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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  
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  
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  
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  
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  
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  
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. **Note:** This course is scheduled for deletion from the ACGM in Spring 2016.

+1131. (AGRI) The Agricultural Industry  
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  
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
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
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
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.

+1327. (AGRI) Poultry Science
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. Note: This course is scheduled for deletion from the ACGM in Spring 2016.

+1329. (AGRI) Principles of Food Science
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
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
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
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
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. Note: This course is scheduled for deletion from the ACGM in Spring 2016.

+2313. (AGRI) Plant Protection
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. Note: This course is scheduled for deletion from the ACGM in Spring 2016.

+2317. (AGRI) Introduction to Agricultural Economics
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
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
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
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.

+2302. (ANTH) Introduction to Archeology *
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 *
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 *
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
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
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.

(ARCH) ARCHITECTURE

+1301. (ARCH) Architectural History I *
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.

+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; or A.5 Ordering Systems. Prerequisites: 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.

+1403. (ARCH) Architectural Design I CIP 04.0201

3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.

Introduction to architectural concepts. The visual characteristics of two- and three-dimensional forms and spaces. This course will introduce students to the principles and elements of design within the context of the built environment. Students will be expected to complete 2-dimensional studio projects that develop their practical knowledge of the design process, design development, visual communication of designs (including formal presentation boards and freehand sketching), and sample selections. The course will also introduce spatial organizing concepts, behavioral and environmental psychology, color theory and design theory and composition.

+1404. (ARCH) Architectural Design II CIP 04.0201

3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.

Introduction to architectural concepts. The visual characteristics of two- and three-dimensional forms and spaces. This course extends student application of design principles and elements by covering the development of 3-D graphic communication techniques in creating preliminary and final presentations to convey design concepts and solutions using perspective drawings, axonometric, presentation boards, 3-D models, freehand sketching and rendered drawings using pen and ink and color media. Prerequisites: ARCH 1403.

+1407. (ARCH) Architectural Graphics I CIP 15.1303

3 lecture hours and 3 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. Note: This course is scheduled for deletion from the ACGM in the Fall 2017.

+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.

* Texas Higher Education Coordinating Board Lower Division Academic Course Guide Manual (ACGM)
# Texas Higher Education Coordinating Board Workforce Education Course Number (WECM)
* Meets State Core Curriculum Requirements
#1302. (ARTC) Digital Imaging I
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
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
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
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.

#2313. (ARTC) Digital Publishing II
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
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.

#2389. (ARTC) Internship – Commercial and Advertising Art
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.

+1301. (ARTS) Art Appreciation *
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) *
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) *
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)
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)  
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  
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  
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  
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  
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  
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  
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  
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  
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  
2 lecture hours and 4 lab hours per week; 96 total contact hours. Credit: 3 semester hours.  
An introduction to ceramics processes through the study of basic materials and techniques. Includes hand building, bisque, glazing and firing procedures, as well as the use of the potter’s wheel.

2347. (ARTS) Ceramics II  
2 lecture hours and 4 lab hours per week; 96 total contact hours. Credit: 3 semester hours.  
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  
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 potential of the computer hardware and software medium for their visual, conceptual, and practical uses in the visual arts.
+2349. (ARTS) Digital Art II  
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  
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  
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  
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  
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  
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.

#1351. (ARTV) Digital Video  
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  
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  
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  
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.

(BIOL) BIOLOGY

+1108. (BIOL) Biology for Non-Science Majors Laboratory I  
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.
+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.

+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.

+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.

* Texas Higher Education Coordinating Board Lower Division Academic Course Guide Manual (ACGM)  
# Texas Higher Education Coordinating Board Workforce Education Course Number (WECM)  
* Meets State Core Curriculum Requirements
+2289. (BIOL) Academic Cooperative
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 a grade of "A" while taking the second 4 hours of college biology concurrently.

+2306. (BIOL) Environmental Biology *
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
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 *
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 *
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 or departmental approval.

+2404. (BIOL) Anatomy and Physiology *
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
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, BIOL 1407, BIOL 1411, or BIOL 1413.
+2420. (BIOL) Microbiology for Non-Science Majors *  
  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.

+2421. (BIOL) Microbiology for Science Majors  
  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.

#1191. (BITC) Special Topics in Biological Technology/Technician  
  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  
  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.

#1303. (BITC) Principles of Biochemistry  
  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, biodiagnostics, fermentation, and bio-manufacturing. **Prerequisites:** CHEM 1411 and BIOL 1406.

#1411. (BITC) Introduction to Biotechnology  
  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  
  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.

#2377. (BITC) Local Needs Course: Product Development to Commercialization  
  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 1472 (formerly BITC 2471).

#2386. (BITC) Internship – Biology Technician/Biotechnology Laboratory Technician  
  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 1472 (formerly BITC 2471), BITC 2377, and BIOL 2420.
#2411. (BITC) Biotechnology Laboratory Instrumentation
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.

#2431. (BITC) Cell Culture Techniques
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 1472 (formerly BITC 2471).

#2475. (BITC) Local Needs Course: Upstream and Downstream Manufacturing of Biologics
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 1472 (formerly BITC 2471), BITC 2377, and BITC 2431 or can be co-enrolled in BITC 2431.

+0101. (BLIN) First Year Seminar
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.

(BLIN) BLINN

#1327. (BMGT) Principles of Management
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
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
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
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.

(BUS4) BUSINESS ADMINISTRATION AND MANAGEMENT

#1313. (BUSA) Investments
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.
#2309. (BUSG) Small Business Management / Entrepreneurship
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
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
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
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
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
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. Dual Credit course.

#1311. (CDEC) Educating Young Children
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. Dual Credit course.

#1313. (CDEC) Curriculum Resources for Early Childhood Programs
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. Certificate and AAS degree only. This course transfers only to four-year institutions with whom Blinn College has specific articulation agreements.
#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. 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. Certificate and AAS degree only. This course transfers only to four-year institutions with whom Blinn College has specific articulation agreements.

#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. Certificate and AAS degree only. This course transfers only to four-year institutions with whom Blinn College has specific articulation agreements.

#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. Certificate and AAS degree only. This course transfers only to four-year institutions with whom Blinn College has specific articulation agreements.

#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. 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. Certificate and AAS degree only. This course transfers only to four-year institutions with whom Blinn College has specific articulation agreements.

#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. AAS degree only. This course transfers only to four-year institutions with whom Blinn College has specific articulation agreements.

#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. AAS degree only. This course transfers only to four-year institutions with whom Blinn College has specific articulation agreements.

#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. AAS degree only. This course transfers only to four-year institutions with whom Blinn College has specific articulation agreements. **Prerequisites:** Appropriate scores on the TSIA or completion of MATH 0308/0309 with a grade of “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. This course transfers only to four-year institutions with whom Blinn College has specific articulation agreements. AAS degree only.

#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. Certificate only. 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. Certificate only. 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. Certificate only. 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. AAS degree only. This course transfers only to four-year institutions with whom Blinn College has specific articulation agreements.

#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. Certificate only. 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. AAS degree only. This course is the capstone course for the Child Development AAS degree. Students should enroll in this course once a majority of child development coursework has been completed for this degree. This course transfers only to four-year institutions with whom Blinn College has specific articulation agreements. Prerequisites: A student must be college ready in math according to TSI college-ready standards.
+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 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.

+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, 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 a grade of "A" while taking the second 4 hours of chemistry concurrently.

+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.
+2425. (CHEM) Organic Chemistry II
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 or 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.

(CJLE) CRIMINAL JUSTICE/LAW ENFORCEMENT

#1506. (CJLE) Basic Peace Officer I
3 lecture hours and 7 lab hours per week; 160 total contact hours. Credit: 5 semester hours.
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. Basic preparation for a new police officer. Should be taken in conjunction with Basic Peace Officer II, III, and IV will satisfy the TCOLE-approved Basic Peace Officer Training Academy. This course may be offered only by institutions Licensed as a Police Academy by the Texas Commission on Law Enforcement Officer Standards and Education (TCOLE). All students must complete academy application process. Admission to Blinn College does not guarantee admission to the police academy. Prerequisites: Apply to Police Academy. Co-enrolled: CJLE 1512, CJLE 1518, and CJLE 1524.

#1512. (CJLE) Basic Peace Officer II
2 lecture hours and 9 lab hours per week; 176 total contact hours. Credit: 5 semester hours.
Basic preparation for a new police 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. All students must complete academy application process. Admission to Blinn College does not guarantee admission to the police academy. Prerequisites: Apply to Police Academy. Co-enrolled: CJLE 1506, CJLE 1518, and CJLE 1524.

