Explanation of Items in Course Descriptions

Course Type: ACNT Accounting Technician (N)
Course Prefix: ACNT
Course Number: 1303
Course Title: Introduction to Accounting I
Semester Hour Credit: (3-0-3)
Lecture Hours Each Week: (3-0-3)
Lab Hours Each Week: (3-0-3)

Course Types

T - Transfer/Academic Courses: Designated by the Texas Higher Education Coordinating Board for general academic transfer among community, state, and technical colleges in Texas; and state public four-year colleges and universities as freshman and sophomore general education courses. Students should check with the transfer institution to verify applicability to their specific major.

N - WECM Courses: Designated by the Texas Higher Education Coordinating Board as workforce education (technical) courses offered for credit and CEUs (Continuing Education Units). While these courses are designed to transfer among state community colleges, they are not designed to automatically transfer to public four-year colleges and universities. Continuing education courses do not transfer to other colleges or to semester hour programs.
ACCT  Accounting (T)

ACCT 2301  Principles of Financial Accounting 3-0-3
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).

ACCT 2302  Principles of Managerial Accounting 3-0-3
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. Prerequisite: ACCT 2301.

ACNT Accounting Technician (N)

ACNT 1303  Introduction to Accounting I 3-0-3
A study of analyzing, classifying, and recording business transactions in a manual and computerized environment. Emphasis on understanding the complete accounting cycle and preparing financial statements, bank reconciliations, and payroll.

ACNT 1304  Introduction to Accounting II 3-0-3
A study of accounting for merchandising, notes payable, notes receivable, valuation of receivables and equipment, and valuation of inventories in a manual and computerized environment. Prerequisite: ACNT-1303.

ACNT 1311  Introduction to Computerized Accounting 3-0-3
Introduction to utilizing the computer in maintaining accounting records with primary emphasis on a general ledger package.

ACNT 1329  Payroll and Business Tax Accounting 3-0-3
A study of payroll procedures, taxing entities, and reporting requirements of local, state, and federal taxing authorities in a manual and computerized environment.

ACNT 1331  Federal Income Tax: Individual 3-0-3
A study of the federal tax law for preparation of individual income tax returns.

ANTH Anthropology (T)

ANTH 2301  Physical Anthropology 3-0-3
The study of human origins and bio-cultural adaptations. Topics may include primatology, genetics, human variation, forensics, health, and ethics in the discipline.

ANTH 2302  Introduction to Archeology 3-0-3
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.

ANTH 2346  General Anthropology 3-0-3
The study of human beings, their antecedents, 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.

ANTH 2351  Cultural Anthropology 3-0-3
The study of human cultures. Topics may include social organization, institutions, diversity, interactions between human groups, and ethics in the discipline.

ARCE Computer Aided Drafting and Design (N) see also DFTG

ARCE 1452  Structural Drafting 3-3-4
A study of structural systems including concrete foundations and frames, wood framing and trusses, and structural steel framing systems. Includes detailing of concrete, wood, and steel to meet industry standards including the American Institute of Steel Construction and The American Concrete Institute. Prerequisite: DFTG 1409.

ARTS Arts (T)

ARTS 1303  Art History I 3-0-3
A chronological analysis of the historical and cultural contexts of the visual arts from prehistoric times to the 14th century. Prerequisite: None
### ARTS 1304 Art History II
3-0-3
A chronological analysis of the historical and cultural contexts of the visual arts from the 14th century to the present day. Prerequisite: None

### AUMT Automotive Service and Repair (N)

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>AUMT 1319</td>
<td>Automotive Engine Repair</td>
<td>2-4-3</td>
<td>Fundamentals of engine operation, diagnosis and repair. Emphasis on identification, inspection, measurements, and disassembly, repair, and reassembly of the engine. Prerequisites: AUMT 2305.</td>
</tr>
<tr>
<td>AUMT 1405</td>
<td>Introduction to Automotive Technology</td>
<td>3-3-4</td>
<td>An introduction to the automotive industry including automotive history, safety practices, shop equipment and tools, vehicle subsystems, service publications, professional responsibilities, and basic automotive maintenance.</td>
</tr>
<tr>
<td>AUMT 1407</td>
<td>Automotive Electrical Systems</td>
<td>2-7-4</td>
<td>An overview of automotive electrical systems including topics in operational theory, testing, diagnosis, and repair of charging and starting systems, and electrical accessories. Emphasis on electrical principle schematic diagrams and service manuals. Prerequisites: AUMT 1405.</td>
</tr>
<tr>
<td>AUMT 1410</td>
<td>Automotive Brake Systems</td>
<td>2-6-4</td>
<td>Operation and repair of drum/disc type brake systems. Topics include brake theory, diagnosis, and repair of power, manual, anti-lock brake systems, and parking brakes. Prerequisite: AUMT 1405.</td>
</tr>
<tr>
<td>AUMT 1416</td>
<td>Automotive Suspension and Steering Systems</td>
<td>2-6-4</td>
<td>Diagnosis and repair of automotive suspension and steering systems including electronically controlled systems. Includes component repair, alignment procedures and tire and wheel service. Prerequisite: AUMT 1405.</td>
</tr>
<tr>
<td>AUMT 1445</td>
<td>Automotive Climate Control Systems</td>
<td>2-6-4</td>
<td>Diagnosis and repair of manual/electronic climate control systems; includes the refrigeration cycle and EPA guidelines for refrigerant handling. Prerequisites: AUMT 1407.</td>
</tr>
<tr>
<td>AUMT 1472</td>
<td>Automotive Computer Systems</td>
<td>2-7-4</td>
<td>This course provides the student with a working knowledge of automotive computer systems. It includes principles of operation, components and function, tools and test equipment, diagnosis, and service and repair of automotive computerized systems. Prerequisites: AUMT 1407.</td>
</tr>
<tr>
<td>AUMT 2305</td>
<td>Automotive Engine Theory</td>
<td>2-2-3</td>
<td>Fundamentals of engine operation and diagnosis including lubrication and cooling systems. Emphasis on identification of components, measurements, inspections, and repair methods. Prerequisite: AUMT 1405.</td>
</tr>
<tr>
<td>AUMT 2337</td>
<td>Automotive Electronics</td>
<td>2-4-3</td>
<td>Study of electronic principles applied to microcomputers and communication systems. Includes digital fundamentals, and use of electronic test equipment. Prerequisites: AUMT 1407.</td>
</tr>
<tr>
<td>AUMT 2413</td>
<td>Automotive Drive Train and Axles</td>
<td>2-6-4</td>
<td>A study of automotive clutches, clutch operation devices, manual transmissions/transaxles, and differentials with emphasis on the diagnosis and repair. Prerequisite: AUMT 1405.</td>
</tr>
<tr>
<td>AUMT 2417</td>
<td>Automotive Engine Performance Analysis I</td>
<td>2-7-4</td>
<td>Theory, operation, diagnosis of drivability concerns, and repair ignition and fuel delivery systems. Use of current engine performance diagnostic equipment. Prerequisites: AUMT 2337.</td>
</tr>
<tr>
<td>AUMT 2425</td>
<td>Automotive Automatic Transmission and Transaxle</td>
<td>2-6-4</td>
<td>A study of the operation, hydraulic circuits and electronic controls of modern automatic transmissions/transaxles. Diagnosis, disassembly, and assembly procedures with emphasis on the use of special tools and repair techniques. Prerequisite: AUMT 2413.</td>
</tr>
<tr>
<td>AUMT 2434</td>
<td>Automotive Engine Performance Analysis II</td>
<td>2-7-4</td>
<td>Diagnosis and repair of emission systems, computerized engine performance systems, and advanced ignition and fuel systems. Includes use of advanced engine performance diagnostic equipment. Prerequisites: AUMT 2417.</td>
</tr>
<tr>
<td>AUMT 2488</td>
<td>Internship - Automobile/Automotive Mechanics Technology/Technician</td>
<td>0-19-4</td>
<td>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 employer. Prerequisite: Department approval required.</td>
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</table>

