CIP 52.0501**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Introduction to a practical application of basic language usage skills with emphasis on fundamentals of writing and editing for business.
- #1309. (POFT) Administrative Office Procedures I** **CIP 52.0401**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Study of current office procedures, duties, and responsibilities applicable to an office environment.
- #1319. (POFT) Records and Information Management I** **CIP 52.0401**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Introduction to basic records and information management. Includes the life cycle of a record, manual and electronic records management, and basic filing procedures and rules. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards.
- #1325. (POFT) Business Math Using Technology** **CIP 52.0408**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Skill development in business math problem-solving using electronic technology. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards.

- #1329. (POFT) Beginning Keyboarding** **CIP 52.0408**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Skill development in the operation of the keyboard by touch applying proper keyboarding techniques. Emphasis on development of acceptable speed and accuracy levels and formatting basic documents.
- #2303. (POFT) Speed and Accuracy Building** **CIP 52.0408**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Review, correct, improve, and/or perfect touch keyboarding techniques for the purpose of increasing speed and improving accuracy.
Recommended: POFT 1329 or keyboarding proficiency of 30 net words per minute.
- #2312. (POFT) Business Correspondence & Communication** **CIP 52.0501**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Development of writing skills necessary to produce effective business communications. **Prerequisites:** ITSW 1301.
- #2331. (POFT) Administrative Project Solutions** **CIP 52.0401**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.
 Advanced concepts of project management and office procedures integrating software applications, critical thinking, and problem-solving skills. **Prerequisites:** ITSW 1301 or POFI 2340.
- #2386. (POFT) Internship - Administrative Assistant and Secretarial Science, General** **CIP 52.0401**
15 external hours per week; 240 total contact hours. Credit: 3 semester hours.
 A work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. A learning plan is developed by the college and the employer. As outlined in the learning plan, apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the occupation and the business/industry. The student will also demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation and the business/industry. **Prerequisites:** Approval of Program Coordinator.
- (PSYC) PSYCHOLOGY**
- +2301. (PSYC) General Psychology *** **CIP 42.0101**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 General Psychology is a survey of the major psychological topics, theories and approaches to the scientific study of behavior and mental processes. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards.
- +2306. (PSYC) Human Sexuality** **CIP 42.0101**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 This course will provide an overview of the broad field of human sexuality. Topics will be covered from various perspectives - biological, sociological, anthropological, etc., but will focus primarily on the psychological perspective. The goal is for each student to learn factual, scientifically-based information that will provoke thought and contribute to his/her own decision-making on sexual issues outside of the classroom. Cross-listed as SOCI 2306.
- +2308. (PSYC) Child Psychology *** **CIP 42.2703**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 This course will address psychological development from conception through middle childhood with references to physical, cognitive, social and personality changes. Students will examine the interplay of biological factors, human interaction, social structures and cultural forces in development. **Recommended:** PSYC 2301.
- +2314. (PSYC) Lifespan Growth and Development** **CIP 42.2703**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Life-Span Growth and Development is a study of social, emotional, cognitive and physical factors and influences of a developing human from conception to death. **Prerequisites:** PSYC 2301.
- +2315. (PSYC) Psychology of Adjustment** **CIP 42.0101**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Study of the processes involved in adjustment of individuals to their personal and social environments.
- +2316. (PSYC) Psychology of Personality** **CIP 42.0101**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Study of various approaches to determinants, development and assessment of personality.

- +2317. (PSYC) Statistical Methods in Psychology** **CIP 42.0101**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Study of statistical methods used in psychological research, assessment, and testing. Includes the study of measures of central tendency and variability, statistical inference, correlation and regression as these apply to psychology. **Prerequisites:** PSYC 2301 and MATH 1324.
- +2319. (PSYC) Social Psychology *** **CIP 42.2707**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Study of individual behavior within the social environment. May include topics such as the socio-psychological process, attitude formation and change, interpersonal relations, and group processes.
- +2389. (PSYC) Academic Cooperative: Psychological Research** **CIP 45.0101**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 An instructional program designed to integrate on-campus study with practical hands-on experience in psychology. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of human social behavior and/or social institutions. Psychological research will discuss the basics of research methodology in psychology and culminate in the development of an independent research project by students. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards.
- (PTHA) PHYSICAL THERAPIST ASSISTANT**
- #1201. (PTHA) The Profession of Physical Therapy** **CIP 51.0806**
2 lecture hours per week; 32 total contact hours. Credit: 2 semester hours.
 Introduction to the profession of physical therapy and the role of the physical therapist assistant.
- #1266. (PTHA) Practicum – Physical Therapist Assistant** **CIP 51.0806**
16 clinical hours per week; 256 total contact hours. Credit: 2 semester hours.
 Practical general workplace training supported by an individualized learning plan developed by the employer, college, and student. During this practicum, students will be introduced to the practice of the physical therapist assistant at a clinical setting. **Prerequisites:** Completion of first, second, third, and fourth semester PTHA courses. **Co-enrolled:** PTHA 2431 and PTHA 2435.
- #1321. (PTHA) Pathophysiology for the PTA** **CIP 51.0806**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Study of the pathophysiology of diseases/conditions encountered in physical therapy. **Prerequisites:** Completion of first semester PTHA courses. **Co-enrolled:** PTHA 2205 and PTHA 2509.
- #1409. (PTHA) Introduction to Physical Therapy** **CIP 51.0806**
2 lecture hours and 6 lab hours per week; 128 total contact hours. Credit: 4 semester hours.
 Introduction to the profession of physical therapy and the role of the physical therapist assistant. Includes the application of basic patient handling, functional skills, communication, and selected data collection techniques. **Prerequisites:** Admissions into the PTA Program. **Co-enrolled:** PTHA 1413.
- #1413. (PTHA) Functional Anatomy** **CIP 51.0806**
2 lecture hours and 6 lab hours per week; 128 total contact hours. Credit: 4 semester hours.
 The relationship of the musculoskeletal and neuromuscular systems to normal and abnormal movement. Integration of skills related to the kinesiological assessment of the human body. **Prerequisites:** Admissions into the PTA Program. **Co-enrolled:** PTHA 1409.
- #1431. (PTHA) Physical Agents** **CIP 51.0806**
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 Biophysical principles, physiological effects, efficacy, and application of physical agents. Study of the therapeutic physical agents which emphasizes the indications, contraindications, medical efficacy, and physiological effects of treatments. **Prerequisites:** Completion of first and second semester PTHA courses.
- #2205. (PTHA) Neurology** **CIP 51.0806**
1 lecture hour and 2 lab hours per week; 48 total contact hours. Credit: 2 semester hours.
 Study of neuroanatomy and neurophysiology as it relates to neurological conditions. **Prerequisites:** Completion of first semester PTHA courses. **Co-enrolled:** PTHA 1321 and PTHA 2509.
- #2239. (PTHA) Professional Issues** **CIP 51.0806**
1 lecture hour and 3 lab hours per week; 64 total contact hours. Credit: 2 semester hours.
 Discussion of professional issues and behaviors related to clinical practice; preparation for transition into the workforce. Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors relevant to the physical therapy occupation and to the professional development of the student. This is the capstone course. **Prerequisites:** Completion of first, second, third, and fourth semester PTHA courses. **Co-enrolled:** PTHA 2266 and PTHA 2267.

- #2266. (PTHA) Practicum – Physical Therapist Assistant** **CIP 51.0806**
16 clinical hours per week; 256 total contact hours. Credit: 2 semester hours.
 Practical general workplace training supported by an individualized learning plan developed by the employer, college, and student. During this practicum, students will expand their clinical knowledge and experience. **Prerequisites:** Completion of first, second, third, and fourth semester PTHA courses. **Co-enrolled:** PTHA 2239 and PTHA 2267.
- #2267. (PTHA) Practicum – Physical Therapist Assistant** **CIP 51.0806**
16 clinical hours per week; 256 total contact hours. Credit: 2 semester hours.
 Practical general workplace training supported by an individualized learning plan developed by the employer, college, and student. During this final practicum, students will perfect their clinical techniques, preparing them to enter the workforce. **Prerequisites:** Completion of first, second, third, and fourth semester PTHA courses. **Co-enrolled:** PTHA 2239 and PTHA 2266.
- #2301. (PTHA) Essentials of Data Collection** **CIP 51.0806**
2 lecture hours and 4 lab hours per week; 96 total contact hours. Credit: 3 semester hours.
 Data collection techniques used to assist in patient/client management. The student will perform assessment and data collection using techniques specific to physical therapy; utilize data collected for decision making in order to enhance physical therapy management; and utilize relevant communication techniques. **Prerequisites:** Completion of first and second semester PTHA courses.
- #2431. (PTHA) Management of Neurological Disorders** **CIP 51.0806**
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 Comprehensive rehabilitation techniques of selected neurological disorders. Advanced course integrating previously learned and new skills/techniques into the comprehensive rehabilitation of patients with neurological issues. **Prerequisites:** Completion of first, second, and third semester PTHA courses. **Co-enrolled:** PTHA 1266 and PTHA 2435.
- #2435. (PTHA) Rehabilitation Techniques** **CIP 51.0806**
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 Comprehensive rehabilitation of selected diseases and disorders. Advanced course integrating previously learned and new skills/techniques into the rehabilitation of selected long-term pathologies. **Prerequisites:** Completion of first, second, and third semester PTHA courses. **Co-enrolled:** PTHA 1266 and PTHA 2431.
- #2509. (PTHA) Therapeutic Exercise** **CIP 51.0806**
3 lecture hours and 6 lab hours per week; 144 total contact hours. Credit: 5 semester hours.
 Concepts, principles, and application of techniques related to therapeutic exercise and functional training. **Prerequisites:** Completion of first semester PTHA courses. **Co-enrolled:** PTHA 1321 and PTHA 2205.

(QCTC) QUALITY CONTROL TECHNOLOGY/TECHNICIAN

- #1446. (QCTC) Testing and Inspection Systems** **CIP 15.0702**
2 lecture hours and 6 lab hours per week; 128 total contact hours. Credit: 4 semester hours.
 A study of testing and inspection systems including pertinent specifications, inspection tools, gauges, instruments, and mechanisms used in illustrating the need for maintaining quality to established standards. **Prerequisites:** WLDG 1425, WLDG 1428, and WLDG 1430.