#1518. (CJLE) Basic Peace Officer III
2 lecture hours and 9 lab hours per week; 176 total contact hours. Credit: 5 semester hours.
Basic preparation for a new police 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. All students must complete academy application process. Admission to Blinn College does not guarantee admission to the police academy. Prerequisites: Apply to Police Academy. Co-enrolled: CJLE 1506, CJLE 1512, and CJLE 1524.

#1524. (CJLE) Basic Peace Officer IV
2 lecture hours and 9 lab hours per week; 176 total contact hours. Credit: 5 semester hours.
Basic preparation for a new police 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 Alchol 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. All students must complete academy application process. Admission to Blinn College does not guarantee admission to the police academy. Prerequisites: Apply to Police Academy. Co-enrolled: CJLE 1506, CJLE 1512, and CJLE 1518.

(CJSA) CRIMINAL JUSTICE/SAFETY STUDIES

#1312. (CJSA) Crime in America
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.

* Texas Higher Education Coordinating Board Lower Division Academic Course Guide Manual (ACGM)
# Texas Higher Education Coordinating Board Workforce Education Course Number (WECM)
* Meets State Core Curriculum Requirements
#1322. (CJSA) Introduction to Criminal Justice  
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  
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  
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 permission of the Criminal Justice Program Coordinator.

#2388. (CJSA) Internship – Criminal Justice/Safety Studies  
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  
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  
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 I  
3 lecture hours and 3 lab hours per week; 96 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 1320 and BCIS 1420.

+1430. (COSC) Computer Programming  
3 lecture hours and 3 lab hours per week; 96 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  
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.  
Introduces the fundamental concepts of structured programming. 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  
3 lecture hours and 3 lab hours per week; 96 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  
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  
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.  
Further applications of programming techniques, introducing the fundamentals concepts of data structures and algorithms. Topics include recursion, fundamentals 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  
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  
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  
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  
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  
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  
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  
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  
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 CJSJ 1322.

+2323. (CRIJ) Legal Aspects of Law Enforcement  
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  
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  
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  
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/HYGIENTIST

#1161. (DHYG) Clinical - Dental Hygiene/Hygienist  
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  
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  
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 (formerly DHYG 2253) and DHYG 2363. Note: Starting with Spring 2017, this course will replace DHYG 1315 for the Fall 2015 cohort and beyond.

#1219. (DHYG) Dental Materials  
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. Note: Starting with Spring 2016, this course will replace DHYG 1319 for the Fall 2015 cohort and beyond.

#1235. (DHYG) Pharmacology for the Dental Hygienist  
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 (formerly DHYG 1319), DHYG 1339, and DHYG 2201.
#1260. (DHYG) Clinical - Dental Hygiene/Hygienist
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 (formerly DHYG 1319), 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 (formerly DHYG 1404), 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. Note: Starting with Fall 2015, this course will replace DHYG 1404 for the Fall 2015 cohort and beyond.

#1311. (DHYG) Periodontology
CIP 51.0602
3 lecture hours per week; 48 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. Note: Starting with Fall 2016, DHYG 1311 contact hours will be 3 lecture hours and 1 lab hours per week for 64 total contact hours.

#1315. (DHYG) Community Dentistry
CIP 51.0602
2 lecture hours and 4 lab hours per week; 96 total contact hours. Credit: 3 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 2253, DHYG 2363. Note: The last semester DHYG 1315 will be taught is Spring 2016. Starting with Spring 2017, DHYG 1215 will replace it for the Fall 2015 cohort and beyond.

#1319. (DHYG) Dental Materials
CIP 51.0602
2 lecture hours and 4 lab hours per week; 96 total contact hours. Credit: 3 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 1206, DHYG 1235, DHYG 1339, and DHYG 2201. Note: The last semester DHYG 1319 will be taught is Spring 2015. Starting with Spring 2016, DHYG 1219 will replace it for the Fall 2015 cohort and beyond.

#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 (formerly DHYG 1404), 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 1206, DHYG 1235, DHYG 1219 (formerly DHYG 1319), and DHYG 2201.

#1404. (DHYG) Dental Radiology
CIP 51.0602
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 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. Note: The last semester DHYG 1404 will be taught is Fall 2014. Starting with Fall 2015, DHYG 1304 will replace it for the Fall 2015 cohort and beyond.
#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 (formerly DHYG 1404), 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 (formerly DHYG 1315) and DHYG 2363. Note: Starting with Spring 2017, this course will replace DHYG 2253 for the Fall 2015 cohort and beyond.

#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 1207, DHYG 2262, and DHYG 1311.

#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.

#2253. (DHYG) Dental Hygiene Practice  
CIP 51.0602  
2 lecture hours per week; 32 total contact hours. Credit: 2 semester hours.  
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 1315 and DHYG 2153 (formerly DHYG 2253). Note: The last semester DHYG 2253 will be taught is Spring 2016. Starting with Spring 2017, DHYG 2153 will replace it for the Fall 2015 cohort and beyond.

#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  
16 clinical hours per week; 256 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 (formerly DHYG 1315) and DHYG 2153 (formerly DHYG 2253). Note: Starting with Spring 2017, DHYG 2363 contact hours will be 18 clinical hours per week for 288 total contact hours.

* Texas Higher Education Coordinating Board Lower Division Academic Course Guide Manual (ACGM)  
# Texas Higher Education Coordinating Board Workforce Education Course Number (WECM)  
* Meets State Core Curriculum Requirements
**+0238 (DIRW) Integrated Reading and Writing**

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 a grade of “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**

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 a grade of “C” or better. **Note:** International students should see paired co-enrolled courses ESOL 0335 and ESOL 0324.

**+0326. (DIRW) Developmental Integrated Reading and Writing**

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 a grade of “C” or better, or completion of both ENGL 0320 and READ 0305 with grades of “C” or better. **Note:** International students should see paired co-enrolled courses ESOL 0336 and ESOL 0325.

**+0327. (DIRW) Developmental Integrated Reading and Writing (Paired IRW Course)**

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 0326 with a grade of “C” or better, or completion of READ 0305 and ENGL 0320 with grades of “C” or better, or completion of ESOL 0335 and ESOL 0324 with grades of “C” or better. **Co-enrolled:** Concurrent enrollment in a designated paired credit course.

**+1120. (DRAM) Theater Practicum I**  
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**  
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  
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. **Note:** This course is scheduled for deletion from the ACGM in Spring 2017.

+1162. (DRAM) Musical Theater II  
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. **Note:** This course is scheduled for deletion from the ACGM in Spring 2017.

+1310. (DRAM) Introduction to Theater *  
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  
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  
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  
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  
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  
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  
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  
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  
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.

* Texas Higher Education Coordinating Board Lower Division Academic Course Guide Manual (ACGM)  
# Texas Higher Education Coordinating Board Workforce Education Course Number (WECM)  
* Meets State Core Curriculum Requirements
+2361. (DRAM) History of the Theater I *  
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 *  
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 *  
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  
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 *  
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 *  
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  
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 
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.

* Texas Higher Education Coordinating Board Lower Division Academic Course Guide Manual (ACGM)  
# Texas Higher Education Coordinating Board Workforce Education Course Number (WECM)  
* Meets State Core Curriculum Requirements
+1301. (EDUC) Introduction to the Teaching Profession  
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  
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.

(EMSP) EMERGENCY MEDICAL SERVICES PROGRAMS

#1260. (EMSP) Clinical – Emergency Medical Technology/Technician  
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. A method of instruction providing detailed education, training and work-based experience, and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation, and placement are the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Students participate in the following areas: 32 hours in the Emergency Department, 16 hours in Labor & Delivery, and 60 hours EMS on the ambulance. 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  
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  
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. At the completion of this module, the student will understand the roles and responsibilities of a paramedic within the EMS system; apply the basic concepts of development, pathophysiology, and pharmacology to assessment and management of emergency patients; be able to properly administer medications; communicate effectively with patients; and understand the medical/legal and ethical issues relating to EMS practice, as well as the issues impacting the well-being of the paramedic. Prerequisites: Admissions into the Paramedic Technology Certificate cohort. Co-enrolled: EMSP 1355, EMSP 1356, EMSP 2306 (formerly EMSP 2349), and EMSP 2260.

#1355. (EMSP) Trauma Management  
2 lecture hours and 2 lab hours per week; 64 total contact hours. Credit: 3 semester hours. 
A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of patients with traumatic injuries. At the completion of this module, the student will be able to integrate the pathophysiological principles and assessment findings to formulate a field impression, and implement the treatment plan for the trauma patient. Prerequisites: Admissions into the Paramedic Technology Certificate cohort. Co-enrolled: EMSP 1338, EMSP 1356, EMSP 2306 (formerly EMSP 2348), and EMSP 2260.