### BCIS Computer Information Technology and Systems (T) see also CETT, COSC, CPMT, ELMT, IMED, ITCC, ITNW, ITSC, ITSE, ITSW, ITSY

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<thead>
<tr>
<th>Course Code</th>
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</thead>
<tbody>
<tr>
<td>BCIS 1305</td>
<td>Business Computer Applications</td>
<td>2-4-3</td>
<td>Introduces and develops foundational skills in applying essential and emerging business productivity information technology tools. The focus of this course is on business productivity software applications, including word processing, spreadsheets, databases, presentation graphics, data analytics, and business-oriented utilization of the internet. (BCIS 1305 is included in the Business Field of Study.) Prerequisites: None</td>
</tr>
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</table>

CTC C&I 2020-21 91
### BIOL Biology (T)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BIOL 1322</td>
<td>Nutrition and Diet Therapy I</td>
<td>3-0-3</td>
</tr>
<tr>
<td>BIOL 1406</td>
<td>Biology for Science Majors I</td>
<td>3-3-4</td>
</tr>
<tr>
<td>BIOL 1407</td>
<td>Biology for Science Majors II</td>
<td>3-3-4</td>
</tr>
<tr>
<td>BIOL 1408</td>
<td>Biology for Non-Science Majors I</td>
<td>3-3-4</td>
</tr>
<tr>
<td>BIOL 1409</td>
<td>Biology for Non-Science Majors II</td>
<td>3-3-4</td>
</tr>
<tr>
<td>BIOL 1411</td>
<td>General Botany</td>
<td>3-3-4</td>
</tr>
<tr>
<td>BIOL 1413</td>
<td>General Zoology</td>
<td>3-3-4</td>
</tr>
<tr>
<td>BIOL 2401</td>
<td>Anatomy and Physiology I</td>
<td>3-3-4</td>
</tr>
<tr>
<td>BIOL 2402</td>
<td>Anatomy and Physiology II</td>
<td>3-3-4</td>
</tr>
<tr>
<td>BIOL 2420</td>
<td>Microbiology for Non-Science Majors</td>
<td>3-3-4</td>
</tr>
<tr>
<td>BIOL 2421</td>
<td>Microbiology for Science Majors</td>
<td>3-3-4</td>
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</tbody>
</table>

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. This course does not fulfill the Science requirement necessary for the completion of the Core Curriculum, the Associate of Science degree and the Associate of Arts degree.

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. Course includes laboratory activities. Prerequisite: Appropriate placement score or TSI exemption or completion of the appropriate level of Developmental Studies course. Co-requisite: BIOX 1406. Recommended prerequisite: Successful completion of College Algebra or concurrent enrollment in higher-level mathematics is recommended.

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. Course includes laboratory activities. Prerequisite: Appropriate placement score or completion of the appropriate level of Developmental Studies course. Co-requisite: BIOX 1407. Recommended prerequisite: Successful completion of College Algebra or concurrent enrollment in higher-level mathematics is recommended. Note: It is recommended that BIOL 1406 be taken before BIOL 1407.

This lecture and lab course provides a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction. Co-requisite: BIOX 1408.

This course will provide a survey of biological principles with an emphasis on humans, including evolution, ecology, plant and animal diversity, and physiology. Course objectives will be met in lecture and laboratory. Prerequisite: none. Co-requisite: BIOX 1409.

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. (This course is intended for science majors.) Laboratory activities will reinforce fundamental biological concepts relevant to the course material. Recommended prerequisite: Successful completion of College Algebra or concurrent enrollment in higher-level mathematics is recommended. Co-requisite: BIOX 1411. Completion of BIOL 1406 is recommended prior to enrollment in this course.

Fundamental biological concepts relevant to animals, including systematics, evolution, structure and function, cellular and molecular metabolism, reproduction, development, diversity, phylogeny, and ecology. (This course is intended for science majors.) Lab activities will reinforce concepts discussed in lecture. Co-requisite: BIOX 1413. Recommended prerequisite: Successful completion of College Algebra or concurrent enrollment in higher-level mathematics is recommended.

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. Hands-on learning experiences will be provided through laboratory activities. Co-requisite: BIOX 2401. Appropriate placement exam reading score or successful completion of a reading intensive course with a “C” or better. Completion of BIOL 1406 is strongly recommended.

Anatomy and Physiology II is the second part of a two-course sequence. It is a study of the structure and function of the 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. Hands-on learning experiences will be provided through laboratory activities. Prerequisite: BIOL 2401 with a grade of “C” or better; must have been taken within the last five years. Completion of BIOL 1406 is strongly recommended. Co-requisite: BIOX 2402.

This course covers basic microbiology and immunology and is primarily directed at pre-nursing, pre-allied health, and non-science majors. It provides an introduction to historical concepts of the nature of microorganisms, microbial diversity, the importance of microorganisms and acellular agents in the biosphere, and their roles in human and animal diseases. Major topics include bacterial structure as well as growth, physiology, genetics, and biochemistry of microorganisms. Emphasis is on medical microbiology, infectious diseases, and public health. Basics of culture and identification of bacteria and microbial ecology will be covered in laboratory activities. Completion of BIOL 1406 is strongly recommended. Co-requisite: BIOX 2420.

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 will reinforce concepts discussed in lecture. Prerequisite: CHEM 1411 and (BIOL 1406 and BIOL 1407) OR (BIOL 1411 AND BIOL 1413). Co-requisite BIOX 2421.
BMGT Business Administration and Management (N) see also BUSG, HRPO and MRKG

BMGT 1301 Supervision 3-0-3
A study of the role of the supervisor. Managerial functions as applied to leadership, counseling, motivation, and human skills are examined.