(RADR) RADIOLOGIC TECHNOLOGY

- #1191. (RADR) Special Topics in Medical Radiologic Technology/Technician** **CIP 51.0911**
1 lecture hour per week; 16 total contact hours. Credit: 1 semester hour.
 Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course is designed to be repeated multiple times to improve student proficiency. Special topic will be selected from one of the following modalities: (I) Computed Tomography. This course is designed for candidates of post-primary certification and registration for required documentation and completion in structured education related to the content specifications coinciding with The American Registry of Radiologic Technologists (ARRT) Computed Tomography. (II) Magnetic Resonance Imaging. This course is designed for candidates of post-primary certification and registration for required documentation of completion in structured education related to the content specifications coinciding with The American Registry of Radiologic Technologists (ARRT) Magnetic Resonance Imaging. (III) Mammography. This course is designed for candidates of post-primary certification and registration for required documentation of completion in structured education related to the content specifications coinciding with The American Registry of Radiologic Technologists (ARRT) Mammography Examination. **Prerequisites:** Completion of first, second, third, and fourth semester RADR courses. **Co-enrolled:** RADR 2367, RADR 2217, and RADR 2235.
- #1203. (RADR) Patient Care** **CIP 51.0911**
2 lecture hours and 1 lab hour per week; 48 total contact hours. Credit: 2 semester hours.
 An introduction to patient assessment, infection control procedures, emergency and safety procedures, communication and patient interaction skills, and basic pharmacology. In addition, patient transportation, body mechanics, and venipuncture will be included. Completion of RADR curriculum with 75% or higher in all RADR courses is required. **Prerequisites:** Admissions into the Radiologic Technology Program. **Co-enrolled:** RADR 1266, RADR 1313, and RADR 1311.

- #1266. (RADR) Practicum – Radiologic Technology/Science – Radiographer** **CIP 51.0911**
16 clinical hours per week; 256 total contact hours. Credit: 2 semester hours.
 Practical, general workplace training supported by an individualized learning plan developed by the employer, college and student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. An orientation of the clinical education site, patient care procedures, professional and ethical conduct, developmental competencies in chest, abdomen, upper and lower extremities must be completed. Completion of RADR curriculum with 75% or higher in all RADR courses is required. **Prerequisites:** Admissions into the Radiologic Technology Program. **Co-enrolled:** RADR 1203, RADR 1313, and RADR 1311.
- #1267. (RADR) Practicum – Radiologic Technology/Science – Radiographer** **CIP 51.0911**
16 clinical hours per week; 256 total contact hours. Credit: 2 semester hours.
 Practical, general workplace training supported by an individualized learning plan developed by the employer, college and student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. The student will continue to meet competencies in basic radiographic procedures and patient care. Completion of RADR curriculum with 75% or higher in all RADR courses is required. **Prerequisites:** Completion of first semester RADR courses. **Co-enrolled:** RADR 2301, RADR 2313, and RADR 2305.
- #1309. (RADR) Introduction to Radiography and Patient Care** **CIP 51.0911**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 An overview of the historical development of radiography, basic radiation protection, an introduction to medical terminology ethical and legal issues for health care professionals, and an orientation to the program and to the health care system. Patient assessment, infection control procedures, emergency and safety procedures, communication and patient interaction skills, and basic pharmacology are also included.
- #1311. (RADR) Basic Radiographic Procedures** **CIP 51.0911**
2 lecture hours and 4 lab hours per week; 96 total contact hours. Credit: 3 semester hours.
 An introduction to radiographic positioning terminology, the proper manipulation of equipment, positioning and alignment of the anatomical structure and equipment, and evaluation of image for proper demonstration of basic anatomy. Radiographic procedures of the lower and upper extremities, chest and abdomen will be simulated. Completion of RADR curriculum with 75% or higher in all RADR courses is required. **Prerequisites:** Admissions into the Radiologic Technology Program. **Co-enrolled:** RADR 1203, RADR 1313, and RADR 1266.
- #1313. (RADR) Principles of Radiographic Imaging I** **CIP 51.0911**
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.
 Radiographic image quality and the effects of exposure variables. Basic principles of radiographic exposure techniques and processing will be presented. Completion of RADR curriculum with 75% or higher in all RADR courses is required. **Prerequisites:** Admissions into the Radiologic Technology Program. **Co-enrolled:** RADR 1203, RADR 1266, and RADR 1311.
- #1367. (RADR) Practicum – Radiologic Technology/Science – Radiographer** **CIP 51.0911**
21 clinical hours per week; 336 total contact hours. Credit: 3 semester hours.
 Practical, general workplace training supported by an individualized learning plan developed by the employer, college and student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. The student will continue to meet competencies in radiographic procedures and patient care. Film analysis, evaluation of special problems and procedural updates will be presented. Completion of RADR curriculum with 75% or higher in all RADR courses is required. **Prerequisites:** Completion of first and second semester RADR courses.
- #2217. (RADR) Radiographic Pathology** **CIP 51.0911**
2 lecture hours per week; 32 total contact hours. Credit: 2 semester hours.
 Disease process and their appearance on radiographic images. Special procedures will be discussed as they interrelate with pathological findings demonstrated on radiographic images. Completion of RADR curriculum with 75% or higher in all RADR courses is required. **Prerequisites:** Completion of first, second, third, and fourth semester RADR courses. **Co-enrolled:** RADR 2367, RADR 1191, and RADR 2235.
- #2235. (RADR) Radiologic Technology Seminar** **CIP 51.0911**
2 lecture hours per week; 32 total contact hours. Credit: 2 semester hours.
 A capstone course focusing on the synthesis of professional knowledge, skills, and attitudes in preparation for professional employment and lifelong learning. This capstone course will assist in student preparation to sit for the national certification exam as well as general professional updates and personal portfolio design. Students must average an 80% or higher on designated simulated certification exams to receive program eligibility for the American Registry of Radiologic Technologists Certification Examination in Radiography. **Prerequisites:** Completion of first, second, third, and fourth semester RADR courses. **Co-enrolled:** RADR 2367, RADR 1191, and RADR 2217.

#2301. (RADR) Intermediate Radiographic Procedures**CIP 51.0911****2 lecture hours and 4 lab hours per week; 96 total contact hours. Credit: 3 semester hours.**

A continuation of the study of the proper manipulation of radiographic equipment, positioning and alignment of the anatomical structure and equipment, and evaluation of images for proper demonstration of anatomy. Radiographic procedures of the gastrointestinal and genitourinary systems will be simulated. Methods of administering contrast media will be discussed and illustrated. Completion of RADR curriculum with 75% or higher in all RADR courses is required. **Prerequisites:** Completion of first semester RADR courses. **Co-enrolled:** RADR 1267, RADR 2305, and RADR 2313.

#2305. (RADR) Principles of Radiographic Imaging II**CIP 51.0911****2 lecture hours and 2 lab hours per week; 64 total contact hours. Credit: 3 semester hours.**

Continuation of Radiographic image quality and the effects of exposure variables, and the synthesis of all variables in image productions. Completion of RADR curriculum with 75% or higher in all RADR courses is required. **Prerequisites:** Completion of first semester RADR courses. **Co-enrolled:** RADR 1267, RADR 2301, and RADR 2313.

#2309. (RADR) Radiographic Imaging Equipment**CIP 51.0911****3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.**

Equipment and physics of x-ray production. Includes basic x-ray circuits. Also examines the relationship of conventional and digital equipment components to the imaging process. This course will explore the concepts of electricity and magnetism as applied to construction and operation of the x-ray machine. Factors and interactions involved in x-ray production will be discussed. Completion of RADR curriculum with 75% or higher in all RADR courses is required. **Prerequisites:** Completion of first, second, and third semester RADR courses. **Co-enrolled:** RADR 2366 and RADR 2331.

#2313. (RADR) Radiation Biology and Protection**CIP 51.0911****3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.**

Effects of radiation exposure on biological systems. Includes typical medical exposure levels, methods for measuring and monitoring radiation, and methods for protecting personnel and patients from excessive exposure. Radiation interactions, radio sensitivity, radiation dose/response relationships, and early/late radiation effects will be discussed. Completion of RADR curriculum with 75% or higher in all RADR courses is required. **Prerequisites:** Completion of first semester RADR courses. **Co-enrolled:** RADR 1267, RADR 2301, and RADR 2305.

#2331. (RADR) Advanced Radiographic Procedures**CIP 51.0911****2 lecture hours and 4 lab hours per week; 96 total contact hours. Credit: 3 semester hours.**

Continuation of positioning; and alignment of the anatomical structure and equipment, evaluation of images for proper demonstration of anatomy and related pathology. The study of standard radiographic procedures of the vertebral column, thorax, skull, and trauma radiographic procedures will be discussed and demonstrated. Completion of RADR curriculum with 75% or higher in all RADR courses is required. **Prerequisites:** Completion of first, second, and third semester RADR courses. **Co-enrolled:** RADR 2366 and RADR 2309.

#2366. (RADR) Practicum – Radiologic Technology/Science – Radiographer**CIP 51.0911****24 clinical hours per week; 384 total contact hours. Credit: 3 semester hours.**

Practical, general workplace training supported by an individualized learning plan developed by the employer, college and student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. The student will continue to meet competencies in radiographic procedures and patient care. Experience in surgery and trauma radiography is emphasized. Completion of RADR curriculum with 75% or higher in all RADR courses is required. **Prerequisites:** Completion of first, second, and third semester RADR courses. **Co-enrolled:** RADR 2309 and RADR 2331.

#2367. (RADR) Practicum – Radiologic Technology/Science – Radiographer**CIP 51.0911****24 clinical hours per week; 384 total contact hours. Credit: 3 semester hours.**

Practical, general workplace training supported by an individualized learning plan developed by the employer, college and student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. The student will continue to meet competencies in radiographic procedures and patient care at an advanced level. Film analysis, procedural updates, and evaluation of special problems will be presented. Completion of RADR curriculum with 75% or higher in all RADR courses is required. **Prerequisites:** Completion of first, second, third, and fourth semester RADR courses. **Co-enrolled:** RADR 2217, RADR 1191, and RADR 2235.