#1356. (EMSP) Patient Assessment and Airway Management  
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. At the completion of this module, the student will be able to take a proper history and perform a comprehensive physical exam on any patient; develop a patient care plan; communicate with others; and establish and/or maintain a patient airway, oxygenate, and ventilate a patient. Prerequisites: Admissions into the Paramedic Technology Certificate cohort. Co-enrolled: EMSP 1338, EMSP 1355, EMSP 2306 (formerly EMSP 2348), 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-Basic 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-Basic 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-Basic. **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 capstone experience covering comprehensive, assessment based patient care management. Includes specific care when dealing with pediatric, adult, geriatric, and special-needs patients. At the completion of this module, the student will be able to integrate pathophysiological principles and assessment findings to formulate a field impression, and implement a treatment plan for patients with common complaints. **Prerequisites:** Completion of first and second semester EMSP courses, all with a B or higher. **Co-enrolled:** EMSP 2362 and EMSP 2330.

#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. A method of instruction providing detailed education, training and work-based experience, and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation, and placement are the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Students 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 (formerly EMSP 2348), 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. A method of instruction providing detailed education, training, work-based experience, and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation, and placement are the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. 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 a 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 2305 (formerly EMSP 2338).

#2300. (EMSP) Methods of Teaching-Emergency Medical Service  
CIP 51.0904  
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.  
Instruction in teaching methodology for instructors of emergency medical services. The student will display a working knowledge of principles and resources for teaching adults; demonstrate the ability to prepare and present lecture/demonstrations on emergency/medical topics; demonstrate the ability to prepare and evaluate student performance in skills and lecture sessions; and exhibit attitudes and behavior consistent with the ethics and professionalism expected of the emergency medical service instructor. **Prerequisites:** Current EMT-Basic certification. A student must be college ready according to TSI college-ready standards.

#2305. (EMSP) EMS Operations  
CIP 51.0904  
2 lecture hours and 2 lab hours per week; 64 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. At the completion of this unit, the student will be able to safely manage medical incidents, rescue situations, hazardous materials, and crime scenes. **Prerequisites:** Completion of first semester EMSP courses, all with a B or higher. **Co-enrolled:** EMSP 2444, EMSP 2434, and EMSP 2261. **Note:** Starting with Spring 2016, this course will replace EMSP 2338 for the Fall 2015 cohort and beyond.
#2306. (EMSP) Emergency Pharmacology

3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.

Utilization of medications in treating emergency situations. A comprehensive course covering all aspects of the utilization of medications in treating emergency situations. Course is designed to complement Cardiology, Special Populations, and Medical Emergency courses. The student will display a command of general pharmacological terminology, general drug mechanisms, administration routes and administration procedures, and drug dose calculations. Students will demonstrate understanding of the pharmacodynamics, pharmacokinetics, indications, contraindications, possible side effects, and common drug interactions of a variety of medications used in out-of-hospital medical care. **Prerequisites:** Admissions into the Paramedic Technology Certificate cohort. **Co-enrolled:** EMSP 1338, EMSP 1355, EMSP 2260, and EMSP 1356. **Note:** Starting with Fall 2015, this course will replace EMSP 2348 for the Fall 2015 cohort and beyond.

#2330. (EMSP) Special Populations

3 lecture hours and 1 lab hour 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, 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. At the completion of this module, the student will be able to integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for neonatal, pediatric and geriatric patients; diverse patients; and chronically ill patients. **Prerequisites:** Completion of first and second semester EMSP courses, all with a B or higher. **Co-enrolled:** EMSP 2362 and EMSP 2143.

#2338. (EMSP) EMS Operations

2 lecture hours and 2 lab hours per week; 64 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. At the completion of this unit, the student will be able to safely manage medical incidents, rescue situations, hazardous materials, and crime scenes. **Prerequisites:** Completion of first semester EMSP courses, all with a B or higher. **Co-enrolled:** EMSP 2444, EMSP 2434, and EMSP 2261. **Note:** The last semester EMSP 2338 will be taught is Spring 2015. Starting with Spring 2016, EMSP 2305 will replace it for the Fall 2015 cohort and beyond.

#2348. (EMSP) Emergency Pharmacology

3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.

Utilization of medications in treating emergency situations. A comprehensive course covering all aspects of the utilization of medications in treating emergency situations. Course is designed to complement Cardiology, Special Populations, and Medical Emergency courses. The student will display a command of general pharmacological terminology, general drug mechanisms, administration routes and administration procedures, and drug dose calculations. Students will demonstrate understanding of the pharmacodynamics, pharmacokinetics, indications, contraindications, possible side effects, and common drug interactions of a variety of medications used in out-of-hospital medical care. **Prerequisites:** Admissions into the Paramedic Technology Certificate cohort. **Co-enrolled:** EMSP 1338, EMSP 1355, EMSP 2260, and EMSP 1356. **Note:** The last semester EMSP 2348 will be taught is Fall 2014. Starting with Fall 2015, EMSP 2305 will replace it for the Fall 2015 cohort and beyond.

#2362. (EMSP) Clinical – Emergency Medical Technology/Technician

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. A capstone course of the EMSP program. A method of instruction providing detailed education, training, work-based experience, and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation, and placement are the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. 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 a B or higher. Students must meet the EMS Program and the Division of Health Sciences requirements for clinical rotations. **Co-enrolled:** EMSP 2362 and EMSP 2330.

#2434. (EMSP) Medical Emergencies

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. At the completion of this module, the student will be able to integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for the medical patient. **Prerequisites:** Completion of first semester EMSP courses, all with a B or higher. **Co-enrolled:** EMSP 2444, EMSP 2305 (formerly EMSP 2338), and EMSP 2261.
#2444. (EMSP) Cardiology  
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. At the completion of this module, the student will be able to integrate pathophysiological principles and assessment findings to formulate a field impression, and implement a treatment plan for the cardiac patient.  
**Prerequisites:** Completion of first semester EMSP courses, all with a B or higher.  
**Co-enrolled:** EMSP 2434, EMSP 2305 (formerly EMSP 2338), and EMSP 2261.  

+0320. (ENGL) Fundamentals of Grammar and Writing  
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 *  
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 *  
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.

+2307. (ENGL) Creative Writing I  
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  
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 *  
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.
+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.

+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 1314 or MATH 1414 or an appropriate score on an approved placement test.

+1304. (ENGR) Engineering Graphics I CIP 15.1301
2 lecture hours and 4 lab hours per week; 96 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.

+1305. (ENGR) Engineering Graphics II CIP 15.1301
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
This course concentrates on units and unit conversions, vector decomposition, vector products, statistics, tables and graphs, graphical analysis, root finding and optimization, Newton’s laws, rate processes, accounting principles and their applications engineering ethics and professionalism, and development of skills in teamwork. Prerequisites: MATH 1316.
+2301. (ENGR) Engineering Mechanics – Statics  
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, and MATH 2414 or can be co-enrolled.

+2302. (ENGR) Engineering Mechanics – Dynamics  
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.

+2406. (ENGR) Introduction to Digital Systems  
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, or an appropriate score on an approved placement test.

(ENGT) ENGINEERING TECHNOLOGY

+1407. (ENGT) Digital Fundamentals  
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  
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 grade of “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  
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 a grade of "C" or better. Corequisites: 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.  
Prerequisites:  Non-native English speaker and appropriate scores on the TSIA, or completion of ENGL 0320 and READ 0305 both with a grade of “C” or better, or completion of ESOL 0335 and ESOL 0324 both with a grade of “C” or better, or completion of DIRW 0325 with a grade of “C” or better.

+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. ESOL 0335 is equivalent to ENGL 0320.  
Prerequisites:  Non-native English speaker and appropriate scores on the TSIA.  
Corequisites:  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-B certification and be accepted into the Fire Academy.  
Co-enrolled: FIRS 1301, FIRS 1313, FIRS 1319, FIRS 1329, FIRS 1407, FIRS 1323 (formerly FIRS 1423), and FIRS 1333 (formerly FIRS 1433).

#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-B certification and be accepted into the Fire Academy.  
Co-enrolled: FIRS 1103, FIRS 1313, FIRS 1319, FIRS 1329, FIRS 1407, FIRS 1323 (formerly FIRS 1423), and FIRS 1333 (formerly FIRS 1433).

#1313. (FIRS) Firefighter Certification III  
CIP 43.0203

3 lecture hours and 2 lab 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-B certification and be accepted into the Fire Academy.  
Co-enrolled: FIRS 1103, FIRS 1301, FIRS 1319, FIRS 1329, FIRS 1407, FIRS 1323 (formerly FIRS 1423), and FIRS 1333 (formerly FIRS 1433).