BMGT 1313 Principles of Purchasing 3-0-3
The purchasing process as it relates to such topics as inventory control, price determination, vendor selection, supply chain management, negotiation techniques, and ethical issues in purchasing.

BMGT 1325 Office Management 3-0-3
Systems, procedures, and practices related to organizing and planning office work, supervising employees’ performance, and exercising leadership skills.

BMGT 1327 Principles of Management 3-0-3
Concepts, terminology, principles, theory, and issues that are in the field of management.

BMGT 2370 Management Applications I 1-5-3
A management laboratory that emphasizes management decision-making skills that are necessary for the modern manager to successfully deal with resource problems in the work place and career field. The course is designed for students desiring to further their management training by applied learning techniques utilizing decision-making case studies, computer-assisted models, or other instructional techniques. It serves as a program Capstone for those students whose situation precludes an internship. The course may be repeated (if topics and learning outcomes vary). Note: Should be taken during the last semester of a certificate program or at about the halfway point in a degree plan. Prerequisite: Consent of the Department Chair.

BMGT 2371 Management Applications II 1-5-3
A management laboratory that emphasizes management decision-making skills that are necessary for the modern manager to successfully deal with resource problems in the work place and career field. The course is designed for students desiring to further their management training by applied learning techniques utilizing decision-making case studies, computer-assisted models, or other instructional techniques. It serves as a program Capstone for those students whose situation precludes an internship. Prerequisite: BMGT 2370 and Consent of the Department Chair.

BMGT 2488 Internship - Business Administration and Management, General 0-19-4
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. Prerequisite: Consent of the Department Chair.

BMGT 2489 Internship - Business Administration and Management, General 0-19-4
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: BMGT 2488 and Consent of the Department Chair.

BUSG Business Administration and Management (N) see also BMGT, HRPO and MRKG

BUSG 1303 Principles of Finance 3-0-3
Financial dynamics of a business. Includes monetary and credit theory, cash inventory, capital management, and consumer and government finance. Emphasizes the time value of money.

BUSG 1315 Small Business Operations 3-0-3
Central Campus Only. A course in the unique aspects of operating a small business. Emphasizes management functions including planning, heading, organizing, staffing and controlling Net Impact operations. Members of the organization that participate during the entire training program and document a minimum of 50 hours of active participation, can be awarded credit for this course with the approval of the Net Impact Faculty Advisor.

BUSG 1370 Small Business Accounting 3-0-3
A course designed to introduce small business owners to basic accounting/financial information necessary to the successful operation of a business. Topics covered include, but are not limited to, cost behavior, cost-volume-profit relationships, budgeting, relevant cost, pricing decisions, payroll accounting and taxes.

BUSG 1371 Entrepreneurship and Business Plan Development 3-0-3
Involves the development and presentation of a plan to create or expand a business. It provides the student with an opportunity to develop and demonstrate a mastery of the essential competencies required for business opportunity analysis, the development of a marketing plan, and the development of a business financial plan. Students will prepare a business plan for a business that they want to develop or expand.

BUSG 2305 Business Law/Contracts 3-0-3
Principles of law which form the legal framework for business activity including applicable statutes, contracts, and agency.

BUSG 2309 Small Business Management 3-0-3
A course on starting, operating and growing a small business. Topics include facts about a small business, essential management skills, how to prepare a business plan, accounting, financial needs, staffing, marketing strategies and legal issues.
### BUSI  Business Administration and Management (T)

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<tbody>
<tr>
<td>BUSI 1301</td>
<td>Business Principles</td>
<td>3-0-3</td>
</tr>
<tr>
<td>BUSI 1307</td>
<td>Personal Finance</td>
<td>3-0-3</td>
</tr>
<tr>
<td>BUSI 2301</td>
<td>Business Law</td>
<td>3-0-3</td>
</tr>
<tr>
<td>BUSI 2305</td>
<td>Business Statistics</td>
<td>3-0-3</td>
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</table>

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.

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.

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.

Descriptive and inferential statistical techniques for business and economic decision-making. Topics include the collection, description, analysis, and summarization of data; probability; discrete and continuous random variables; the binomial and normal distributions; sampling distributions; tests of hypotheses; estimation and confidence intervals; linear regression; and correlation analysis. Statistical software is used to analyze data throughout the course. Prerequisite: MATH 1314 or MATH 1324 and BCIS 1305

### CBFM  Construction Technology (N) see also CNBT, ELPT, MBST, PFPB, and WDWK

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<tr>
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<tbody>
<tr>
<td>CBFM 1334</td>
<td>Interior and Exterior Painting and Refinishing</td>
<td>2-4-3</td>
</tr>
<tr>
<td>CBFM 2487</td>
<td>Internship–Building/Property Maintenance and Manager</td>
<td>0-19-4</td>
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</tbody>
</table>

This course covers an in-depth look at early childhood mentoring, an important professional facet of a teacher’s development. Students will explore what it means to be a mentor and work directly with new people entering into the early childhood field. This is a practical course designed to teach skills to new and experienced mentors in Early Childhood Education.

This course is designed to teach the specific use of technology in the classroom, including preschool management software, recording children’s work, and current software available for brochures, flyers, etc., that will be used commonly for preschool/school settings. Recommended for the student who has completed 3 credit hours of computer studies.

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 with State Board for Educator Certification Pedagogy and Professional Responsibilities standards. Requires students to participate in a minimum of 16 hours field experience with children from infancy through age 12 in a variety of settings with varied and diverse populations.

### CDEC  Child Development (N)

This course explores the effects of deployments on military families and children. Techniques for supporting children of military families during deployments will be covered.

This course covers an in-depth look at early childhood mentoring, an important professional facet of a teacher’s development. Students will explore what it means to be a mentor and work directly with new people entering into the early childhood field. This is a practical course designed to teach skills to new and experienced mentors in Early Childhood Education.

This course is designed to teach the specific use of technology in the classroom, including preschool management software, recording children’s work, and current software available for brochures, flyers, etc., that will be used commonly for preschool/school settings. Recommended for the student who has completed 3 credit hours of computer studies.

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### CDEC 1311 Educating Young Children

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 with State Board for Educator Certification Pedagogy and Professional Responsibilities standards. Requires students to participate in a minimum of 16 hours of field experience with children from infancy through age 12 in a variety of settings with varied and diverse populations.

Factors impacting the well-being of young children. Includes healthy behavior, food, nutrition, fitness, and safety practices. Focuses on local and national standards and legal implications of relevant policies and regulations. Course content is aligned with State Board for Educator Certification Pedagogy and Professional Responsibilities standards. Requires students to participate in a minimum of 16 hours field experience with children from infancy through age 12 in a variety of settings with varied and diverse populations.