(READ) DEVELOPMENTAL READING**+0304. (READ) Reading****CIP 32.0108****3 lecture hours and 2 lab hours per week; 80 total contact hours. Credit: 3 semester hours.***Not counted toward a degree or certificate.*

READ 0304 is a basic reading course designed to improve overall reading skills, particularly fluency, vocabulary, and comprehension through the development of skills in basic phonics, structural analysis, use of reference materials, reading and specific information, study techniques, and written responses to comprehensive questions. **Prerequisites:** Appropriate scores on the TSIA and STDY 0311 with C or better or be co-enrolled. **Corequisites:** STDY 0311.

+0305. (READ) Reading**CIP 32.0108****3 lecture hours and 2 lab hours per week; 80 total contact hours. Credit: 3 semester hours.***Not counted toward a degree or certificate.*

READ 0305 is designed to improve reading proficiency and appreciation through extensive and varied exercises in reading. Emphasis is placed on learning basic skills and strategies that improve reading comprehension and develop vocabulary. The course offers multimedia learning experiences and whole group and small group interactive instruction. **Prerequisites:** Appropriate scores on the TSIA, or completion of READ 0304 with C or better. **Note:** International students should see paired co-enrolled courses ESOL 0335 and ESOL 0324.

(RELE) REAL ESTATE**#1300. (RELE) Contract Forms and Addenda****CIP 52.1501****3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.**

Promulgated Contract Forms, shall include but is not limited to unauthorized practice of law, broker-lawyer committee, current promulgated and approved forms, commission rules governing use forms and case studies involving use of forms.

#1303. (RELE) Real Estate Appraisal**CIP 52.1501****3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.**

A study of the central purposes and functions of an appraisal, social and economic determinants of value, appraisal case studies, cost, market data and income approaches to value estimates, final correlations, and reporting.

#1307. (RELE) Real Estate Investments**CIP 52.1501****3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.**

Characteristics of real estate investments includes techniques of investment analysis, time-valued money, discounted and non-discounted investment criteria, leverage, tax shelters, depreciation, and applications to property tax.

#1309. (RELE) Real Estate Law**CIP 52.1501****3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.**

Provides a study of legal concepts of real estate, land description, real property rights, estates in land, contracts, conveyances, encumbrances, foreclosures, recording procedures, and evidence of title.

#1311. (RELE) Laws of Contracts**CIP 52.1501****3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.**

Elements of a contract, offer and acceptance, statute of frauds, specific performance and remedies for breach, unauthorized practice of law, commission rules relating to use of adopted forms, and owner disclosure requirements.

#1315. (RELE) Property Management**CIP 52.1501****3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.**

A study of the role of the property manager, landlord policies, operational guidelines, leases, lease negotiations, tenant relations, maintenance, reports, habitability laws, and the Fair Housing Act.

#1319. (RELE) Real Estate Finance**CIP 52.1501****3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.**

Monetary systems, primary and secondary money markets, sources of mortgage loans, federal government programs, loan applications, processes and procedures, closing costs, alternative financial instruments, equal credit opportunity laws affecting mortgage lending, Community Reinvestment Act, and the state housing agency.

#1321. (RELE) Real Estate Marketing**CIP 52.1501****3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.**

A study of real estate professionalism and ethics; characteristics of successful salespersons; time management; psychology of marketing; listing procedures; advertising; negotiating and closing financing; the Deceptive Trade Practice Act, Consumer Protection Act and Commercial Code.

#1325. (RELE) Real Estate Mathematics**CIP 52.1501****3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.**

Basic arithmetic skills, includes mathematical logic, percentages, interest, time value of money, depreciation, amortization, proration, and estimation of closing statements.

#1406. (RELE) Principles of Real Estate**CIP 52.1501****4 lecture hours per week; 64 total contact hours. Credit: 4 semester hours.**

Overview of licensing as a broker or salesperson. Includes ethics of practice as a license holder, titles to and conveyance of real estate, legal descriptions, deeds, encumbrances and liens, distinctions between personal and real property, appraisal, finance and regulations, closing procedures, and real estate mathematics. Covers at least three hours of classroom instruction on federal, state, and local laws relating to housing, discrimination, housing credit discrimination, and community reinvestment. Fulfills the 60-hour requirement for salesperson license.

#2301. (RELE) Law of Agency**CIP 52.1501****3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.**

Law of agency including principal-agent and master-servant relationships, the authority of an agent, the termination of an agent's authority, the fiduciary and other duties of an agent, employment law, deceptive trade practices, listing or buying procedures, and the disclosure of an agency.

(RNSG) REGISTERED NURSING/REGISTERED NURSE**#1144. (RNSG) Nursing Skills II****CIP 51.3801****3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.**

Study of the concepts and principles necessary to perform intermediate or advanced nursing skills for the adult patient; and demonstrate competence in the performance of nursing procedures. Content includes knowledge, judgment, skills and professional values within a legal/ethical framework. This course lends itself to a blocked approach. **Prerequisites:** Generic: Completion of first semester RNSG courses. LVN-T: Admissions into the LVN-Transition Option. **Co-enrolled:** Generic: RNSG 1341, RNSG 1260, RNSG 2213, and RNSG 2160.

#1215. (RNSG) Health Assessment**CIP 51.3801****1 lecture hour and 3 lab hours per week; 64 total contact hours. Credit: 2 semester hours.**

Development of skills and techniques required for a comprehensive nursing health assessment within a legal/ethical framework. This course lends itself to a blocked approach. **Prerequisites:** Generic: Admissions into the ADN Program. LVN-T: Departmental approval. **Co-enrolled:** Generic: RNSG 1301 and RNSG 1513.

#1260. (RNSG) Clinical – Registered Nursing/Registered Nurse**CIP 51.3801****6 clinical hours per week; 96 total contact hours. Credit: 2 semester hours.**

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. The content of this course focuses on clients and their families with common, chronic health concerns and will assist the student to develop their role as a member of the profession in providing patient-centered care, while emphasizing patient safety and advocacy and collaboration among the health care team. **Prerequisites:** Generic: Completion of first semester RNSG courses. LVN-T: Admissions into the LVN-Transition Option. **Co-enrolled:** Generic: RNSG 1341, RNSG 1144, RNSG 2213, and RNSG 2160. LVN-T: RNSG 1327.

#1301. (RNSG) Pharmacology**CIP 51.3801****3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.**

Introduction to the science of pharmacology with emphasis on the actions, interactions, adverse effects, and nursing implications of each drug classification. Content includes the roles and responsibilities of the nurse in safe administration of medications within a legal/ethical framework. This course lends itself to either a blocked or integrated approach. **Prerequisites:** Generic: Admissions into the ADN Program. LVN-T: Departmental approval. **Co-enrolled:** Generic: RNSG 1215 and RNSG 1513.

#1327. (RNSG) Transition to Professional Nursing**CIP 51.3801****3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.**

Content includes health promotion, expanded assessment, analysis of data, critical thinking skills and systematic problem solving process, pharmacology, interdisciplinary teamwork, communication, and applicable competencies in knowledge, judgment, skills, and professional values within a legal/ethical framework throughout the life span. This course lends itself to either a blocked or integrated approach. **Prerequisites:** LVN-T: Admissions into the LVN-Transition Option. **Co-enrolled:** LVN-T: RNSG 1260.

#1341. (RNSG) Common Concepts of Adult Health**CIP 51.3801****3 lecture hours; 48 total contact hours. Credit: 3 semester hours.**

Basic integration of the role of the professional nurse as a provider of patient-centered care, patient safety advocate, member of health care team and member of the profession. Study of the common concepts of caring for adult patients and families with medical-surgical health care needs related to body systems, emphasizing knowledge, judgment, skills, and professional values within a legal/ethical framework. This course lends itself to a blocked approach. The content of this course focuses on clients and their families with common, chronic health concerns. **Prerequisites:** Generic: Completion of first semester RNSG courses. **Co-enrolled:** Generic: RNSG 1260, RNSG 1144, RNSG 2213, and RNSG 2160.

#1343. (RNSG) Complex Concepts of Adult Health**CIP 51.3801****3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.**

Integration of previous knowledge and skills related to common adult health needs into the continued development of the professional nurse as a provider of patient-centered care, patient safety advocate, member of health care team, and member of the profession in the care of adult patients and families with complex medical-surgical health care needs associated with body systems. Emphasis on complex knowledge, judgments, skills, and professional values within a legal/ethical framework. This course lends itself to a blocked approach. The content of this course focuses on patients with common acute health concerns. **Prerequisites:** Generic: Completion of first and second semester RNSG courses. LVN-T: Completion of first semester RNSG courses. **Co-enrolled:** Generic and LVN-T: RNSG 2261, RNSG 1412, and RNSG 2161.