#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-B certification and be accepted into the Fire Academy.  
Co-enrolled: FIRS 1103, FIRS 1301, FIRS 1313, FIRS 1329, FIRS 1407, FIRS 1323 (formerly FIRS 1423), and FIRS 1333 (formerly FIRS 1433).
#1323. (FIRS) Firefighter Certification V
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-B certification and be accepted into the Fire Academy. Co-enrolled: FIRS 1103, FIRS 1313, FIRS 1319, FIRS 1329, FIRS 1407, and FIRS 1333 (formerly FIRS 1433). Note: Starting with Fall 2015, this course will be replacing FIRS 1423.

#1329. (FIRS) Firefighter Certification VI
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-B certification and be accepted into the Fire Academy. Co-enrolled: FIRS 1103, FIRS 1313, FIRS 1319, FIRS 1407, FIRS 1323 (formerly FIRS 1423), and FIRS 1333 (formerly FIRS 1433).

#1333. (FIRS) Firefighter Certification VII
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-B certification and be accepted into the Fire Academy. Co-enrolled: FIRS 1103, FIRS 1313, FIRS 1319, FIRS 1329, FIRS 1407, and FIRS 1323 (formerly FIRS 1423). Note: Starting with Fall 2015, this course will be replacing FIRS 1433.

#1407. (FIRS) Firefighter Certification II
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, II, 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-B certification and be accepted into the Fire Academy. Co-enrolled: FIRS 1103, FIRS 1313, FIRS 1319, FIRS 1329, FIRS 1323 (formerly FIRS 1423), and FIRS 1333 (formerly FIRS 1433).

#1423. (FIRS) Firefighter Certification V
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, 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-B certification and be accepted into the Fire Academy. Co-enrolled: FIRS 1103, FIRS 1313, FIRS 1319, FIRS 1329, FIRS 1407, and FIRS 1433. Note: The last semester FIRS 1423 will be taught is Summer 2015. Starting with Fall 2015, FIRS 1323 will be replacing it.

#1433. (FIRS) Firefighter Certification VII
3 lecture hours and 3 lab hours per week; 96 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, II, 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-B certification and be accepted into the Fire Academy. Co-enrolled: FIRS 1103, FIRS 1313, FIRS 1319, FIRS 1329, FIRS 1407, and FIRS 1423. Note: The last semester FIRS 1433 will be taught is Summer 2015. Starting with Fall 2015, FIRS 1333 will be replacing it.

(FIRT) Fire Protection and Safety Technology/Technician

#1303. (FIRT) Fire and Arson Investigation I
3 lecture hours per week; 48 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. Note: Starting with Spring 2016, FIRT 1303 contact hours will be 2 lecture hours and 3 lab hours per week for 80 total contact hours.
#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  
3 lecture hours per week; 48 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. **Note:** Starting with Spring 2016, FIRT 1319 contact hours will be 2 lecture hours and 3 lab hours per week for 80 total contact hours.

#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  
3 lecture hours per week; 48 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  
3 lecture hours per week; 48 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. **Note:** Starting with Spring 2016, FIRT 2309 contact hours will be 2 lecture hours and 3 lab hours per week for 80 total contact hours.

(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
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
Introduction to the concepts which provide a foundation for continued study of geography. Includes the different elements of natural environment as related to human activities, modes of living, and map concepts. Essentials of physical geography: the Earth, its atmosphere (weather and climate), land forms and processes, soils, and biogeography (plant and animal life). 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 a grade of 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. Note: This course is scheduled for deletion from the ACGM in Spring 2016.

+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.

(GEOL) GEOLOGY

+1403. (GEOL) 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.

* Texas Higher Education Coordinating Board Lower Division Academic Course Guide Manual (ACGM)
# Texas Higher Education Coordinating Board Workforce Education Course Number (WECM)
* Meets State Core Curriculum Requirements
+1404. (GEOL) Historical Geology *  
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. (GEOL) Oceanography *  
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  
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 a grade of ‘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  
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  
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 and 1412 or departmental approval.

+2311. (GERM) Intermediate German I  
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  
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  
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 *  
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.

(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: Prior approval of program coordinator is required for enrollment.

(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.

(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  
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: HIST 1301 or HIST 1302 or departmental approval. A student must be college ready in reading according to TSI college-ready standards.

2312. (HIST) Western Civilization II  
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 globalization. Prerequisites: HIST 1301 or 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  
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. Note: This course is scheduled for deletion from the ACGM in Spring 2016.

2314. (HIST) History of England II  
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. Note: This course is scheduled for deletion from the ACGM in Spring 2016.

2321. (HIST) World Civilizations I  
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 or HIST 1302 or departmental approval.

2322. (HIST) World Civilizations II  
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 or HIST 1302 or departmental approval.

1301. (HITT) Health Data Content and Structure  
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 a grade of 70% or better to complete the course.

1302. (HITT) The Culture of Health Care  
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  
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 a grade of 70% or better to complete the course.
#1311. (HITT) Health Information Systems
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 a grade of 70% or better to complete the course.

#1312. (HITT) History of Health Information Technology in the U.S.
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
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 a grade of 70% or better to complete the course. Prerequisites: HITT 1305.

#1342. (HITT) Ambulatory Coding
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 a grade of 70% or better 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
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 a grade of 70% or better 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
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 a grade of 70% or better to complete the course. Prerequisites: HITT 1305.

#1353. (HITT) Legal and Ethical Aspects of Health Information
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 a grade of 70% or better to complete the course. Prerequisites: HITT 1301.

#1355. (HITT) Health Care Statistics
3 lecture and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.
Principles of health care statistics with emphasis in hospital statistics. Skill development in computation and calculation of health data. The student must achieve a grade of 70% or better to complete the course. Note: This course will no longer be taught after the Spring 2015 semester.

#1361. (HITT) Clinical - Health Information/Medical Records Technology/Technician
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 a grade of 70% or better to complete the course. Prerequisites: Approval of Program Director.

#2335. (HITT) Coding and Reimbursement Methodologies
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 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 a grade of 70% or better to complete the course. Prerequisites: HITT 1341 and HITT 1342. Note: The last semester HITT 2335 will be taught is Spring 2016. Starting with Fall 2014, HITT 2435 will be replacing it.

#2339. (HITT) Health Information Organization and Supervision
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 a grade of 70% or better to complete the course. Prerequisites: HITT 1301, HITT 1345, and HITT 1353.
#2340. (HITT) Advanced Medical Billing and Reimbursement  
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 a grade of 70% or better 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 2335.

#2343. (HITT) Quality Assessment and Performance Improvement  
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 a grade of 70% or better to complete the course. **Prerequisites:** HITT 1301, HITT 1345, and HITT 1353.

#2346. (HITT) Advanced Medical Coding  
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.

#2360. (HITT) Clinical - Health Information/Medical Records Technology/Technician  
16 external hours per week; 256 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 a grade of 70% or better to complete the course. **Prerequisites:** HITT 2335. **Note:** The last semester HITT 2360 will be taught is Spring 2016. Starting with Fall 2014, HITT 2460 will be replacing it.

#2435. (HITT) Coding and Reimbursement Methodologies  
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 a grade of 70% or better to complete the course. **Prerequisites:** HITT 1341 and HITT 1342. **Note:** Starting with Fall 2014, this course will be replacing HITT 2335.

#2460. (HITT) Clinical - Health Information/Medical Records Technology/Technician  
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 a grade of 70% or better to complete the course. **Prerequisites:** HITT 2435. **Note:** Starting with Fall 2014, this course will be replacing HITT 2360.

(HPRS) HEALTH SERVICES/ALLIED HEALTH/HEALTH SCIENCES

#1205. (HPRS) Essentials of Medical Law/Ethics for Health Professionals  
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.

#2301. (HPRS) Pathophysiology  
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 or BIOL 2404, and ADN Program approval.

#2321. (HPRS) Medical Law and Ethics for Health Professionals  
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.
#2301. (HRPO) Human Resources Management
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
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 fit 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.

#1305. (IBUS) Introduction to International Business and Trade
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.

#1316. (IMED) Web Design I
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
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
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.

#1325. (ITNW) Fundamentals of Networking Technologies
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.

#1453. (ITNW) Supporting Network Server Infrastructure
3 lecture hours and 2 lab hours per week; 80 total contact hours. Credit: 4 semester hours.
Skills development in installing, configuring, managing, and supporting a network infrastructure. Prerequisites: ITNW 1454 or departmental approval.
#1454. (ITNW) Implementing and Supporting Servers  
3 lecture hours and 2 lab hours per week; 80 total contact hours. Credit: 4 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  
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  
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 1453.