A study of appropriate infant and toddler programs (birth to 3 years), including an overview of development, quality routines, learning environments, materials and activities, and teaching/guidance techniques. 16 lab hours required.
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<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>CDEC 1354</td>
<td>Child Growth &amp; Development</td>
<td>3-0-3</td>
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<tr>
<td></td>
<td>Physical, emotional, social, and cognitive factors impacting growth and development of children through adolescence.</td>
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<tr>
<td>CDEC 1356</td>
<td>Emergent Literacy for Early Childhood</td>
<td>3-1-3</td>
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<tr>
<td></td>
<td>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. 16 lab hours required.</td>
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<tr>
<td>CDEC 1358</td>
<td>Creative Arts for Early Childhood</td>
<td>3-1-3</td>
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<td></td>
<td>An exploration of principles, methods, and materials for teaching music, movement, visual arts, and dramatic play through process-oriented experiences to support divergent thinking for children from birth through age eight. 16 lab hours required.</td>
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<tr>
<td>CDEC 1359</td>
<td>Children with Special Needs</td>
<td>3-1-3</td>
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<td></td>
<td>A survey of information regarding children with special needs including possible causes and characteristics of exceptionalities, intervention strategies, available resources, referral processes, and the advocacy role and legislative issues. 16 lab hours required.</td>
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</tr>
<tr>
<td>CDEC 1413</td>
<td>Curriculum Resources for Early Childhood Programs</td>
<td>3-2-4</td>
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<tr>
<td></td>
<td>A study of the fundamentals of developmentally appropriate curriculum design and implementation in early care and education programs for children birth through age 8. 32 lab hours required.</td>
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<tr>
<td>CDEC 1417</td>
<td>Child Development Associate Training I</td>
<td>3-2-4</td>
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<td>Based on the requirements for the Child Development Associate credential (CDA). Topics include CDA overview, observation skills, and child growth and development. The four functional areas of study are creative, cognitive, physical, and communication. 32 hour lab required.</td>
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</tr>
<tr>
<td>CDEC 1419</td>
<td>Child Guidance</td>
<td>3-2-4</td>
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<td></td>
<td>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. 32 lab hours required.</td>
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</tr>
<tr>
<td>CDEC 2307</td>
<td>Math &amp; Science for Early Childhood</td>
<td>3-1-3</td>
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<tr>
<td></td>
<td>An exploration of principles, methods, and materials for teaching children math and science concepts through discovery and play. 16 lab hours required.</td>
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<tr>
<td>CDEC 2341</td>
<td>The School Age Child</td>
<td>3-1-3</td>
</tr>
<tr>
<td></td>
<td>A study of programs for the school age child, including an overview of development, learning environments, materials, activities and guidance techniques. 16 lab hours required.</td>
<td></td>
</tr>
<tr>
<td>CDEC 2388</td>
<td>Internship Child Care Provider/Assistant</td>
<td>0-9-3</td>
</tr>
<tr>
<td></td>
<td>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. Student’s final course. 144 work-based or volunteer lab experience in an approved facility, final course taken.</td>
<td></td>
</tr>
<tr>
<td>CDEC 2422</td>
<td>Child Development Associate Training II</td>
<td>3-2-4</td>
</tr>
<tr>
<td></td>
<td>A continuation of the study of the requirements for the Child Development Associate Credential (CDA). The six functional areas of study include safe, healthy, learning environment, self, social, and guidance. 32 hour lab required.</td>
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</tr>
<tr>
<td>CDEC 2424</td>
<td>Child Development Associate Training III</td>
<td>3-2-4</td>
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<tr>
<td></td>
<td>Continuation of the requirements for the Child Development Associate credential (CDA). The three functional areas of study include family, program management and professionalism. 32 hour lab required.</td>
<td></td>
</tr>
<tr>
<td>CDEC 2426</td>
<td>Administration of Programs for Children I</td>
<td>3-2-4</td>
</tr>
<tr>
<td></td>
<td>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. Prerequisite: Six hours of Child Development coursework. 32 lab hours required.</td>
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</table>

CETT Computer Information Technology and Systems (N) see also BCIS, COSC, CPMT, ELMT, IMED, ITCC, ITNW, ITSC, ITSE, ITSW, ITSY

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CETT 1303</td>
<td>DC Circuits</td>
<td>2-4-3</td>
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<tr>
<td></td>
<td>A study of the fundamentals of direct current including Ohm’s law, Kirchhoff’s laws and circuit analysis techniques. The aim of the course is to acquaint the student with the basic vocabulary of electronic circuits and to help them understand the relationship between voltage, current, power, and resistance. The student will be able to identify the basic circuit components, their schematic symbols and their proper function in electrical circuits. Prerequisite: None</td>
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<tr>
<td>CETT 1305</td>
<td>AC Circuits</td>
<td>2-4-3</td>
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<td></td>
<td>A study of the fundamentals of alternating current including series and parallel AC circuits, phasors, capacitive and inductive networks, transformers, and resonance. This is a study of single and poly-phase AC circuits and the use of Kirchhoff’s Laws as well as Thevenin’s, Norton’s, and Superposition theorems in analyzing these circuits. Prerequisite: CETT 1303 DC Circuits.</td>
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</tr>
<tr>
<td>CETT 1321</td>
<td>Electronic Fabrication</td>
<td>2-4-3</td>
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<tr>
<td></td>
<td>A study of electronic circuit fabrication techniques including printed circuit boards, wire wrapping, bread boarding, and various soldering techniques. Prerequisite: None Scheduled for December 2020 deactivation</td>
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<tr>
<td>Course</td>
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<td>Units</td>
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<tr>
<td>CETT 1325</td>
<td>Digital Fundamentals</td>
<td>2-4-3</td>
</tr>
<tr>
<td>CETT 1331</td>
<td>Programming for Discrete Electronic Devices</td>
<td>2-4-3</td>
</tr>
<tr>
<td>CETT 1429</td>
<td>Solid State Devices</td>
<td>3-3-4</td>
</tr>
<tr>
<td>CETT 1441</td>
<td>Solid State Circuits</td>
<td>3-3-4</td>
</tr>
<tr>
<td>CETT 1449</td>
<td>Digital Systems</td>
<td>3-3-4</td>
</tr>
<tr>
<td>CETT 2335</td>
<td>Advanced Microprocessors</td>
<td>2-4-3</td>
</tr>
<tr>
<td>CETT 2489</td>
<td>Internship-Computer Engineering Technology/Technician</td>
<td>0-19-4</td>
</tr>
<tr>
<td>CHEF 1301</td>
<td>Basic Food Preparation</td>
<td>1-5-3</td>
</tr>
<tr>
<td>CHEF 1302</td>
<td>Principles of Healthy Cuisine</td>
<td>1-5-3</td>
</tr>
<tr>
<td>CHEF 1305</td>
<td>Sanitation and Safety</td>
<td>3-0-3</td>
</tr>
<tr>
<td>CHEF 1310</td>
<td>Garde Manger</td>
<td>2-4-3</td>
</tr>
<tr>
<td>CHEF 1341</td>
<td>American Regional Cuisine</td>
<td>2-4-3</td>
</tr>
<tr>
<td>CHEF 1345</td>
<td>International Cuisine</td>
<td>2-4-3</td>
</tr>
<tr>
<td>CHEF 2301</td>
<td>Intermediate Food Preparation</td>
<td>2-4-3</td>
</tr>
<tr>
<td>CHEF 2302</td>
<td>Saucier</td>
<td>2-4-3</td>
</tr>
<tr>
<td>CHEM 1406</td>
<td>Introductory Chemistry I</td>
<td>3-3-4</td>
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</tbody>
</table>
CHEM 1407  Introductory Chemistry II  3-3-4
A survey of the fundamentals of organic and biochemistry for non-science majors or nursing students interested in the processes of life. Basic principles, nomenclature, principle reactions and methods of synthesis, and the major classes of physiologically important compounds are studied. Lab activities will reinforce concepts discussed in lecture. Co-requisite: CHEX 1407.