- #1412. (RNSG) Nursing Care of the Childbearing and Childrearing Family** **CIP 51.3801**
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 Study of the concepts related to the provision of nursing care for childbearing and childrearing families; application of systematic problem-solving processes and critical thinking skills, including a focus on the childbearing family during the perinatal periods and the childrearing family from birth to adolescence; and competency in knowledge, judgment, skill, and professional values within a legal/ethical framework. This course lends itself to a blocked approach. **Prerequisites:** Generic: Completion of first and second semester RNSG courses. LVN-T: Completion of first semester RNSG courses. **Co-enrolled:** Generic and LVN-T: RNSG 2261, RNSG 1343, and RNSG 2161.
- #1513. (RNSG) Foundations for Nursing Practice** **CIP 51.3801**
3 lecture hours and 6 lab hours per week; 144 total contact hours. Credit: 5 semester hours.
 Introduction to the role of the professional nurse as provider of patient-centered care, patient safety advocate, member of health care team, and member of the profession. Content includes fundamental concepts of nursing practice, history of professional nursing, and a systematic framework for decision-making and critical thinking. The mechanisms of disease and the needs and problems that can arise are discussed and how the nursing process helps manage the patient through these issues. Emphasis on knowledge, judgments, skills and professional values within a legal/ethical framework. This course lends itself to a blocked approach. The content of this course will assist the student to develop his or her role as a member of the profession in providing patient-centered care, while emphasizing patient safety and advocacy and collaboration among the health care team. **Prerequisites:** Generic: Admissions into the ADN Program. LVN-T: Departmental approval. **Co-enrolled:** Generic: RNSG 1215 and RNSG 1301.
- #2121. (RNSG) Professional Nursing: Leadership and Management** **CIP 51.3801**
1 lecture hour per week; 16 total contact hours. Credit: 1 semester hour.
 Exploration of leadership and management principles applicable to the roles of the professional nurse. Includes application of knowledge, judgment, skills, and professional values within a legal/ethical framework. This course lends itself to a blocked approach. **Prerequisites:** Generic: Completion of first, second, and third semester RNSG courses. LVN-T: Completion of first and second semester RNSG courses. **Co-enrolled:** Generic and LVN-T: RNSG 2231, RNSG 2262, and RNSG 2263.
- #2160. (RNSG) Clinical – Registered Nursing/Registered Nurse** **CIP 51.3801**
3 clinical hours per week; 48 total contact hours. Credit: 1 semester hour.
 A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. The content of this course focuses on principles and concepts of mental health, psychopathology and treatment modalities on clients and their families at mental health sites. The content of this course will assist the student to develop their role as a member of the profession in providing patient-centered care, while emphasizing patient safety and advocacy and collaboration among the health care team. **Prerequisites:** Generic: Completion of first semester RNSG courses. LVN-T: Admissions into the LVN-Transition Option. **Co-enrolled:** Generic: RNSG 1341, RNSG 1144, RNSG 2213, and RNSG 1260. LVN-T: RNSG 2213.
- #2161. (RNSG) Clinical – Registered Nursing/Registered Nurse** **CIP 51.3801**
3 clinical hours per week; 48 total contact hours. Credit: 1 semester hour.
 A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. The content of this course focuses on the provision of nursing care for childbearing and childrearing families. **Prerequisites:** Generic: Completion of first and second semester RNSG courses. LVN-T: Completion of first semester RNSG courses. **Co-enrolled:** Generic and LVN-T: RNSG 2261, RNSG 1412, and RNSG 1343.
- #2213. (RNSG) Mental Health Nursing** **CIP 51.3801**
2 lecture hours per week; 32 total contact hours. Credit: 2 semester hours.
 Principles and concepts of mental health, psychopathology, and treatment modalities related to the nursing care of patients and their families. This course lends itself to a blocked approach. **Prerequisites:** Generic: Completion of first semester RNSG courses. LVN-T: Admissions into the LVN-Transition Option. **Co-enrolled:** Generic: RNSG 1341, RNSG 1144, RNSG 2160, and RNSG 1260. LVN-T: RNSG 2160.
- #2231. (RNSG) Advanced Concepts of Adult Health** **CIP 51.3801**
2 lecture hours per week; 32 total contact hours. Credit: 2 semester hours.
 Application of advanced concepts and skills in the development of the professional nurse's roles with adult patients and families involving multiple body systems. Emphasis on advanced knowledge, judgments, skills and professional values within a legal/ethical framework. This course lends itself to a blocked approach. This course focuses on clients with common complex health concerns. The content of this course will assist the student to develop their role as a member of the profession in providing patient-centered care, while emphasizing patient safety and advocacy and collaboration among the health care team. **Prerequisites:** Generic: Completion of first, second, and third semester RNSG courses. LVN-T: Completion of first and second semester RNSG courses. **Co-enrolled:** Generic and LVN-T: RNSG 2121, RNSG 2262, and RNSG 2263.

#2261. (RNSG) Clinical – Registered Nursing/Registered Nurse **CIP 51.3801**
6 clinical hours per week; 96 total contact hours. Credit: 2 semester hours.
 A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. The content of this course focuses on clients with common acute health concerns. The content of this course will assist the student to develop their role as a member of the profession in providing patient-centered care, while emphasizing patient safety and advocacy and collaboration among the health care team. **Prerequisites:** Generic: Completion of first and second semester RNSG courses. LVN-T: Completion of first semester RNSG courses. **Co-enrolled:** Generic and LVN-T: RNSG 1343, RNSG 1412, and RNSG 2161.

#2262. (RNSG) Clinical – Registered Nursing/Registered Nurse **CIP 51.3801**
6 clinical hours per week; 96 total contact hours. Credit: 2 semester hours.
 A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. The content of this course focuses on clients with common complex health concerns. The content of this course will assist the student to develop their role as a member of the profession in providing patient-centered care, while emphasizing patient safety and advocacy and collaboration among the health care team. **Prerequisites:** Generic: Completion of first, second, and third semester RNSG courses. LVN-T: Completion of first and second semester RNSG courses. **Co-enrolled:** Generic and LVN-T: RNSG 2121, RNSG 2231, and RNSG 2263.

#2263. (RNSG) Clinical – Registered Nursing/Registered Nurse **CIP 51.3801**
8 clinical hours per week; 128 total contact hours. Credit: 2 semester hours.
 A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. The content of this course focuses on clients with common complex health concerns. The content of this course will assist the student to develop their role as a member of the profession in providing patient-centered care, while emphasizing patient safety and advocacy and collaboration among the health care team. **Prerequisites:** Generic: Completion of first, second, and third semester RNSG courses. LVN-T: Completion of first and second semester RNSG courses. **Co-enrolled:** Generic and LVN-T: RNSG 2121, RNSG 2231, and RNSG 2262.

(SCIT) ANATOMY

#1307. (SCIT) Applied Human Anatomy and Physiology I **CIP 26.0403**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 An applied systematic study of the structure and function of the human body. Includes anatomical terminology, cells, tissues, and the following systems: integumentary, skeletal, muscular, nervous, and endocrine. Emphasis on homeostasis. The student must achieve 70% or higher to complete the course.

#1308. (SCIT) Applied Human Anatomy and Physiology II **CIP 26.0403**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 A continuation of Applied Human Anatomy and Physiology I designed for students considering a career in the health field. The following body systems are included: digestive, respiratory, cardiovascular, lymphatic/immune, renal/excretory, and reproductive. Emphasis is on homeostasis. The student must achieve 70% or higher to complete the course. **Prerequisites:** SCIT 1307.

(SGNL) AMERICAN SIGN LANGUAGE

Students who have never taken a foreign language or who have completed less than one year of a foreign language in high school should enroll in 1401. Students who have had a course or courses in a foreign language may take a departmental test to determine in which course they should enroll.

+1401. (SGNL) Beginning American Sign Language I **CIP 16.1603**
3 lecture hours and 2 lab hours per week; 80 total contact hours. Credit: 4 semester hours.
 Introduction to American Sign Language covering finger spelling, vocabulary, and basic sentence structure in preparing individuals to interpret oral speech for the hearing impaired. This course is an introduction to American Sign Language and deaf culture. Students will acquire an understanding of multiple aspects of deaf culture, including its history, alphabet, vocabulary, correct grammatical structures, conversational behaviors, and social customs.

+1402. (SGNL) Beginning American Sign Language II **CIP 16.1603**
3 lecture hours and 2 lab hours per week; 80 total contact hours. Credit: 4 semester hours.
 Introduction to American Sign Language covering finger spelling, vocabulary, and basic sentence structure in preparing individuals to interpret oral speech for the hearing impaired. This course is conducted, mainly, without voice. It focuses on sign vocabulary, numbers, finger spelling, and deaf culture. Emphasis is placed on the enhancement of both receptive and expressive skills and on the application of rudimentary syntactical structure. **Prerequisites:** SGNL 1401 or departmental approval.

- +2301. (SGNL) Intermediate American Sign Language I** **CIP 16.1603**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Review and application of conversational skills in American Sign Language; interpreting from signing to voice as well as from voice to signing. Introduction to American Sign Language literature and folklore. This course is a continuation of SGNL 1401 and 1402, and is designed to provide extensive exposure to body language and American Sign Language. Emphasis is on comprehensive and expressive skills, as well as the linguistic features of the language taught in context. **Prerequisites:** SGNL 1401 and SGNL1402 or departmental approval.
- +2302. (SGNL) Intermediate American Sign Language II** **CIP 16.1603**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Review and application of conversational skills in American Sign Language; interpreting from signing to voice as well as from voice to signing. Introduction to American Sign Language literature and folklore. A continuation of SGNL 2301, this course provides further study in American Sign Language, its vocabulary, grammar, syntax, manual and non-manual aspects, as well as cultural features. Students will analyze selected literary works in ASL, integrate skills in discourse styles and structures, and apply the concept of contextualization to narratives. This course provides development and practice of conversational skills in expressive and receptive areas of ASL. **Prerequisites:** SGNL 1401, SGNL 1402, and SGNL 2301 or departmental approval.
- (SOC) SOCIOLOGY**
- +1301. (SOC) Introductory Sociology *** **CIP 45.1101**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 The scientific study of human society, including ways in which groups, social institutions, and individuals affect each other. Causes of social stability and social change are explored through the application of various theoretical perspectives, key concepts, and related research methods of sociology. Analysis of social issues in their institutional context may include topics such as social stratification, gender, race/ethnicity, and deviance. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards.
- +1306. (SOC) Social Problems *** **CIP 45.1101**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Application of sociological principles and theoretical perspectives to major social problems in contemporary society such as inequality, crime and violence, substance abuse, environmental issues, deviance, or family problems. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards.
- +2301. (SOC) Marriage and the Family *** **CIP 45.1101**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Sociological and theoretical analysis of the structures and functions of the family, the varied cultural patterns of the American family, and the relationships that exist among the individuals within the family, as well as the relationships that exist between the family and other institutions in society.
- +2319. (SOC) Minority Studies** **CIP 45.1101**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 This course studies minority-majority group relations, addressing their historical, cultural, social, economic, and institutional development in the United States. Both sociological and social psychological levels of analysis will be employed to discuss issues including experiences of minority groups within the context of their cultural heritage and tradition, as well as that of the dominant culture. Core concepts to be examined include (but are not limited to) social inequality, dominance/ subordination, prejudice, and discrimination. Particular minority groups discussed may include those based on poverty, race/ethnicity, gender, sexual orientation, age, disability, or religion. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards.
- +2336. (SOC) Criminology** **CIP 45.0401**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 The course surveys various theories of crime, with an emphasis on understanding the social causes of criminal behavior. The techniques for measuring crime as a social phenomenon and the characteristics of criminals are examined. This course addresses crime types (such as consensual or white-collar crimes), the criminal justice system, and other social responses to crime. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards.