#2364. (ITNW) Practicum - Computer Systems Networking and Telecommunications  
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. A learning plan is developed by the college and the employer. This practicum may be paid or unpaid experience. Students must complete at least the minimum required on-site workplace hour requirements under appropriate supervision. In addition to fulfilling the external workplace hours, students must also complete the one hour per week instructional component. This practicum is a capstone course and a requirement for program completion and should be taken near the last of study. **Prerequisites:** Program Coordinator approval prior to enrollment.

**ITSC COMPUTER AND INFORMATION SCIENCES**

#1325. (ITSC) Personal Computer Hardware  
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.  
Current personal computer hardware including assembly, upgrading, setup, configuration and troubleshooting.

#1416. (ITSC) Linux Installation and Configuration  
3 lecture hours and 2 lab hours per week; 80 total contact hours. Credit: 4 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.

#2425. (ITSC) Advanced Linux  
3 lecture hours and 2 lab hours per week; 80 total contact hours. Credit: 4 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 1416.

**ITSE COMPUTER PROGRAMMING/PROGRAMMER**

#2402. (ITSE) Intermediate Web Programming  
3 lecture hours and 2 lab hours per week; 80 total contact hours. Credit: 4 semester hours.  
Techniques for Web development. Includes server-side and client-side scripting. **Prerequisites:** ITSE 2409 or departmental approval.

#2409. (ITSE) Database Programming  
3 lecture hours and 2 lab hours per week; 80 total contact hours. Credit: 4 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  
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 reports. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards. Recommended POFT 1329 or keyboarding proficiency of 30 net words per minute.
#1304. (ITSW) Introduction to Spreadsheets  
3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.  
Instruction in the concepts, procedures, and importance of electronic spreadsheets. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards.

#1307. (ITSW) Introduction to Database  
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  
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  
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  
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 a grade of “C” or better.

#1305. (LGLA) Legal Writing  
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  
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  
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  
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 a grade of “C” or better.

#1353. (LGLA) Wills, Trusts and Probate Administration  
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 a grade of “C” or better.

#1355. (LGLA) Family Law  
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 a grade of "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 a grade of "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 a grade of "C" or better.

#2310. (MATH) Introductory Algebra CIP 32.0104
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
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 or completion of READ 0304 with a grade of "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

+0112 (MATH) Intermediate Algebra NCBO Option CIP 32.0104
Individualized, modular curriculum; non-course based option (NCBO). 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. MATH 0112 is an individualized curriculum for students whose test scores demonstrates high proficiency but do not meet state requirements for placement into college level math coursework. This course will present an individualized and concentrated study of specific algebra skills and strategies needed by enrolled students. Emphasis is placed on learning and applying algebra skills and strategies essential to success in academic courses. 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 grade of “Pass” or “Fail” and must pass the course to be TSI college-ready in math. Prerequisites: Appropriate scores on the TSIA or departmental approval.

+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.

+0309. (MATH) Pre-Algebra CIP 32.0104
3 lecture hours and 2 lab hours per week; 80 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 a grade of “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. Prerequisites: Appropriate scores on the TSIA, or completion of MATH 0310 with a grade of "C" or better. Note: Students that start in MATH 0308, 0309, or 0310 must take MATH 0312 as part of the Developmental Sequence.

+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 a grade of “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, 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: MATH 1314, or MATH 1414, or MATH 1325, or MATH 2412, or higher MATH, 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 a grade of “C” or better, or an appropriate score on an approved placement test.

+1333. (MATH) Contemporary Mathematics II *  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 a grade of “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 MATH 0312 with a grade of “C” or better, or an appropriate score on an approved placement test.

+ Texas Higher Education Coordinating Board Lower Division Academic Course Guide Manual (ACGM)
# Texas Higher Education Coordinating Board Workforce Education Course Number (WECM)
* Meets State Core Curriculum Requirements
+1350. (MATH) Fundamentals of Mathematics I
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
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 *
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 MATH 0312 with a grade of “C” or better, or an appropriate score on an approved placement test.

+2313. (MATH) Calculus I
3 lecture hours per week; 48 total contact hours. Credit: 3 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. This course may not be used as a prerequisite for MATH 2414. **Prerequisites:** MATH 1316 and MATH 1414, or MATH 2412, or an appropriate score on an approved placement test, or departmental approval.

+2320. (MATH) Differential Equations
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 *
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 College Algebra or an appropriate score on an approved placement test, or departmental approval.

+2413. (MATH) Calculus I *
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
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 or integration; sequences and series; and, improper integrals. **Prerequisites:** MATH 2413 or departmental approval.
+2415. (MATH) Calculus III
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.

(MCHN) MACHINE TOOL TECHNOLOGY/MACHINIST

#1280. (MCHN) Cooperative Education – Machine Tool Technology/Machinist
1 lecture hour and 8 external hours per week; 144 total contact hours. Credit: 2 semester hours.
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience.

(MDCA) MEDICAL/CLINICAL ASSISTANT

#1302. (MDCA) Human Disease/Pathophysiology
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 a grade of 70% or better to complete the course. Prerequisites: A student must be college ready in reading by TSI college-ready standards; and HIT 1305 or be co-enrolled.

(MRKG) BUSINESS MARKETING AND MARKETING MANAGEMENT

#1311. (MRKG) Principles of Marketing
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 identifying 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
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
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
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, études, 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 études, 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, études, 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, études, solos, and etudes 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, études, 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  
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  
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  
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.

+2281-2282. (MUAP) Individual Instruction: Voice Study  
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

+1124-2124. (MUEN) Marching Band  
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.

+1125-2125. (MUEN) Wind Symphony/Symphonic Band  
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 and 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.

+1131-1132 and 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.

+1133-1136 and 2133-2136. (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.

+1134-1135 and 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.

+1137 and 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.

+1138-1139 and 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.

+1141-1142 and 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.

+1152-1153 and 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.

+1154-1155 and 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.
+1157. (MUSI) Opera Workshop I  
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.

+1158. (MUSI) Opera Workshop II  
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.  
Note: This course is scheduled for deletion from the ACGM in Spring 2017.

+1159. (MUSI) Musical Theater I  
3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.  
Study and performance of works from the musical theatre repertoire. Cross-listed with DRAM 1161, 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.  
Note: This course is scheduled for deletion from the ACGM in Spring 2017.

+1160. (MUSI) Italian Diction  
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: MUIE 1152, MUIE 1153, MUIE 1154, MUIE 1155, MUIE 2152, MUIE 2153, MUIE 2154, or MUIE 2155.

+1163. (MUSI) Jazz Improvisation I  
2 lab hours per week; 32 total contact hours. Credit: 1 semester hour.  
Materials and practices for improvisation or extemporaneous performance in the jazz idiom. The art of jazz improvisation. A course in the basic materials and skills used in improvising jazz solos. The course objectives are provision of basic skills for improvisation and opportunity to refine those skills in regular practice sessions. This course will add refinement to improvised solos within the jazz ensemble within our current curriculum.  
Prerequisites: Knowledge of all major scales and departmental approval.  
Note: This course is scheduled for deletion from the ACGM in Spring 2017.

+1164. (MUSI) Jazz Improvisation II  
2 lab hours per week; 32 total contact hours. Credit: 1 semester hour.  
Materials and practices for improvisation or extemporaneous performance in the jazz idiom. The art of jazz improvisation. A course in the basic materials and skills used in improvising jazz solos. The course objectives are provision of basic skills for improvisation and opportunity to refine those skills in regular practice sessions. This course will add refinement to improvised solos within the jazz ensemble within our current curriculum.  
Prerequisites: Knowledge of all major scales and departmental approval.  
Note: This course is scheduled for deletion from the ACGM in Spring 2017.

+1181. (MUSI) Piano Class I  
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  
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

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 *

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 *

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 *

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.

**+2159. (MUSI) Musical Theater II** * CIP 50.0903

3 lab hours per week; 48 total contact hours. Credit: 1 semester hour.
Study and performance of works from the musical theater repertoire. Cross-listed with DRAM 1162, this course is a continuation of MUSI 1159 and 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. Note: This course is scheduled for deletion from the ACGM in Spring 2017.

**+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 1212. 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 terton 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

#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. Technical Dual Credit course.

#1391. (NURA) Special Topics Nursing Assistant/Aide  
CIP 51.3902
2 lecture hours and 2 lab hours per week; 64 total contact hours. Credit: 3 semester hours.
A health-related lab-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts as a nurse aide. Direct supervision is provided by the lab instructor. Technical Dual Credit course.

(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. Bryan Collegiate 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.

+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.

* Texas Higher Education Coordinating Board Lower Division Academic Course Guide Manual (ACGM)
# Texas Higher Education Coordinating Board Workforce Education Course Number (WECM)
* Meets State Core Curriculum Requirements
+1128. (PHED) Physical Activities: Basketball  
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  
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  
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  
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  
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  
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  
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  
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  
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.