CHEM 1411  General Chemistry I  3-3-4
The first of two courses covering the 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 an introduction to thermodynamics and descriptive chemistry. Emphasis is placed on problem solving. Lab activities will reinforce concepts discussed in lecture. Prerequisite: Student must have completed MATH 1314 with a grade of “C” or better within the last 5 years. Co-requisite: CHEX 1411. High school chemistry is strongly recommended.

CHEM 1412  General Chemistry II  3-3-4
The second of two courses covering the fundamental principles of chemistry for majors in the sciences, health sciences, and engineering. Topics include chemical equilibrium; phase diagrams and spectrometry; acid-base concepts; thermodynamics; kinetics; electrochemistry; nuclear chemistry; an introduction to organic chemistry and descriptive inorganic chemistry. Emphasis is placed on problem solving. Lab activities will reinforce concepts discussed in lecture. Prerequisite: CHEM 1411. Co-requisite: CHEX 1412.

CHLT  Community Health (N)

CHLT 1301  Introduction to Community Health  3-0-3
Designed to provide a basic understanding of variables that affect health sectors in the community.

CHLT 1302  Wellness and Health Promotion  3-0-3
Overview of wellness theory and its application throughout the life span. Focus is on attitude development, impact of cultural beliefs, and communication of wellness. Includes health behavior theories and approaches to behavior modification.

CHLT 1340  Community Health Advocacy  3-0-3
Study of local, regional, and national health care resources. Identification of health organizations, support groups, and health care delivery systems to be used for client referral. Activities include visits to various local agencies and attendance/participation in related activities.

CHLT 1341  Environmental Health  3-0-3
Survey of ecological principles and their application to the health and safety of physical and social environments, occupational settings, and human beings. Site visits to specific living quarters or occupational settings and measurement of environmental safety factors addressed.

CHLT 1342  Community Health Field Methods  3-0-3
Preparation for field work with individuals, families, and groups emphasizing teaching and capacity-building skills. Topics include outreach methods, area canvassing, home visiting, group work, community events, and community organizing.

CHLT 1391  Special Topics in Community Health  3-0-3
Topics address recently identified current events, skills, knowledges, 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.

CHLT 2367  Practicum - Community Health Services  0-21-3
Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.

CJCR  Criminal Justice (N)  See also CJLE and CJSA

CJCR 1304  Probation and Parole  3-0-3
A survey of the structure, organization, and operation of probation and parole services. Emphasis on applicable state statutes and administrative guidelines.

CJCR 1307  Correctional Systems and Practices  3-0-3
Corrections in the criminal justice system; organization of correctional systems; correctional role; institutional operations; alternatives to institutionalization; treatment and rehabilitation; current and future issues.

CJCR 1358  Rights of Prisoners  3-0-3
Analysis of the legal rights of the convicted offender incarcerated in state and federal penal institutions. Emphasis on constitutional principles, case law, and federal and state statutes concerning prisoner rights.

CJCR 1391  Special Topics in Corrections/Correctional Administration  3-0-3
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.

CJCR 1400  Basic Jail Course  4-1-4
Provides instruction in human relations; observation; evaluation of prisoners, booking procedures; classification; mug shots; fingerprinting, strip searches; meals, medical services, visitation; inmates rights and privileges; detention areas; key; knife and tool control; disturbances; riots; fire procedures; and release procedures. Taught in accordance with the current TCLEOSE instructor guides provided by the Commission for course #1005.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJCR 2324</td>
<td>Community Resources in Corrections</td>
<td>3-0-3</td>
<td>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.</td>
</tr>
<tr>
<td>CJCR 2325</td>
<td>Legal Aspects of Corrections</td>
<td>3-0-3</td>
<td>A study of the operation, management, and legal issues affecting corrections. Analysis of constitutional issues involving rights of the convicted, as well as civil liability of correctional agencies and staff.</td>
</tr>
<tr>
<td>CJCR 2466</td>
<td>Practicum (or Field Experience) Corrections/Correctional Administration</td>
<td>0-28-4</td>
<td>Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Prerequisite: Consent of the Department Chair.</td>
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</table>

**Criminal Justice (N)** see also CJCR and CJSA

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<thead>
<tr>
<th>Course Code</th>
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<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CJLE 1211</td>
<td>Basic Firearms</td>
<td>1-2-2</td>
<td>Instruction in firearm safety, cleaning and care techniques, proper shooting principles, and proficiency with a handgun and shotgun. Prerequisite: Department approval required.</td>
</tr>
<tr>
<td>CJLE 1333</td>
<td>Traffic Law and Investigation</td>
<td>3-0-3</td>
<td>Instruction in the basic principles of traffic control, traffic law enforcement, court procedures, and traffic law. Emphasis on the need for a professional approach in dealing with traffic law violators and the police role in accident investigation and traffic supervision.</td>
</tr>
<tr>
<td>CJLE 1345</td>
<td>Intermediate Crime Scene Investigation</td>
<td>3-0-3</td>
<td>Topics include objectives, preparations, procedures, and methods of crime scene search; value of crime scene sketches and their relationship to crime scene photographs; fingerprints as physical evidence, fingerprint identification and classification, types of impressions and techniques for locating and developing impressions.</td>
</tr>
<tr>
<td>CJLE 2345</td>
<td>Vice and Narcotics Investigation</td>
<td>3-0-3</td>
<td>Study of various classifications of commonly used narcotics, dangerous drugs, gambling, sex crimes, fraud, gangs, and investigative techniques; and identify proper interdiction procedures and techniques.</td>
</tr>
<tr>
<td>CJLE 2486</td>
<td>Internship-Criminal Justice/Police Science</td>
<td>0-19-4</td>
<td>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. Prerequisite: Consent of the Department Chair.</td>
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</table>