(SPAN) SPANISH LANGUAGE

Students who have never taken a foreign language or who have completed less than one year of a foreign language in high school should enroll in 1411. Students who have had a course or courses in a foreign language may take a departmental test to determine in which course they should enroll.

- +1411. (SPAN) Beginning Spanish I** **CIP 16.0905**
3 lecture hours and 2 lab hours per week; 80 total contact hours. Credit: 4 semester hours.
 Basic Spanish language skills in listening, speaking, reading, and writing within a cultural framework. Students will acquire the vocabulary and grammatical structures necessary to communicate and comprehend at the beginner level.
- +1412. (SPAN) Beginning Spanish II** **CIP 16.0905**
3 lecture hours and 2 lab hours per week; 80 total contact hours. Credit: 4 semester hours.
 Basic Spanish language skills in listening, speaking, reading, and writing within a cultural framework. Students will acquire the vocabulary and grammatical structures necessary to communicate and comprehend at the beginner level. This course is a continuation of SPAN 1411. **Prerequisites:** SPAN 1411 or departmental approval.
- +2311. (SPAN) Intermediate Spanish I** **CIP 16.0905**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 The consolidation of skills acquired at the introductory level. Further development of proficiency in listening, speaking, reading and writing. Emphasis on comprehension, appreciation, and interpretation of the cultures of the Spanish-speaking world. **Prerequisites:** SPAN 1412 or departmental approval.
- +2312. (SPAN) Intermediate Spanish II** **CIP 16.0905**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 The consolidation of skills acquired at the introductory level. Further development of proficiency in listening, speaking, reading and writing. Emphasis on comprehension, appreciation, and interpretation of the cultures of the Spanish-speaking world. This course is a continuation of SPAN 2311. **Prerequisites:** SPAN 2311 or departmental approval.
- +2313. (SPAN) Spanish for Native/Heritage Speakers I** **CIP 16.0905**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Review and application of skills in reading and writing. Emphasizes vocabulary acquisition, reading, composition, and culture. Designed for individuals with oral proficiency in Spanish, these courses are considered equivalent to SPAN 2311 & SPAN 2312. Particular attention will be given to spelling, accent marks and expansion of the students' vocabulary. This course will allow students to reactivate the Spanish they have learned previously and develop it further, and it will help them learn more about their language and cultural heritage. **Prerequisites:** Native Spanish speaker or individuals who have learned Spanish and are fluent in the language.
- +2315. (SPAN) Spanish for Native/Heritage Speakers II** **CIP 16.0905**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Review and application of skills in reading and writing. Emphasizes vocabulary acquisition, reading, composition, and culture. Designed for individuals with oral proficiency in Spanish, these courses are considered equivalent to SPAN 2311 & SPAN 2312. This course is a sequel to Spanish 2313 for native Spanish speakers and individuals who have learned Spanish and are fluent in the language. This course will emphasize reading comprehension and literary analysis at a more sophisticated level. Particular attention will be given to spelling, simple and compound tenses and expansion of the students' vocabulary. This course will allow students to reactivate the Spanish they have learned previously and develop it further, and it will help them learn more about their language and cultural heritage. **Prerequisites:** Native Spanish speakers or individuals who have learned Spanish and are fluent in the language.
- (SPCH) SPEECH**
- +1311. (SPCH) Introduction to Speech Communication *** **CIP 23.1304**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Introduces basic human communication principles and theories embedded in a variety of contexts including interpersonal, small group, and public speaking.
- +1315. (SPCH) Public Speaking *** **CIP 23.1304**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Application of communication theory and practice to the public speaking context, with emphasis on audience analysis, speaker delivery, ethics of communication, cultural diversity, and speech organizational techniques to develop students' speaking abilities, as well as ability to effectively evaluate oral presentations.

- +1318. (SPCH) Interpersonal Communication *** **CIP 23.1304**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Application of communication theory to interpersonal relationship development, maintenance, and termination in relationship contexts including friendships, romantic partners, families, and relationships with co-workers and supervisors.
- +1321. (SPCH) Business and Professional Communication *** **CIP 23.1304**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Study and application of communication within the business and professional context. Special emphasis will be given to communication competencies in presentations, dyads, teams and technologically mediated formats.
- +1342. (SPCH) Voice and Diction** **CIP 23.1304**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Focuses on the physiology and mechanics of effective voice production with practice in articulation, pronunciation, and enunciation.
Recommended: Completion of SPCH 2341 or be co-enrolled.
- +2333. (SPCH) Discussion and Small Group Communication** **CIP 23.1304**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Focuses on discussion and small group theories and techniques as they relate to group process and interaction.
- +2335. (SPCH) Argumentation and Debate *** **CIP 23.1304**
Core Curriculum Course
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Focuses on the theories and practice of argumentation and debate including analysis, reasoning, organization, evidence, and refutation. Aims to engage students in discussions and debates of contemporary issues of socio-political and cultural significance, which are the building blocks of a democratic society.
- +2341. (SPCH) Oral Interpretation** **CIP 23.1304**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Theories and techniques in analyzing and interpreting literature. Preparation and presentation of various literary forms.

(SPNL) SPANISH LANGUAGE AND LITERATURE

- #1201. (SPNL) Health Care Spanish** **CIP 16.0905**
2 lecture hours per week; 32 total contact hours. Credit: 2 semester hours.
 Development of practical Spanish communication skills for the health care employee including medical terminology, greetings, common expressions, commands, and phrases and questions necessary to carry out specific health care procedures and to facilitate the physical assessment of a Spanish speaking patient. Discussions, visiting speakers and outside assignments will also cover cross-cultural issues pertinent to relationships between non-Hispanic health care staff and the Hispanic/Spanish-speaking community members.

(SRGT) SURGICAL TECHNOLOGY/TECHNOLOGIST

- #1260. (SRGT) Clinical – Surgical Technology/Technologist** **CIP 51.0909**
12 external hours per week; 192 contact hours. Credit: 2 semester hours.
 A health-related work-based learning experiences that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. **Prerequisites:** Admissions into the Surgical Technology Certificate Program. **Co-enrolled:** SRGT 1405, SRGT 1409, and HPRS 2300.
- #1261. (SRGT) Clinical – Surgical Technology/Technologist** **CIP 51.0909**
12 external hours per week; 192 contact hours. Credit: 2 semester hours.
 A health-related work-based learning experiences that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. **Prerequisites:** Completion of first semester cohort courses. **Co-enrolled:** SRGT 1441 and SRGT 1442.
- #1267. (SRGT) Practicum (or Field Experience) – Surgical Technology/Technologist** **CIP 51.0909**
14 external hours per week; 224 contact hours. Credit: 2 semester hours.
 Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Direct supervision is provided by the clinical professional. **Prerequisites:** Completion of first and second semester cohort courses. **Co-enrolled:** SRGT 2130.

- #1405. (SRGT) Introduction to Surgical Technology** **CIP 51.0909**
2 lecture hours and 6 lab hours per week; 128 contact hours. Credit: 4 semester hours.
 Orientation to surgical technology theory, surgical pharmacology and anesthesia, technological sciences, and patient care concepts. **Prerequisites:** Admissions into the Surgical Technology Certificate Program. **Co-enrolled:** SRGT 1260, SRGT 1409, and HPRS 2300.
- #1409. (SRGT) Fundamentals of Perioperative Concepts and Techniques** **CIP 51.0909**
2 lecture hours and 6 lab hours per week; 128 contact hours. Credit: 4 semester hours.
 In-depth coverage of perioperative concepts such as aseptic principles and practices, infectious processes, wound healing, and creation and maintenance of the sterile field. **Prerequisites:** Admissions into the Surgical Technology Certificate Program. **Co-enrolled:** SRGT 1260, SRGT 1405, and HPRS 2300.
- #1441. (SRGT) Surgical Procedures I** **CIP 51.0909**
2 lecture hours and 6 lab hours per week; 128 contact hours. Credit: 4 semester hours.
 Introduction to surgical pathology and its relationship to surgical procedures. Emphasis on surgical procedures related to the general, OB/GYN, genitourinary, otorhinolaryngology, and orthopedic surgical specialties incorporating instruments, equipment, and supplies required for safe patient care. **Prerequisites:** Completion of first semester cohort courses. **Co-enrolled:** SRGT 1442 and SRGT 1261.
- #1442. (SRGT) Surgical Procedures II** **CIP 51.0909**
3 lecture hours and 3 lab hours per week; 96 contact hours. Credit: 4 semester hours.
 Introduction to surgical pathology and its relationship to surgical procedures. Emphasis on surgical procedures related to the cardiothoracic, peripheral vascular, plastic/reconstructive, ophthalmology, oral/maxillofacial, and neurological surgical specialties incorporating instruments, equipment, and supplies required for safe patient care. **Prerequisites:** Completion of first semester cohort courses. **Co-enrolled:** SRGT 1441 and SRGT 1261.
- #2130. (SRGT) Professional Readiness** **CIP 51.0909**
1 lecture hour per week; 16 contact hours. Credit: 1 semester hour.
 Overview of professional readiness for employment, attaining certification, and maintaining certification status. **Prerequisites:** Completion of first and second semester cohort courses. **Co-enrolled:** SRGT 1267.