+1151. (PHED) Scuba Diving 1  
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 Open Water. 
Prerequisites: Must be able to swim 200 yards any stroke no time limit or snorkel 300 yards no time limit. Students must meet PADI Medical Requirements.

+1164. (PHED) Introduction to Physical Fitness and Wellness *  
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
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
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
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
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
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.

1346. (PHED) Drug Use and Abuse
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
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
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
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
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
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.

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.
#1301. (PHRA) Introduction to Pharmacy
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. The student must achieve a grade of 70% or better to complete the course. Technical Dual Credit course.

#1491. (PHRA) Special Topics in Pharmacy Technician/Assistant
3 lecture hours and 4 lab hours per week; 112 total contact hours. Credit: 4 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. The student must achieve a grade of 70% or better to complete the course. Technical Dual Credit course.

#1401. (PHYS) College Physics I *
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 *
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 *
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 *
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
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 a grade of “A” while taking the second 4 hours of physics concurrently.

#2425. (PHYS) University Physics I *
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  
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.

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

#2331. (POFI) Desktop Publishing  
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  
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:** ITS 1301.

(POFM) MEDICAL ADMINISTRATIVE/EXECUTIVE ASSISTANT

#1300. (POFM) Basic Medical Coding  
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  
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  
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  
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.  
Development of written and oral communication skills required to produce effective communication in a technological business environment. Topics include composition of business letters, memos, and reports. Emphasis on proofreading, grammar, spelling, and vocabulary. **Prerequisites:** A student must be college ready in reading according to TSI college-ready standards.

#1309. (POFT) Administrative Office Procedures I  
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  
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  
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  
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  
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 Communications II  
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  
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  
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 *  
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  
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 *  
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  
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  
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  
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  
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  
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.

(PTHA) PHYSICAL THERAPIST ASSISTANT

#1201. (PTHA) The Profession of Physical Therapy
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
15 clinical hours per week; 240 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. Note: Starting with Fall 2016, PTHA 1266 contact hours will be 16 clinical hours per week for 256 total contact hours.

#1321. (PTHA) Pathophysiology for the PTA
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
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 (formerly PTHA 1513).

#1413. (PTHA) Functional Anatomy
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. Note: Starting with Fall 2015, this course will replace PTHA 1513 for the Fall 2015 cohort and beyond.

#1431. (PTHA) Physical Agents
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.

#1513. (PTHA) Functional Anatomy
3 lecture hours and 6 lab hours per week; 144 total contact hours. Credit: 5 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. Note: The last semester PTHA 1513 will be taught is Fall 2014. Starting with Fall 2015, PTHA 1413 will replace it for the Fall 2015 cohort and beyond.

#2205. (PTHA) Neurology
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
2 lecture hours per week; 32 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. Note: Starting with Spring 2017, PTHA 2239 contact hours will be 1 lecture hour and 3 lab hours per week for 64 total contact hours.
#2266. (PTHA) Practicum – Physical Therapist Assistant
15 clinical hours per week; 240 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. Note: Starting with Spring 2017, PTHA 2266 contact hours will be 16 clinical hours per week for 256 total contact hours.

#2267. (PTHA) Practicum – Physical Therapist Assistant
15 clinical hours per week; 240 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. Note: Starting with Spring 2017, PTHA 2267 contact hours will be 16 clinical hours per week for 256 total contact hours.

#2301. (PTHA) Essentials of Data Collection
2 lecture hours and 2 lab hours per week; 64 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. Note: Starting with Summer 2016, PTHA 2301 contact hours will be 2 lecture hours and 4 lab hours per week for 96 total contact hours.

#2431. (PTHA) Management of Neurological Disorders
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
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
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
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
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

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

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

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

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

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

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 1313, and RADR 1311.

#1367. (RADR) Practicum - Radiologic Technology/Science - Radiographer

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

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
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
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
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
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 (formerly RADR 2431).

#2313. (RADR) Radiation Biology and Protection
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
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. **Note:** Starting with Fall 2016, this course will replace RADR 2431 for the Fall 2015 cohort and beyond.

#2340. (RADR) Sectional Anatomy for Medical Imaging
3 lecture hours per week; 48 total contact hours. Credit: 3 semester hours.
Anatomic relationships that are present under various sectional orientations as depicted by computed tomography or magnetic resonance imaging. 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 and RADR 2217. **Note:** The last semester RADR 2340 will be taught is Spring 2016.

#2366. (RADR) Practicum - Radiologic Technology/Science - Radiographer
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 (formerly RADR 2431).
#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.

#2431. (RADR) Advanced Radiographic Procedures  
CIP 51.0911
2 lecture hours and 4 lab hours per week; 96 total contact hours. Credit: 4 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 2313. Note: The last semester RADR 2431 will be taught is Fall 2015. Starting with Fall 2016, RADR 2331 will replace it for the Fall 2015 cohort and beyond.

+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 a grade of “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 a grade of “C” or better. Note: International students should see paired co-enrolled courses ESOL 0335 and ESOL 0324.

(READ) DEVELOPMENTAL READING

#1200. (RELE) Contract Forms and Addenda  
CIP 52.1501
2 lecture hours per week; 32 total contact hours. Credit: 2 semester hours.
Promulgated Contract Forms, which shall include but is not limited to unauthorized practice of law, broker-lawyer committee, current promulgated forms, commission rules governing use forms and case studies involving use of forms.

#1211. (RELE) Laws of Contracts  
CIP 52.1501
2 lecture hours per week; 32 total contact hours. Credit: 2 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.

#1219. (RELE) Real Estate Finance  
CIP 52.1501
2 lecture hours per week; 32 total contact hours. Credit: 2 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.

#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  
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.

#1315. (RELE) Property Management  
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.

#1321. (RELE) Real Estate Marketing  
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  
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  
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.

#2201. (RELE) Law of Agency  
2 lecture hours per week; 32 total contact hours. Credit: 2 semester hours.  
A study of the 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  
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.

#1162. (RNSG) Clinical – Registered Nursing/Registered Nurse  
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 clients with common, chronic health concerns and will assist the student to transition into 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: LVN-T: Admissions into the LVN-Transition Option Co-enrolled: LVN-T: RNSG 1327 and RNSG 1144. Note: The last semester RNSG 1162 will be taught is Summer 2015.

#1215. (RNSG) Health Assessment  
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  
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.  

#1300. (RNSG) Health Assessment Across the Lifespan  
2 lecture hours and 3 lab hours per week; 80 total contact hours. Credit: 3 semester hours.  
Development of skills and techniques required for a comprehensive nursing health assessment of patients across the lifespan: pediatric, adult, and geriatric. Includes assessment of patients’ health promotion and maintenance, illness and injury prevention and restoration, and application of the nursing process 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: HPRS 2301, RNSG 1513, and RNSG 1301. **Note:** The last semester RNSG 1300 will be taught is Summer 2015.  

#1301. (RNSG) Pharmacology  
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  
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  
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  
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  
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 and LVN-T: 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 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 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 2212, 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.

* Texas Higher Education Coordinating Board Lower Division Academic Course Guide Manual (ACGM)
# Texas Higher Education Coordinating Board Workforce Education Course Number (WECM)
* Meets State Core Curriculum Requirements
#2262. (RNSG) Clinical – Registered Nursing/Registered Nurse  
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. Note: Starting with Spring 2017, this course will replace RNSG 2263 for the Fall 2015 cohort and beyond.

#2263. (RNSG) Clinical – Registered Nursing/Registered Nurse  
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. Note: Starting with Spring 2017, this course will replace RNSG 2363 for Fall 2015 cohort and beyond. At that point, contact hours will be 8 clinical hours per week for a total of 128 total contact hours.

#2363. (RNSG) Clinical – Registered Nursing/Registered Nurse  
9 clinical hours per week; 144 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. This is a capstone 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 community agency. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the student and the Blinn College ADN faculty. 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 2231 and RNSG 2263. Note: The last semester RNSG 2363 will be taught is Fall 2016. Starting with the Spring 2017, RNSG 2263 (0/0/8=128 contact hours) will replace it for the Fall 2015 cohort and beyond.

(SCIT) ANATOMY

#1307. (SCIT) Applied Human Anatomy and Physiology I  
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 a grade of 70% or better to complete the course.

#1308. (SCIT) Applied Human Anatomy and Physiology II  
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 a grade of 70% or better to complete the course. Prerequisites: SCIT 1307.

(SGNL) AMERICAN SIGN LANGUAGE

#1401. (SGNL) Beginning American Sign Language I  
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.

1301. (SOCI) 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. (SOCI) 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. (SOCI) 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. (SOCI) 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. (SOCI) Criminology  
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  
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  
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  
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  
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  
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 reactivitate 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  
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 reactivitate 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.