**Criminal Justice (N)** see also CJCR and CJLE

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>CJSA 1170</td>
<td>Alcohol Awareness/Intervention</td>
<td>1-0-1</td>
<td>This course will provide the student with a basic overview of alcohol as a drug of abuse and the methodology for developing an action plan of intervention at a local level. Focus on alcohol fueled offenses and problems, identifying and dealing with alcohol abusers and the criminal justice implications of alcohol related convictions.</td>
</tr>
<tr>
<td>CJSA 1171</td>
<td>Police Brutality</td>
<td>1-0-1</td>
<td>This course will provide students with basic information about the excessive use of force by police. The police have the right to use force to subdue criminals; even deadly force is authorized in certain situations. This course addresses what triggers the excessive use of force, what the consequences are to the police and society when this happens, and how it can be prevented.</td>
</tr>
<tr>
<td>CJSA 1173</td>
<td>Drug Recognition for Law Enforcement</td>
<td>1-0-1</td>
<td>The course will provide the student with the basics of the most common controlled substances a law enforcement officer will encounter. The student will gain knowledge of classifications of, identification of, and effects of “street drugs”.</td>
</tr>
<tr>
<td>CJSA 1174</td>
<td>Terrorism as a Strategy</td>
<td>1-0-1</td>
<td>The course will consider the definition of terrorism and its place in the spectrum of political violence as well as comparing different classifications of insurgency. The course will introduce students to how terrorism is used as a strategy of insurgency and how it is a strategy based on the psychological impact.</td>
</tr>
<tr>
<td>CJSA 1175</td>
<td>Investigation of Sexual Abuse</td>
<td>1-0-1</td>
<td>This course discusses the different formats used to investigate the crime of sexual assault. It includes strategies to investigate sexual assault, interview victims and witnesses, document evidence in accordance with state laws, and conduct case studies.</td>
</tr>
<tr>
<td>CJSA 1176</td>
<td>Introduction to Gangs and Gang Infiltration of the Military</td>
<td>1-0-1</td>
<td>This course offers an introduction to gangs in America and the infiltration of gangs in the United States military. Topics include gang identification, the role of the criminal justice system and the community in suppressing, intervening and preventing gang activity, how and why gang members join the military and the impact of gangs on the military.</td>
</tr>
<tr>
<td>CJSA 1177</td>
<td>International Criminal Justice</td>
<td>1-0-1</td>
<td>This course will provide an introduction to the history, policy, and practices of criminal justice in an international environment. The history of the development of the laws and judicial structures that serve to administer international criminal justice will be examined, particularly post World War II. The agencies involved in international criminal justice, from INTERPOL to the Federal Bureau of Investigation, will be studied as will the differing policing practices in particular comparative cases. Specific attention will be paid to the international issues arising for criminal justice practitioners in both domestic and foreign jurisdictions and the bodies of international law that will affect a criminal justice practitioner. Finally, the 21st Century international terrorist threat will be studied for its effects on the practice of criminal justice in civil and military contexts.</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>CJSA 1178</td>
<td>Criminal Deviance</td>
<td>1-0-1</td>
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<td></td>
<td>This course is an examination of criminal behavior with a special emphasis on the deviation from societal norms. The course will discuss ideas about crime, criminal intent, and criminal motivation. The course offers a survey of theories and research on the rationality of criminal behavior and stimulus of offenders. The course also offers a review of the social response to criminal behavior.</td>
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<tr>
<td>CJSA 1192</td>
<td>Special Topics in Criminal Justice/Law Enforcement Administration</td>
<td>1-0-1</td>
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<tr>
<td></td>
<td>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.</td>
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<tr>
<td>CJSA 1302</td>
<td>Private Security Officer Training</td>
<td>3-0-3</td>
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<td></td>
<td>A critical study of the provisions of the Texas Private Investigators and Private Security Agencies Act. Topics include the impact of the code on procedures and policies, judicial interpretation of statutes and related procedures, and rules and regulations. Satisfies the requirements for Commissioned Security Officer Skill Certification. Prerequisite: Consent of Department Chair.</td>
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<tr>
<td>CJSA 1308</td>
<td>Criminalistics I</td>
<td>3-0-3</td>
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<tr>
<td></td>
<td>Introduction to the field of criminalistics. Topics include the application of scientific and technical methods in the investigation of crime including location, identification, and handling of evidence for scientific analysis.</td>
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<tr>
<td>CJSA 1312</td>
<td>Crime in America</td>
<td>3-0-3</td>
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<td></td>
<td>The study of American crime problems in historical perspective, social and public policy factors affecting crime, impact and crime trends, social characteristics of specific crimes, and crime prevention.</td>
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<tr>
<td>CJSA 1313</td>
<td>Court Systems and Practices</td>
<td>3-0-3</td>
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<td></td>
<td>The judiciary in the criminal justice system; structure of the American court system; prosecution; right to counsel; pre-trial release; grand juries; adjudication process; types and rules of evidence, sentencing.</td>
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<tr>
<td>CJSA 1317</td>
<td>Juvenile Justice System</td>
<td>3-0-3</td>
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<td>A study of the juvenile justice process. Topics 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.</td>
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<tr>
<td>CJSA 1318</td>
<td>Court Management</td>
<td>3-0-3</td>
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<td>Exploration of operational issues in the administration of American courts. Topics include responsibilities of court personnel, records management, and organizational management topics.</td>
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<tr>
<td>CJSA 1322</td>
<td>Introduction to Criminal Justice</td>
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<td></td>
<td>The study of the history and philosophy of criminal justice and ethical considerations; crime defined; its nature and impact; overview of criminal justice system; law enforcement, court system; prosecution and defense; trial process; corrections.</td>
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<tr>
<td>CJSA 1327</td>
<td>Fundamentals of Criminal Law</td>
<td>3-0-3</td>
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<td>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; criminal responsibility.</td>
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<tr>
<td>CJSA 1342</td>
<td>Criminal Investigation</td>
<td>3-0-3</td>
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<td></td>
<td>Study of investigative theory, the collection and preservation of evidence, sources of information, concepts of interviewing and interrogation, the use of forensic sciences, case and trial preparation.</td>
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<tr>
<td>CJSA 1348</td>
<td>Ethics in Criminal Justice</td>
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<td>Ethical philosophies and issues pertaining to the various professions in the criminal justice system. Includes ethical issues emanating from constitutional conflict with public protection and individual rights, civil liberties, and correctional policies.</td>
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<tr>
<td>CJSA 1351</td>
<td>Use of Force</td>
<td>3-0-3</td>
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<td>A study of the use of force including introduction to and statutory authority for the use of force, force options, deadly force, and related legal issues. Fulfills the TCLEOSE Use of Force Intermediate Certificate requirement.</td>
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<tr>
<td>CJSA 1359</td>
<td>Police Systems and Practices</td>
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<td>Exploration of the profession of police officer. Topics include organization of law enforcement systems, the police role, police discretion, ethics, police-community interaction, and current and future issues.</td>
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<tr>
<td>CJSA 1393</td>
<td>Special Topics in Criminal Justice Studies</td>
<td>3-0-3</td>
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<td>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.</td>
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<tr>
<td>CJSA 2300</td>
<td>Legal Aspects of Law Enforcement</td>
<td>3-0-3</td>
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<td></td>
<td>Exploration of police authority. Topics include responsibilities and constitutional constraints, law of arrest, search and seizure, and police liability.</td>
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<tr>
<td>CJSA 2302</td>
<td>Police Management, Supervision, and Related Topics</td>
<td>3-0-3</td>
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<td>Techniques and theories regarding dealing with people, their performance and problems. Topics include basic supervision, leadership, time management, first-line supervision, and management by objectives.</td>
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<tr>
<td>CJSA 2331</td>
<td>Child Abuse, Prevention and Investigation</td>
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<td></td>
<td>Forms of child abuse and neglect and the traits of typical abusers. Includes strategies to investigate abuse, interview victims and witnesses, document evidence in accordance with state law, and conduct case studies.</td>
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</tbody>
</table>
CJSA 2488 Internship-Criminal Justice Safety Studies 0-19-4
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. Prerequisite: Consent of the Department Chair.