(STDY) STUDY SKILLS

- +0101. (STDY) Study Strategies** **CIP 32.0101**
1 lecture hour and 1 lab hour per week; 32 contact hours. Credit: 1 semester hour.
Not counted toward a degree or certificate.
 Study Strategies is designed to help students develop and improve skills necessary to succeed in a rigorous college academic environment. Topics include time management, memory enhancement, critical reading, effective listening and note taking, test preparation, and critical thinking and writing. **Prerequisites:** Appropriate scores on the TSIA.
- +0311. (STDY) Strategies for College Success** **CIP 32.0101**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
Not counted toward a degree or certificate.
 Strategies for College Success is designed for development and improvement of study systems. Emphasis is placed on college-level study skills, the improvement of time management, effective listening and note-taking, marking texts, learning through media, concentration, retention of information and skills needed for taking examinations. Students who are TSI liable in reading and/or writing are strongly encouraged to take STDY 0311 to support their academic success. *Students whose TSIA scores make them "college ready" in English and Reading should take EDUC 1300 if they want to learn more about effective learning strategies and learning theories.* **Corequisites:** Students who test into READ 0304 must also register for STDY 0311 or take STDY 0311 before enrolling in READ 0304.

(TECA) EARLY CHILDHOOD EDUCATION

- +1303. (TECA) Families, School, and Community** **CIP 13.0101**
3 lecture hours and 1 external hour per week; 64 total contact hours. Credit: 3 semester hours.
 A study of the child, family, community and schools, including parent education and involvement, family and community lifestyles, child abuse, and current family life issues. Course content is aligned as applicable with the State Board for Educator Certification Pedagogy and Professional Responsibilities standards. This course requires students to participate in field experiences with children from infancy through age 12 in a variety of settings with varied and diverse populations. It includes 16 hours of field experiences over the course of the semester.

- +1311. (TECA) Educating Young Children** **CIP 13.1202**
3 lecture hours and 1 external hour per week; 64 total contact hours. Credit: 3 semester hours.
 An introduction to the education of the young child, including developmentally appropriate practices and programs, theoretical and historical perspectives, ethical and professional responsibilities and current issues. Course content is aligned as applicable with the State Board for Educator Certification Pedagogy and Professional Responsibilities standards. This course requires students to participate in field experiences with children from infancy through age 12 in a variety of settings with varied and diverse populations. It includes 16 hours of field experiences over the course of the semester.
- +1318. (TECA) Wellness of the Young Child** **CIP 13.0101**
3 lecture hours and 1 external hour per week; 64 total contact hours. Credit: 3 semester hours.
 A study of the factors that impact the well-being of the young child including healthy behavior, food, nutrition, fitness, and safety practices. Focus on local and national standards and legal implications of relevant policies and regulations. Course content is aligned as applicable with the State Board for Educator Certification Pedagogy and Professional Responsibilities standards. This course requires students to participate in field experiences with children from infancy through age 12 in a variety of settings with varied and diverse populations. It includes 16 hours of field experiences over the course of the semester.
- +1354. (TECA) Child Growth and Development** **CIP 13.1202**
Approval pending for inclusion in the AY 2017/2018 Core Curriculum.
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 A study of the physical, emotional, social, and cognitive factors impacting growth and development of children through adolescence. Course content is aligned as applicable with the State Board for Educator Certification Pedagogy and Professional Responsibilities standards.
- (VNSG) VOCATIONAL NURSING**
- #1119. (VNSG) Leadership and Professional Development** **CIP 51.3901**
1 lecture hour per week; 16 total contact hours. Credit: 1 semester hour.
 Study of the importance of professional growth. Topics include the role of the licensed vocational nurse in the multi-disciplinary health care team, professional organizations, and continuing education. **Prerequisites:** Completion of all first and second semester VNSG courses, all with 75% or higher. **Co-enrolled:** VNSG 1332 and VNSG 1262.
- #1122. (VNSG) Vocational Nursing Concepts** **CIP 51.3901**
1 lecture hour per week; 16 total contact hours. Credit: 1 semester hour.
 Introduction to the nursing profession and its responsibilities. Includes legal and ethical issues in nursing practice. Concepts related to the physical, emotional, and psychosocial self-care of the learner/professional. **Prerequisites:** Admissions into the Vocational Nursing Program. **Co-enrolled:** VNSG 1405, VNSG 1323, VNSG 1226, VNSG 1133, VNSG 1201, VNSG 1227, and VNSG 1360.
- #1133. (VNSG) Growth and Development** **CIP 51.3901**
1 lecture hour per week; 16 total contact hours. Credit: 1 semester hour.
 Study of the basic aspects of growth and development throughout the life span. Focus on growth and development of the individual's body, mind, and personality as influenced by the environment. **Prerequisites:** Admissions into the Vocational Nursing Program. **Co-enrolled:** VNSG 1405, VNSG 1323, VNSG 1226, VNSG 1122, VNSG 1201, VNSG 1227, and VNSG 1360.
- #1201. (VNSG) Mental Health and Mental Illness** **CIP 51.3901**
2 lecture hours per week; 32 total contact hours. Credit: 2 semester hours.
 Personality development, human needs, common mental mechanisms, and factors influencing mental health and mental illness. Includes common mental disorders and related therapy. **Prerequisites:** Admissions into the Vocational Nursing Program. **Co-enrolled:** VNSG 1405, VNSG 1323, VNSG 1226, VNSG 1133, VNSG 1122, VNSG 1227, and VNSG 1360.
- #1226. (VNSG) Gerontology** **CIP 51.3901**
2 lecture hours per week; 32 total contact hours. Credit: 2 semester hours.
 Overview of the physical, psychosocial, and cultural aspects of the aging process. Addresses common disease processes of aging. Exploration of attitudes toward care of the older adult. **Prerequisites:** Admissions into the Vocational Nursing Program. **Co-enrolled:** VNSG 1405, VNSG 1323, VNSG 1133, VNSG 1122, VNSG 1201, VNSG 1227, and VNSG 1360.
- #1227. (VNSG) Essentials of Medication Administration** **CIP 51.3901**
1 lecture hours and 3 lab hour per week; 64 total contact hours. Credit: 2 semester hours.
 General principles of medication administration including determination of dosage, preparation, safe administration, and documentation of multiple forms of drugs. Instruction includes various systems of measurement. **Prerequisites:** Admissions into the Vocational Nursing Program. **Co-enrolled:** VNSG 1405, VNSG 1323, VNSG 1226, VNSG 1133, VNSG 1122, VNSG 1201, and VNSG 1360.

- #1230. (VNSG) Maternal-Neonatal Nursing** **CIP 51.3901**
2 lecture hours per week; 32 total contact hours. Credit: 2 semester hours.
 A study of the biological, psychological, and sociological concepts applicable to basic needs of the family including childbearing and neonatal care. Utilization of the nursing process in the assessment and management of the childbearing family. Topics include physiological changes related to pregnancy, fetal development, and nursing care of the family during labor and delivery and the puerperium. **Prerequisites:** Completion of all first semester VNSG courses, all with 75% or higher. **Co-enrolled:** VNSG 1231, VNSG 1234, VNSG 1329, and VNSG 1661.
- #1231. (VNSG) Pharmacology** **CIP 51.3901**
2 lecture hours per week; 32 total contact hours. Credit: 2 semester hours.
 Fundamentals of medications and their diagnostic, therapeutic, and curative effects. Includes nursing interventions utilizing the nursing process. **Prerequisites:** Completion of all first semester VNSG courses, all with 75% or higher. **Co-enrolled:** VNSG 1234, VNSG 1230, VNSG 1329, and VNSG 1661.
- #1234. (VNSG) Pediatrics** **CIP 51.3901**
2 lecture hours per week; 32 total contact hours. Credit: 2 semester hours.
 Study of the care of the pediatric patient and family during health and disease. Emphasis on growth and developmental needs utilizing the nursing process. **Prerequisites:** Completion of all first semester VNSG courses, all with 75% or higher. **Co-enrolled:** VNSG 1231, VNSG 1230, VNSG 1329, and VNSG 1661.
- #1262. (VNSG) Clinical - Licensed Practical/Vocational Nurse Training** **CIP 51.3901**
6 clinical hours per week; 96 total contact hours. Credit: 2 semester hours.
 A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Clinical education is an unpaid learning experience. Clinical education is an unpaid learning experience. **Prerequisites:** Completion of all first and second semester VNSG courses, all with 75% or higher. **Co-enrolled:** VNSG 1332 and VNSG 1119.
- #1323. (VNSG) Basic Nursing Skills** **CIP 51.3901**
1 lecture hours and 7 lab hours per week; 128 total contact hours. Credit: 3 semester hours.
 Mastery of basic nursing skills and competencies for a variety of health care settings. Utilization of the nursing process as the foundation for all nursing interventions. **Prerequisites:** Admissions into the Vocational Nursing Program. **Co-enrolled:** VNSG 1405, VNSG 1226, VNSG 1133, VNSG 1122, VNSG 1201, VNSG 1227, and VNSG 1360.
- #1329. (VNSG) Medical-Surgical Nursing I** **CIP 51.3901**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Application of the nursing process to the care of the adult patient experiencing medical-surgical conditions along the health-illness continuum in a variety of health care settings. **Prerequisites:** Completion of all first semester VNSG courses, all with 75% or higher. **Co-enrolled:** VNSG 1231, VNSG 1234, VNSG 1230, and VNSG 1661.
- #1332. (VNSG) Medical-Surgical Nursing II** **CIP 51.3901**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 Continuation of Medical-Surgical Nursing I with application of the nursing process to the care of adult patient experiencing medical-surgical conditions along the health-illness continuum in a variety of health care settings. **Prerequisites:** Completion of all first and second semester VNSG courses, all with 75% or higher. **Co-enrolled:** VNSG 1119 and VNSG 1262.
- #1360. (VNSG) Clinical – Licensed Practical/Vocational Nurse Training** **CIP 51.3901**
15 clinical hours per week; 240 total contact hours. Credit: 3 semester hours.
 A health related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Clinical education is an unpaid learning experience. **Prerequisites:** Admissions into the Vocational Nursing Program. **Co-enrolled:** VNSG 1405, VNSG 1323, VNSG 1226, VNSG 1133, VNSG 1122, VNSG 1201, and VNSG 1227.
- #1405. (VNSG) Health Science** **CIP 51.3901**
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 An introduction to the general principles of anatomy and physiology, nutrition, and microbiology necessary for understanding body processes and basic principles underlying health promotion and therapeutic interventions. **Prerequisites:** Admissions into the Vocational Nursing Program. **Co-enrolled:** VNSG 1323, VNSG 1226, VNSG 1133, VNSG 1122, VNSG 1201, VNSG 1227, and VNSG 1360.
- #1661. (VNSG) Clinical – Licensed Practical/Vocational Nurse Training** **CIP 51.3901**
30 clinical hours per week; 480 total contact hours. Credit: 6 semester hours.
 A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Clinical education is an unpaid learning experience. **Prerequisites:** Completion of all first semester VNSG courses, all with 75% or higher. **Co-enrolled:** VNSG 1231, VNSG 1234, VNSG 1230, and VNSG 1329.