+1144. (SPCH) Forensic Activities I: Debate Team  
2 lab hours per week; 32 total contact hours. Credit: 1 semester hours.  
Laboratory experience for students who participate in forensic activities. Students are encouraged to participate in speech 
and debate tournaments. Individual practice time may be required. **Note:** This course is limited to students who wish to 
participate on the Blinn College Speech and Debate Team. **Note:** This course is scheduled for deletion from the ACGM in 
Spring 2017.
+1145. (SPCH) Forensic Activities II: Debate Team
2 lab hours per week; 32 total contact hours. Credit: 1 semester hours.
Laboratory experience for students who participate in forensic activities. Students are encouraged to participate in speech and debate tournaments. Individual practice time may be required. **Prerequisites:** SPCH 1144. **Note:** This course is limited to students who wish to participate on the Blinn College Speech and Debate Team. **Note:** This course is scheduled for deletion from the ACGM in Spring 2017.

+1311. (SPCH) Introduction to Speech Communication *
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 *
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 *
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 *
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 technology mediated formats.

+1342. (SPCH) Voice and Diction
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.

+2144. (SPCH) Forensic Activities III: Debate Team
2 lab hours per week; 32 total contact hours. Credit: 1 semester hours.
Laboratory experience for students who participate in forensic activities. Students are encouraged to participate in speech and debate tournaments. Individual practice time may be required. **Prerequisites:** SPCH 1144 and SPCH 1145. **Note:** This course is limited to students who wish to participate on the Blinn College Speech and Debate Team. **Note:** This course is scheduled for deletion from the ACGM in Spring 2017.

+2145. (SPCH) Forensic Activities IV: Debate Team
2 lab hours per week; 32 total contact hours. Credit: 1 semester hours.
Laboratory experience for students who participate in forensic activities. Students are encouraged to participate in speech and debate tournaments. Individual practice time may be required. **Prerequisites:** SPCH 1144, SPCH 1145, and SPCH 2144. **Note:** This course is limited to students who wish to participate on the Blinn College Speech and Debate Team. **Note:** This course is scheduled for deletion from the ACGM in Spring 2017.

+2333. (SPCH) Discussion and Small Group Communication
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 *
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
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.
#1201. (SPNL) Health Care Spanish
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.

##(STDY) STUDY SKILLS

+0101. (STDY) Study Strategies
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
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
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
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
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
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.
#1115. (VNSG) Disease Control and Prevention  
1 lecture hour per week; 16 total contact hours. Credit: 1 semester hour. 
Study of the general principles of prevention of illness and disease, basic microbiology, and the maintenance of aseptic conditions. **Prerequisites:** Admissions into the Vocational Nursing Program. **Co-enrolled:** VNSG 1122, VNSG 1226 (formerly VNSG 1126), VNSG 1133, VNSG 1216, VNSG 1227, VNSG 1260, VNSG 1323, and VNSG 1420.

#1119. (VNSG) Leadership and Professional Development  
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 1238, VNSG 1432, and VNSG 1462.

#1122. (VNSG) Vocational Nursing Concepts  
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. **Prerequisites:** Admissions into the Vocational Nursing Program. **Co-enrolled:** VNSG 1115, VNSG 1122, VNSG 1133, VNSG 1136, VNSG 1216, VNSG 1227, VNSG 1260, VNSG 1323, and VNSG 1420.

#1126. (VNSG) Gerontology  
1 lecture hour per week; 16 total contact hours. Credit: 1 semester hour. 
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 1115, VNSG 1122, VNSG 1133, VNSG 1136, VNSG 1216, VNSG 1227, VNSG 1260, VNSG 1323, and VNSG 1420. **Note:** The last semester VNSG 1126 will be taught is Fall 2014. Starting with Fall 2015, VNSG 1226 will replace it for the Fall 2015 cohort and beyond.

#1133. (VNSG) Growth and Development  
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 1115, VNSG 1122, VNSG 1133, VNSG 1216, VNSG 1227, VNSG 1260, VNSG 1323, and VNSG 1420.

#1136. (VNSG) Mental Health  
1 lecture hour per week; 16 total contact hours. Credit: 1 semester hour. 
Introduction to the principles and theories of positive mental health and human behaviors. Topics include emotional responses, coping mechanisms, and therapeutic communication skills. **Prerequisites:** Completion of all first semester VNSG courses, all with 75% or higher. **Co-enrolled:** VNSG 1231, VNSG 1234, VNSG 1230 (formerly VNSG 1330), VNSG 1429, and VNSG 1561.

#1216. (VNSG) Nutrition  
2 lecture hours per week; 32 total contact hours. Credit: 2 semester hours. 
Introduction to nutrients and the role of diet therapy in growth and development and in the maintenance of health. **Prerequisites:** Admissions into the Vocational Nursing Program. **Co-enrolled:** VNSG 1115, VNSG 1226 (formerly VNSG 1126), VNSG 1122, VNSG 1216, VNSG 1227, VNSG 1260, VNSG 1323, and VNSG 1420.

#1226. (VNSG) Gerontology  
2 lecture hours per week; 16 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 1115, VNSG 1122, VNSG 1133, VNSG 1216, VNSG 1227, VNSG 1260, VNSG 1323, and VNSG 1420. **Note:** Starting with Fall 2015, this course will replace VNSG 1126 for the Fall 2015 cohort and beyond.

#1227. (VNSG) Essentials of Medication Administration  
2 lecture hours and 1 lab hour per week; 48 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 1115, VNSG 1226 (formerly VNSG 1126), VNSG 1122, VNSG 1133, VNSG 1216, VNSG 1260, VNSG 1323, and VNSG 1420.
#1230. (VNSG) Maternal-Neonatal Nursing  
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 1136, VNSG 1231, VNSG 1234, VNSG 1429, and VNSG 1561. Note: Starting with Spring 2016, this course will replace VNSG 1330 for the Fall 2015 cohort and beyond.

#1231. (VNSG) Pharmacology  
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 1136, VNSG 1234, VNSG 1230 (formerly VNSG 1330), VNSG 1429, and VNSG 1561.

#1234. (VNSG) Pediatrics  
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 1136, VNSG 1231, VNSG 1230 (formerly VNSG 1330), VNSG 1429, and VNSG 1561.

#1238. (VNSG) Mental Illness  
2 lecture hours per week; 32 total contact hours. Credit: 2 semester hours. 
Study of human behavior with emphasis on emotional and mental abnormalities and modes of treatment incorporating the nursing process. Prerequisites: Completion of all first and second semester VNSG courses, all with 75% or higher. Co-enrolled: VNSG 1119, VNSG 1432, and VNSG 1462.

#1260. (VNSG) Clinical – Licensed Practical/Vocational Nurse Training  
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. Clinical education is an unpaid learning experience. Prerequisites: Admissions into the Vocational Nursing Program. Co-enrolled: VNSG 1115, VNSG 1226 (formerly VNSG 1126), VNSG 1122, VNSG 1133, VNSG 1216, VNSG 1227, VNSG 1323, and VNSG 1420.

#1323. (VNSG) Basic Nursing Skills  
2 lecture hours and 4 lab hours per week; 96 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 1115, VNSG 1226 (formerly VNSG 1126), VNSG 1122, VNSG 1133, VNSG 1216, VNSG 1227, VNSG 1323, and VNSG 1420.

#1330. (VNSG) Maternal-Neonatal Nursing  
2 lecture hours and 2 lab hours per week; 64 total contact hours. Credit: 3 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 1429, and VNSG 1561. Note: The last semester VNSG 1330 will be taught is Spring 2015. Starting with Spring 2016, VNSG 1230 will replace it for the Fall 2015 cohort and beyond.

#1420. (VNSG) Anatomy and Physiology for Allied Health  
4 lecture hours per week; 64 total contact hours. Credit: 4 semester hours. 
Study of the structure (anatomy) and function (physiology) of the human body including the neuroendocrine, integumentary, musculoskeletal, digestive, urinary, reproductive, respiratory, and circulatory systems. Prerequisites: Admissions into the Vocational Nursing Program. Co-enrolled: VNSG 1115, VNSG 1226 (formerly VNSG 1126), VNSG 1122, VNSG 1133, VNSG 1216, VNSG 1227, VNSG 1260, and VNSG 1323.

#1429. (VNSG) Medical-Surgical Nursing I  
4 lecture hours per week; 64 total contact hours. Credit: 4 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 1136, VNSG 1231, VNSG 1234, VNSG 1230 (formerly VNSG 1330), and VNSG 1561.
#1432. (VNSG) Medical-Surgical Nursing II  
4 lecture hours per week; 64 total contact hours. Credit: 4 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, VNSG 1238, and VNSG 1432.