CMSW  Mental Health Services (N) see also DAAC, PSYT and SCWK

CMSW 1166 Practicum (or Field Experience) - Clinical/Medical Social Work 0-8-1
Practical, general workplace training supported by an individualized learning plan developed by the instructor and the student.

CMSW 1167 Practicum (or Field Experience) - Clinical and Medical Social Work 0-10-1
This course provides the student with practical general training and experience in the workplace through assignment to a specific field placement site under the supervision of professionals from the host agency. This course is the Capstone Experience for students exiting the program with a Certificate or Associates in Applied Science (AAS) Degree in Mental Health Services with an At-Risk Youth Specialization, or an AAS with a Social Work Specialization. Prerequisites: Departmental Approval, CMSW 1309, DAAC 1319, DAAC 2354, PSYT 1329, PSYT 2321, PSYT 2331. See Mental Health Services admissions requirements.

CMSW 1309 Problems of Children and Adolescents 2-4-3
Examine common problems and evaluate effective intervention models of at-risk children and youth. Topics include: social, family, educational systems impact, mental health, juvenile delinquency, teen sexuality, and addictive behaviors. Articulate common problems and characteristics of at-risk children and youth in the social, family, and educational systems; investigate intervention models; and describe juvenile laws.

CNBT  Construction Technology (N) see also CBFM, CRPT, ELPT, MBST, PFPB and WDWK

CNBT 1446 Construction Estimating I 3-3-4
Fundamentals of estimating materials and labor costs in construction.

COSC  Computer Information Technology and Systems (T) see also BCIS, CETT, CPMT, ELMT, IMED, ITCC, ITNW, ITSC, ITSE, ITSW, ITSY

COSC 1301 Introduction to Computing 3-1-3
Overview of computer systems—hardware, operating systems, and microcomputer application software, including the Internet, word processing, spreadsheets, presentation graphics, and databases. Current issues such as the effect of computers on society, and the history and use of computers in business, educational, and other modern settings are also studied. This course is not intended to count toward a student’s major field of study in business or computer science. Prerequisites: None

COSC 1315 Introduction to Computer Programming 3-1-3
Introduction to computer programming for solving a variety of problems. This course is intended for non-computer science and non-computer engineering majors. Emphasis on the fundamentals of design, development, testing, implementation, and documentation of computer programs. Includes problem solving with structured techniques and algorithms using pseudo code and/or graphical representations. Prerequisites: None

COSC 1336 Programming Fundamentals I 2-4-3
This course introduces the fundamental concepts of structured programming and provides a comprehensive introduction to programming for computer science and technology majors. Topics include software development methodology, data types, control structures, functions, arrays, and the mechanics of running, testing, and debugging. This course assumes computer literacy. (This course is included in the Field of Study Curriculum for Computer Science.) Prerequisite: COSC 1315.

COSC 1337 Programming Fundamentals II 2-4-3
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. (This course is included in the Field of Study Curriculum for Computer Science.) Prerequisite: COSC 1336.

COSC 2325 Computer Organization 2-4-3
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. This course is included in the Field of Study Curriculum for Computer Science. Prerequisite: COSC 1336 or COSC 1315 or departmental approval.

COSC 2336 Programming Fundamentals III 2-4-3
Further applications of programming techniques, introducing the fundamental concepts of data structures and algorithms. Topics include data structures (including stacks, queues, linked lists, hash tables, trees, and graphs), searching, sorting, recursion, and algorithmic analysis. Advanced programming techniques including file access methods, data structures, modular programming, program testing and documentation. Programs will be implemented in an appropriate object oriented language. (This course is included in the Field of Study Curriculum for Computer Science.) Prerequisite: COSC 1337.
CPMT Computer Information Technology and Systems (N)  see also BCIS, CETT, COSC, ELMT, IMED, ITCC, ITNW, ITSC, ITSE, ITSW, ITSY

CPMT 1345 Computer Systems Maintenance  2-4-3
A study of the components within a computer system. Development of testing and troubleshooting skills. Prerequisite: None.

CRIJ Criminal Justice (T)

CRIJ 1301 Introduction to Criminal Justice  3-0-3
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.

CRIJ 1306 Court Systems and Practices  3-0-3
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.

CRIJ 1307 Crime in America  3-0-3
The study of American crime problems in historical perspective, social and public policy factors affecting crime, impact and crime trends, social characteristics of specific crimes, and prevention of crime.

CRIJ 1310 Fundamentals of Criminal Law  3-0-3
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.

CRIJ 1313 Juvenile Justice System  3-0-3
A study of the juvenile justice process. Topics 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.

CRIJ 2301 Community Resources in Corrections  3-0-3
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.

CRIJ 2313 Correctional Systems and Practices  3-0-3
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.

CRIJ 2314 Criminal Investigation  3-0-3
Investigative theory; collection and preservation of evidence; sources of information; interview and interrogation; uses of forensic sciences; case and trial preparation.

CRIJ 2323 Legal Aspects of Law Enforcement  3-0-3
Exploration of police authority. Topics include responsibilities and constitutional restraints, law of arrest, search and seizure, and police liability.

CRIJ 2328 Police Systems and Practices  3-0-3
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.

CRPT Construction Technology (N)  see also CBFM, CNBT, ELPT, MBST, PFPB and WDWK

CRPT 1411 Roof Systems  3-4-4
Principles of design and construction of a roof system incorporating gable, hip, valley and intersections. Emphasis given to safe work practices and the use and maintenance of tools and equipment. Prerequisite: CRPT 1429 and CRPT 1415.

CRPT 1415 Wall Systems  3-4-4
Identification of components; construction of wall systems; safe work practices; and the use and maintenance of tools and equipment. Prerequisite: CRPT 1429 and CRPT 1423.