(VTHT) VETERINARY TECHNOLOGY

- #1105. (VTHT) Veterinary Medical Terminology** **CIP 51.0808**
1 lecture hour and 1 lab hour per week; 32 total contact hours. Credit: 1 semester hour.
 Introduction to word parts, directional terminology, and analysis of veterinary terms. **Prerequisites:** Admissions into the Veterinary Technology Program. **Co-enrolled:** VTHT 1109 and VTHT 1301.
- #1109. (VTHT) Veterinary Nutrition** **CIP 51.0808**
1 lecture hour and 1 lab hour per week; 32 total contact hours. Credit: 1 semester hour.
 Fundamentals of energy and non-energy producing nutrients, their sources and functions. Integration of concepts including digestion, absorption, and metabolism with application to normal and therapeutic nutritional needs. **Prerequisites:** Admissions into the Veterinary Technology Program. **Co-enrolled:** VTHT 1105 and VTHT 1301.
- #1125. (VTHT) Pharmacological Calculations** **CIP 51.0808**
1 lecture hour and 1 lab hour per week; 32 total contact hours. Credit: 1 semester hour.
 Skill development in calculating drug dosages. **Prerequisites:** Completion of first semester VTHT courses. **Co-enrolled:** VTHT 1413 and VTHT 2217.
- #1140. (VTHT) Veterinary Jurisprudence and Ethics** **CIP 51.0808**
1 lecture hour per week; 16 total contact hours. Credit: 1 semester hour.
 Survey of laws, regulations, and ethical standards governing the veterinary profession. **Prerequisites:** Completion of first, second, third, and fourth semester VTHT courses. **Co-enrolled:** VTHT 1441, VTHT 2260, VTHT 1245, and VTHT 2331.
- #1245. (VTHT) Veterinary Radiology** **CIP 51.0808**
1 lecture hour and 3 lab hours per week; 64 total contact hours. Credit: 2 semester hours.
 Presentation of theory and principles and practical application of radiology within the field of veterinary medicine. **Prerequisites:** Completion of first, second, third, and fourth semester VTHT courses. **Co-enrolled:** VTHT 1441, VTHT 2260, VTHT 1140, and VTHT 2331.
- #1249. (VTHT) Veterinary Pharmacology** **CIP 51.0808**
2 lecture hours and 1 lab hour per week; 48 total contact hours. Credit: 2 semester hours.
 Fundamentals of pharmacology including recognition, calculation, labeling, packaging, and administration of veterinary drugs, biologics, and therapeutic agents. Discussion of normal and abnormal responses to these agents. **Prerequisites:** Completion of the first, second, and third semester VTHT courses. **Co-enrolled:** VTHT 2209, VTHT 2205, VTHT 2201, and VTHT 2223.
- #1260. (VTHT) Clinical – Veterinary/Animal Health Technology/Technician and Veterinary Assistant** **CIP 51.0808**
10 clinical hours per week; 160 total contact hours. Credit: 2 semester hours.
 A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. **Prerequisites:** Completion of the first and second semester VTHT courses.
- #1301. (VTHT) Introduction to Veterinary Technology** **CIP 51.0808**
2 lecture hours and 4 lab hours per week; 96 total contact hours. Credit: 3 semester hours.
 Survey of the profession of veterinary technology with emphasis on basic techniques, handling and care of animals, and ethical and professional requirements. **Prerequisites:** Admissions into the Veterinary Technology Program. **Co-enrolled:** VTHT 1105 and VTHT 1109.
- #1413. (VTHT) Veterinary Anatomy and Physiology** **CIP 51.0808**
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 Gross anatomy of domestic animals including physiological explanations of how each organ system functions. **Prerequisites:** Completion of first semester VTHT courses. **Co-enrolled:** VTHT 1125 and VTHT 2217.
- #1441. (VTHT) Anesthesia and Surgical Assistance** **CIP 51.0808**
2 lecture hours and 6 lab hours per week; 128 total contact hours. Credit: 4 semester hours.
 In-depth application of surgical, obstetrical, and anesthesia techniques including identification and use of instruments and equipment. **Prerequisites:** Completion of first, second, third, and fourth semester VTHT courses. **Co-enrolled:** VTHT 1140, VTHT 2260, VTHT 1245, and VTHT 2331.
- #2201. (VTHT) Canine and Feline Clinical Management** **CIP 51.0808**
1 lecture hour and 3 lab hours per week; 64 total contact hours. Credit: 2 semester hours.
 Survey of feeding, common management practices, and care of canines and felines in a clinical setting. Review of common diseases of canines and felines encountered in the practice of veterinary medicine. **Prerequisites:** Completion of the first, second, and third semester VTHT courses. **Co-enrolled:** VTHT 2209, VTHT 2205, VTHT 1249, and VTHT 2223.

- #2205. (VTHT) Equine Clinical Management** **CIP 51.0808**
1 lecture hour and 3 lab hours per week; 64 total contact hours. Credit: 2 semester hours.
 Survey of feeding, common management practices, and care of equines in a clinical setting. Review of common diseases of equines encountered in the practice of veterinary medicine. **Prerequisites:** Completion of the first, second, and third semester VTHT courses. **Co-enrolled:** VTHT 2209, VTHT 2201, VTHT 1249, and VTHT 2223.
- #2209. (VTHT) Food Animal Clinical Management** **CIP 51.0808**
1 lecture hour and 3 lab hours per week; 64 total contact hours. Credit: 2 semester hours.
 Survey of feeding, management practices, and care of food producing animals in a clinical setting. Review of common diseases of food producing animals. **Prerequisites:** Completion of the first, second, and third semester VTHT courses. **Co-enrolled:** VTHT 2205, VTHT 2201, VTHT 1249, and VTHT 2223.
- #2217. (VTHT) Exotic Animal Clinical Management** **CIP 51.0808**
1 lecture hour and 3 lab hours per week; 64 total contact hours. Credit: 2 semester hours.
 Survey of feeding, common management practices, and care of exotic animals in a clinical or zoological setting. Review of common diseases of exotic animals encountered in the practice of veterinary medicine. **Prerequisites:** Completion of first semester VTHT courses. **Co-enrolled:** VTHT 1125 and VTHT 1413.
- #2223. (VTHT) Veterinary Clinical Pathology I** **CIP 51.0808**
1 lecture hour and 4 lab hours per week; 80 total contact hours. Credit: 2 semester hours.
 In-depth study of hematology and blood chemistries with emphasis on lab procedures. **Prerequisites:** Completion of the first, second, and third semester VTHT courses. **Co-enrolled:** VTHT 2209, VTHT 2205, VTHT 2201, and VTHT 1249.
- #2260. (VTHT) Clinical – Veterinary/Animal Health Technology/Technician and Veterinary Assistant** **CIP 51.0808**
10 clinical hours per week; 160 total contact hours. Credit: 2 semester hours.
 A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. **Prerequisites:** Completion of first, second, third, and fourth semester VTHT courses. **Co-enrolled:** VTHT 1140, VTHT 1441, VTHT 1245, and VTHT 2331.
- #2331. (VTHT) Veterinary Clinical Pathology II** **CIP 51.0808**
2 lecture hours and 4 lab hours per week; 96 total contact hours. Credit: 3 semester hours.
 In-depth study of urinalysis and cytology. Survey of microbiological techniques. Emphasis on lab procedures. **Prerequisites:** Completion of first, second, third, and fourth semester VTHT courses. **Co-enrolled:** VTHT 1441, VTHT 2260, VTHT 1140, and VTHT 1245.
- #2421. (VTHT) Veterinary Parasitology** **CIP 51.0808**
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.
 Study of parasites common to domestic animals including zoonotic diseases. **Prerequisites:** Completion of the first and second semester VTHT courses.
- (WLDG) WELDING TECHNOLOGY/WELDER**
- #1313. (WLDG) Introduction to Blueprint Reading for Welders** **CIP 48.0508**
2 lecture hours and 2 lab hours per week; 64 total contact hours. Credit: 3 semester hours.
 A study of industrial blueprints. Emphasis placed on terminology, symbols, graphic description, and welding processes. Includes systems of measurement and industry standards. Also includes interpretation of plans and drawings used by industry to facilitate field application and production.
- #1340. (WLDG) AWS Level I Certification Review** **CIP 48.0508**
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
 A review of various welding processes, welding terminology, and welding technology curriculum in preparation for taking the American Welding Society Level One Certification written test.
- #1425. (WLDG) Introduction to Oxy-Fuel Welding and Cutting** **CIP 48.0508**
2 lecture hours and 6 lab hours per week; 128 total contact hours. Credit: 4 semester hours.
 An introduction to oxy-fuel welding and cutting, safety, setup and maintenance of oxy-fuel welding, and cutting equipment and supplies.
- #1428. (WLDG) Introduction to Shielded Metal Arc Welding (SMAW)** **CIP 48.0508**
2 lecture hours and 6 lab hours per week; 128 total contact hours. Credit: 4 semester hours.
 An introduction to the shielded metal arc welding process. Emphasis placed on power sources, electrode selection, and various joint designs.
- #1430. (WLDG) Introduction to Gas Metal Arc Welding (GMAW)** **CIP 48.0508**
2 lecture hours and 6 lab hours per week; 128 total contact hours. Credit: 4 semester hours.
 Principles of gas metal arc welding, setup and use of Gas Metal Arc Welding (GMAW) equipment, and safe use of tools/equipment. Instruction in various joint designs.