#1462. (VNSG) Clinical - Licensed Practical/Vocational Nurse Training  
16 clinical 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. 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 1119, VNSG 1238, and VNSG 1432.

#1561. (VNSG) Clinical - Licensed Practical/Vocational Nurse Training  
26 clinical hours per week; 416 total contact hours. Credit: 5 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 1136, VNSG 1231, VNSG 1234, VNSG 1230 (formerly VNSG 1330), and VNSG 1429.  
Note: Starting with Summer 2016, VNSG 1561 contact hours will be 25 clinical hours per week for 400 total contact hours.

(VTHT) VETERINARY TECHNOLOGY

#1105. (VTHT) Veterinary Medical Terminology  
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 (formerly VTHT 1209) and VTHT 1301 (formerly VTHT 1401).  
Note: Starting with Fall 2015, this course will replace VTHT 1205 for the Fall 2015 cohort and beyond.

#1109. (VTHT) Veterinary Nutrition  
1 lecture hour and 1 lab 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 (formerly VTHT 1205) and VTHT 1301 (formerly VTHT 1401).  
Note: Starting with Fall 2015, this course will replace VTHT 1209 for the Fall 2015 cohort and beyond.

#1125. (VTHT) Pharmacological Calculations  
1 lecture hour and 1 lab 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.  
Note: Starting with Spring 2016, this course will replace VTHT 1225 for the Fall 2015 cohort and beyond.

#1140. (VTHT) Veterinary Jurisprudence and Ethics  
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 (formerly VTHT 1345), and VTHT 2331 (formerly VTHT 2431).

#1205. (VTHT) Veterinary Medical Terminology  
2 lecture hours per week; 32 total contact hours. Credit: 2 semester hours.  
Introduction to word parts, directional terminology, and analysis of veterinary terms.  
Prerequisites: Admissions into the Veterinary Technology Program.  
Co-enrolled: VTHT 1209 and VTHT 1401.  
Note: The last semester VTHT 1205 will be taught is Fall 2014. Starting with Fall 2015, VTHT 1105 will replace it for the Fall 2015 cohort and beyond.

#1209. (VTHT) Veterinary Nutrition  
2 lecture hours per week; 32 total contact hours. Credit: 2 semester hours.  
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 1205 and VTHT 1401.  
Note: The last semester VTHT 1209 will be taught is Fall 2014. Starting with Fall 2015, VTHT 1109 will replace it for the Fall 2015 cohort and beyond.
#1225. (VTHT) Pharmacological Calculations  
2 lecture hours per week; 32 total contact hours. Credit: 2 semester hours. 
Skill development in calculating drug dosages. **Prerequisites:** Completion of first semester VTHT courses. **Co-enrolled:** VTHT 1413 and VTHT 2217. **Note:** The last semester VTHT 1225 will be taught is Spring 2015. Starting with Spring 2016, VTHT 1125 will replace it for the Fall 2015 cohort and beyond.

#1245. (VTHT) Veterinary Radiology  
1 lecture hours 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 (formerly VTHT 2431). **Note:** Starting with Spring 2017, this course will replace VTHT 1345 for the Fall 2015 cohort and beyond.

#1249. (VTHT) Veterinary Pharmacology  
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 (formerly VTHT 2323). **Note:** Starting with Fall 2016, this course will replace VTHT 1349 for the Fall 2015 cohort and beyond.

#1260. (VTHT) Clinical-Veterinary/Animal Health Technology/Technician and Veterinary Assistant  
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  
2 lecture hours and 3 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 (formerly VTHT 1205) and VTHT 1109 (formerly VTHT 1209). **Note:** Starting with Fall 2015, this course will replace VTHT 1401 for the Fall 2015 cohort and beyond.

#1345. (VTHT) Veterinary Radiology  
2 lecture hours and 2 lab hours per week; 64 total contact hours. Credit: 3 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 2431. **Note:** The last semester VTHT 1345 will be taught is Spring 2016. Starting with Spring 2017, VTHT 1245 will replace it for the Fall 2015 cohort and beyond.

#1349. (VTHT) Veterinary Pharmacology  
3 lecture hours per week; 48 total contact hours. Credit: 3 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 2323. **Note:** The last semester VTHT 1349 will be taught is Fall 2015. Starting with Fall 2016, VTHT 1249 will replace it for the Fall 2015 cohort and beyond.

#1401. (VTHT) Introduction to Veterinary Technology  
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 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 1205 and VTHT 1209. **Note:** The last semester VTHT 1401 will be taught is Fall 2014. Starting with Fall 2015, VTHT 1301 will replace it for the Fall 2015 cohort and beyond.

#1413. (VTHT) Veterinary Anatomy and Physiology  
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 (formerly VTHT 1225) and VTHT 2217.
#1441. (VTHT) Anesthesia and Surgical Assistance  
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 (formerly VTHT 1345), and VTHT 2331 (formerly VTHT 2431).

#2201. (VTHT) Canine and Feline Clinical Management  
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 (formerly VTHT 1349), and VTHT 2223 (formerly VTHT 2323).

#2205. (VTHT) Equine Clinical Management  
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 (formerly VTHT 1349), and VTHT 2223 (formerly VTHT 2323).

#2209. (VTHT) Food Animal Clinical Management  
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 (formerly VTHT 1349), and VTHT 2223 (formerly VTHT 2323).

#2217. (VTHT) Exotic Animal Clinical Management  
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 (formerly VTHT 1225) and VTHT 1413.

#2223. (VTHT) Veterinary Clinical Pathology I  
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 (formerly VTHT 1349). **Note:** Starting with Fall 2016, this course will replace VTHT 2323 for the Fall 2015 cohort and beyond.

#2230. (VTHT) Clinical-Veterinary/Animal Health Technology/Technician and Veterinary Assistant  
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 (formerly VTHT 1345), and VTHT 2331 (formerly VTHT 2431).

#2323. (VTHT) Veterinary Clinical Pathology I  
2 lecture hours and 3 lab hours per week; 80 total contact hours. Credit: 3 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 1349. **Note:** The last semester VTHT 2323 will be taught is Fall 2015. Starting with Fall 2016, VTHT 2223 will replace it for the Fall 2015 cohort and beyond.

#2331. (VTHT) Veterinary Clinical Pathology II  
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 (formerly VTHT 1345). **Note:** Starting with Spring 2017, this course will replace VTHT 2431 for the Fall 2015 cohort and beyond.

#2421. (VTHT) Veterinary Parasitology  
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.
#2431. (VTHT) Veterinary Clinical Pathology II  
3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 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 1345. **Note:** The last semester VTHT 2431 will be taught is Spring 2016. Starting with Spring 2017, VTHT 2331 will replace it for the Fall 2015 cohort and beyond.

(WLDG) WELDING TECHNOLOGY/WELDER

#1313. (WLDG) Introduction to Blueprint Reading for Welders  
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  
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  
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)  
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, oxy-fuel cutting, and various joint designs. Instruction provided in SMAW fillet welds in various positions.

#1430. (WLDG) Introduction to Gas Metal Arc Welding (GMAW)  
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  
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  
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 weld positions 1G and 2G using various electrodes. **Prerequisites:** WLDG 1428, WLDG 1430, and WLDG 1457.

#1457. (WLDG) Intermediate Shielded Metal Arc Welding (SMAW)  
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  
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.

#2289. (WLDG) Internship - Welding Technology/Welder  
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, WLDG 1457, and ENGL 1301. **Co-enrolled:** WLDG 2453.
#2447. (WLDG) Advanced Gas Metal Arc Welding (GMAW)  
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)  
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  
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:

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Refund Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to the first class session</td>
<td>100%</td>
</tr>
<tr>
<td>After the first class session</td>
<td>NONE</td>
</tr>
</tbody>
</table>

Courses of less than eight (8) weeks or meetings:

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Refund Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to the first class session</td>
<td>100%</td>
</tr>
<tr>
<td>Prior to the second class session</td>
<td>80%</td>
</tr>
<tr>
<td>After the second class session</td>
<td>NONE</td>
</tr>
</tbody>
</table>

Courses over eight (8) weeks or meetings:

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Refund Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to the first class session</td>
<td>100%</td>
</tr>
<tr>
<td>Prior to the second class session</td>
<td>80%</td>
</tr>
<tr>
<td>Prior to the third class session</td>
<td>50%</td>
</tr>
<tr>
<td>After the fourth class session</td>
<td>NONE</td>
</tr>
</tbody>
</table>

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

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

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

* Texas Higher Education Coordinating Board Lower Division Academic Course Guide Manual (ACGM)
# Texas Higher Education Coordinating Board Workforce Education Course Number (WECM)
* Meets State Core Curriculum Requirements

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