- #1434. (WLDG) Introduction to Gas Tungsten Arc (GTAW) Welding** **CIP 48.0508**
2 lecture hours and 6 lab hours per week; 128 total contact hours. Credit: 4 semester hours.
 Principles of gas tungsten arc welding (GTAW), including setup, GTAW equipment. Instruction in various positions and joint designs.
- #1435. (WLDG) Introduction to Pipe Welding** **CIP 48.0508**
2 lecture hours and 6 lab hours per week; 128 total contact hours. Credit: 4 semester hours.
 An introduction to welding of pipe using the shielded metal arc welding process (SMAW), including electrode selection, equipment setup, and safe shop practices. Emphasis on various welding positions and electrodes. **Prerequisites:** WLDG 1428, WLDG 1430, and WLDG 1457.
- #1457. (WLDG) Intermediate Shielded Metal Arc Welding (SMAW)** **CIP 48.0508**
2 lecture hours and 6 lab hours per week; 128 total contact hours. Credit: 4 semester hours.
 A study of the production of various fillets and groove welds. Preparation of specimens for testing in various positions. **Prerequisites:** WLDG 1428.
- #2288. (WLDG) Internship – Welding Technology/Welder** **CIP 48.0508**
12 external hours per week; 192 total contact hours. Credit: 2 semester hours.
 A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. **Prerequisites:** WLDG 1425, WLDG 1428, WLDG 1430, and WLDG 1457. **Co-enrolled:** WLDG 1435.
- #2447. (WLDG) Advanced Gas Metal Arc Welding (GMAW)** **CIP 48.0508**
2 lecture hours and 6 lab hours per week; 128 total contact hours. Credit: 4 semester hours.
 Advanced topics in Gas Metal Arc Welding (GMAW). Includes welding in various positions.
- #2451. (WLDG) Advanced Gas Tungsten Arc Welding (GTAW)** **CIP 48.0508**
2 lecture hours and 6 lab hours per week; 128 total contact hours. Credit: 4 semester hours.
 Advanced topics in GTAW welding, including welding in various positions and directions.
- #2453. (WLDG) Advanced Pipe Welding** **CIP 48.0508**
2 lecture hours and 6 lab hours per week; 128 total contact hours. Credit: 4 semester hours.
 Advanced topics involving welding of pipe using the shielded metal arc welding (SMAW) process. Topics include electrode selection, equipment setup, and safe shop practices. Emphasis on weld positions 5G and 6G using various electrodes.

Workforce Education Programs Information

Blinn College provides a full complement of Workforce Education programs for lifelong learning. These non-credit courses are offered through the Division of Workforce Education throughout the thirteen county service area. Workforce Programs are designed, both in subject and format, to fulfill the specific technical training needs of individuals and organizations. Through coursework, a student will master a skill and learn a subject without enrolling in college credit courses. Courses are publicized and offered throughout the year. Classes are offered during the day and evening, weekdays and weekends, and vary in length.

Certificates of Completion and Continuing Education Units (CEU) may be awarded to those students who satisfactorily complete the course. One (CEU) is ten (10) contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction, and qualified instruction. Tuition and fees are determined for each course and publicized in the course schedules.

Continuing Education instructional staff hold appropriate education credentials and technical experience in the subject areas taught. Blinn College seeks out individuals who are recognized as leaders in their area of expertise to assist with course development and to provide instruction.

Some classes have prerequisites that the student must meet before enrolling. Course schedules and information are available at the Workforce Education Office, Bryan Workforce Campus, 301 Post Office Street in Bryan (979-209-7205), the Hodde Technical Education Center in Brenham (979-830-4443), the Schulenburg campus (979-743-5237) and at the Sealy campus (979-627-7997); and on the [Blinn College Workforce Education website](#).

Refund Policy for Workforce Education

Refunds take a minimum of six (6) weeks to process. Students will not receive a refund immediately when enrollment is withdrawn. To receive a full tuition refund, the student must notify the division of workforce education twenty-four (24) business hours before the course start date. Any costs incurred by the college for unreturned textbooks and supplies will be subtracted from the refund amount.

Refunds for withdrawals on or after the course date will be prorated as follows:

	Courses of two (2) weeks or fewer classes or meetings:	
Prior to the first class session		100%
After the first class session		NONE
	Courses of less than eight (8) weeks or meetings:	
Prior to the first class session		100%
Prior to the second class session		80%
After the second class session		NONE
	Courses over eight (8) weeks or meetings:	
Prior to the first class session		100%
Prior to the second class session		80%
Prior to the third class session		50%
After the fourth class session		NONE

Course Cancellation

In the event a course is cancelled by Workforce Education, a full refund will be given to the student. Students will be notified of course cancellation three (3) business days before the start date.

Registration and Payment

Students may register in person at any workforce education location, over the phone, or via mail. Payment is not accepted over the phone, but may be completed online after phone registration. Registration and payment may be mailed. Payment is required at the time of registration. If a student registers, but does not pay, enrollment will be dropped that evening.

Online Registration

Online registration is available through Workforce Education. Payment is required at the time of registration or the student will be dropped from the course that evening. If the student is utilizing financial aid, tuition assistance or another type of third party assistance (i.e. DARS, Workforce Solutions, GI Bill) the student will need to register in person at a Blinn campus location. If the student has registered online and needs to withdraw from a course before the start date, the student needs to call or go into the local campus for assistance.

Financial Assistance

Promissory notes are available when registering for a class at least three (3) weeks before the start date. Half of the tuition payment is due at registration to hold a spot in that course. The second, and final, payment is due seven (7) business days before the course start date. If the second payment is not made by the due date, the student will be dropped and a refund will be processed for the initial tuition payment. Refunds take a minimum of six (6) weeks to process.

A variety of solutions are available for individuals seeking new or advanced employment, through grants funded under Welfare-to-Work (WTW), Temporary Assistance to Needy Families (TANF), and Workforce Investment Act (WIA) programs. The Workforce Development team is composed of dedicated trainers and facilitators who personalize each program to meet the needs of each participant. Currently, Workforce Development projects are operating in coordination with the Brazos Valley Workforce Development Board, the Rural Capitol Workforce Board, and the Gulf Coast Workforce Board to provide participants with the best possible services.

Customized Training for Business and Industry

Most of Blinn College's offerings can be customized to meet a particular group or employer. Additional, more advanced and specialized course offerings are available for incumbent employees of business and industry. Coursework is available to advance the skills of employees, create a baseline of common skills, and to provide continuing education units for licensure. Courses can be conducted on campus, at the employer's site, or at another offsite location. Certificates of Completion and CEU's are awarded to those individuals who successfully complete a course. **For more information call (979) 209-7205.**

Workforce Education Certificates and Non-Credit Courses

Program	Course Name	Prefix & Number	Contact Hours
Certified Nurse Aide (C.N.A.)	Nurse Aide for Health Care	NURA 1001	80
	Clinical - Nursing Assistant/Aide and Patient Care Assistant/Aide	NURA 1060	40
	Certificate in Certified Nurse Aide	TOTAL	120
Certified Medication Aide	Medication Administration for the Nurse Aide/Home Health Aide	NURA 1013	140
Medical Office Technician	Introduction to General Office Skills	POFT 1022	16
	Basic Medical Assistant Technology	MDCA 1000	32
	Advanced Medical Assistant Technology	MDCA 2031	32
	CPR for Healthcare Providers	EMSP 1019	8
	Certificate in Medical Office Technician	TOTAL	88
Pharmacy Technician	Local Needs in Pharmacy Technology	PHRA 2071	160
	Special Topics in Pharmacy Technician/Assistant	PHRA 1091	40
	Certificate in Pharmacy Technology	TOTAL	200
Phlebotomy Technician	Phlebotomy	PLAB 1023	48
	Clinical - Phlebotomy/Phlebotomist	PLAB 1060	132
	Certificate in Phlebotomy	TOTAL	180
Certified Medication Aide Refresher	Professional Development: Medication Aide	NURA 1041	8
Certified Nurse Aide Refresher (C.N.A.)	Nurse Aide Skills	NURA 2005	8
Machining	Basic Safety and Health	OSHT 1000	12
	Industrial Mathematics	TECM 1001	48
	Blueprint Reading and Sketching	DFTG 1025	48
	Statistical Process Control for Machinist	MCHN 1030	32
	Basic Machine Shop I	MCHN 1038	112
	Certificate in Machining Fundamentals	TOTAL	252
CNC Machining	Fundamentals of Computer Numerical Controlled (CNC) Machine Controls	MCHN 2003	84
Fundamentals of Welding	Introduction to Metallurgy	WLDG 1037	60
	Introduction to Metallurgy	WLDG 1037	60
	Certificate in Welding Fundamentals: SMAW	TOTAL	120
	Fundamentals of Gas Metal Arc Welding (GMAW)	WLDG 1002	60
	Fundamentals of Gas Metal Arc Welding (GMAW)	WLDG 1002	60
	Certificate in Welding Fundamentals: GMAW	TOTAL	120
	Fundamentals of Gas Tungsten Arc Welding (GTAW)	WLDG 1006	60
	Fundamentals of Gas Tungsten Arc Welding (GTAW)	WLDG 1006	40
	Certificate in Welding Fundamentals: GTAW	TOTAL	100
Certificate in Welding Technology	TOTAL	340	
Introduction To Pipe Welding	Pipe Welding	WLDG 1041	36
HVAC Contractors License Renewal	Heating, Air Conditioning, and Refrigeration Technologies/Technicians Refresher	HART 1043	8
HVAC Technician	Air Conditioning I	HART 1038	240
Electrician License Renewal	Professional Development: Electrical Licensing Regulations and National Electrical Code Review	ELPT 2000	4
Electrician Technician	Fundamentals of Electricity I	ELPT 1019	240
Master Electrician Exam Review	Master Electrician Exam Review I	ELPT 1040	48
Commercial Truck Driving	CDL Licensure		200

Verify non-credit course offerings with the Workforce Education Division.