CRPT 1423 Floor Systems  3-3-4
An introduction to common floor systems. Includes component identification; construction of a floor system; safe work practices; and the use and maintenance of tools and equipment. Prerequisite: CRPT 1429.

CRPT 1429 Introduction to Carpentry  3-3-4
An introduction to the carpentry trade including safety, tools, equipment, terminology, and methods.

DAAC Mental Health Services (N)  see also CMSW, PSYT and SCWK

DAAC 1167 Practicum (or Field Experience) – Substance Abuse/Addiction Counseling  0-10-1
Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Prerequisite: See Mental Health Services admission requirement.
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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>DAAC 1304</td>
<td>Pharmacology of Addiction</td>
<td>2-4-3</td>
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<td>This course provides an emphasis on the pharmacological effects of addiction, tolerance, dependence, cross addiction, drug interactions, withdrawal, and recovery; describing the psychological and physiological effects of substance use. Recommended: DAAC 1319 be taken concurrently.</td>
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<tr>
<td>DAAC 1309</td>
<td>Assessment Skill of Alcohol and Other Drug Addictions</td>
<td>2-4-3</td>
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<td>An exploration of the procedures and tools used to identify and assess a client’s problems, strengths, deficits, and needs. Emphasis will be on practical application through the development of assessment documentation, case studies, and treatment plans. Prerequisites: DAAC 1304, DAAC 1319.</td>
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<tr>
<td>DAAC 1311</td>
<td>Counseling Theories</td>
<td>2-4-3</td>
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<td>This course is an examination of the major theories and current treatment modalities used in the field of counseling. Prerequisite: PSYT 1329. Recommended prerequisite: PSYC 2301.</td>
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<tr>
<td>DAAC 1319</td>
<td>Substance-Related &amp; Addictive Disorders</td>
<td>2-4-3</td>
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<td>An examination of the causes and consequences of addiction, the major drug classifications, and the counselor’s code of ethics. Attention is given to family systems, special populations &amp; diversity, prevention, intervention, &amp; relapse prevention, and legal and professional issues in addiction counseling. An overview of competencies and requirements for licensure in Texas is covered. Recommended: DAAC 1304 to be taken concurrently.</td>
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<tr>
<td>DAAC 2301</td>
<td>Therapeutic Communities in a Criminal Justice Setting</td>
<td>2-2-3</td>
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<td>The models of addiction counseling related to the treatment of incarcerated substance users are examined. This includes the application of ethical standards and laws that relate to addiction counseling. Information on relapse prevention and recovery programs is also covered. Prerequisites: DAAC 1304, DAAC 1309, DAAC 1319.</td>
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<tr>
<td>DAAC 2306</td>
<td>Substance Abuse Prevention I</td>
<td>2-2-3</td>
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<td>Identify evidence-based prevention strategies within a cultural context; identify risk and protective factors for substance use disorders; describe resources for prevention program planning; and explain program evaluation methods.</td>
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<tr>
<td>DAAC 2307</td>
<td>Addicted Family Intervention</td>
<td>2-4-3</td>
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<td>Examination of family systems focusing on the effects of addiction and recovery. Describe the effects of addiction on the family system; differentiate between various family treatment processes; identify the impact of addictive behaviors as they relate to diverse family structures; and analyze the roles of the family members in the addictive and recovery process. Therapeutic alternatives as they relate to the family from a multicultural and trans-generational perspective will be addressed. Prerequisite: DAAC 1319.</td>
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<tr>
<td>DAAC 2341</td>
<td>Counseling Alcohol and Other Drug Addictions</td>
<td>2-4-3</td>
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<td>This course is an advanced examination of skills, confidentiality and ethical guidelines applied in the counseling, treatment and recovery of substance use disorders. Required prerequisites: Departmental Approval, DAAC 1304, DAAC 1309, DAAC 2354, CMSW 1309, PSYT 1329, PSYT 2321, PSYT 2331.</td>
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<tr>
<td>DAAC 2353</td>
<td>Substance Abuse Prevention II</td>
<td>2-2-3</td>
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<td>In-depth exploration of research, evaluation methods and best practices in prevention program design.</td>
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<tr>
<td>DAAC 2354</td>
<td>Dynamics of Group Counseling</td>
<td>2-4-3</td>
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<td>Exploration of group counseling skills, techniques, and stages of group development, and confidentiality and ethics. Differentiate types of groups; describe the basic stages of the group process; demonstrate group management skills; produce client documentation; and identify issues of confidentiality. Prerequisites: Departmental Approval, CMSW 1309, DAAC 1304, DAAC 1319, PSYT 1329, PSYT 2321, PSYT 2331. Recommended prerequisite: PSYC 2301.</td>
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<tr>
<td>DAAC 2367</td>
<td>Practicum (or Field Experience) – Substance Abuse/Addiction Counseling</td>
<td>0-22-3</td>
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<td>This advanced placement helps students gain practical experience in the discipline, enhances skills, and integrates knowledge gained from the classroom. Direct supervision at an advanced level is provided by clinical professionals at the host agency. This course is the Capstone Experience for students exiting the program with a Certificate or Associates in Applied Science (AAS) Degree in Chemical Dependency Counseling and the Certificate in Criminal Justice Addictions. Prerequisites: Departmental Approval, CMSW 1309, DAAC 1304, DAAC 1309, DAAC 1319, DAAC 2301, DAAC 2307, DAAC 2341, DAAC 2354, PSYT 1329, PSYT 2321, PSYT 2331. See Mental Health Services admission requirement.</td>
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<tr>
<td>DFTG 1358</td>
<td>Computer-Aided Drafting and Design (N)</td>
<td>2-4-3</td>
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<td>See also ARCE</td>
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<tr>
<td>DFTG 1385</td>
<td>Electrical/Electronics Drafting</td>
<td>2-4-3</td>
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<td>A study of the principles of layout of electrical and electronic drawings, stressing modern representation used for block diagrams, schematic diagrams, logic diagrams, wiring/assembly drawings, printed circuit board layouts, motor control diagrams, power distribution diagrams, and electrical one-line diagrams. All drawing assignments will be computer generated. Prerequisite: DFTG 1409.</td>
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<tr>
<td>DFTG 1405</td>
<td>Technical Drafting</td>
<td>3-3-4</td>
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<td>Introduction to the principles of drafting to include terminology and fundamentals, including size and shape descriptions, projection methods, geometric construction, sections, auxiliary views, and reproduction processes.</td>
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<tr>
<td>DFTG 1409</td>
<td>Basic Computer-Aided Drafting</td>
<td>3-3-4</td>
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<td>An introduction to basic computer-aided drafting. Emphasis is placed on drawing setup; creating and modifying geometry; storing and retrieving predefined shapes; placing, rotating, and scaling objects, adding text and dimensions, using layers, coordinating systems; as well as input and output devices. Prerequisites: DFTG 1405 or concurrent enrollment.</td>
<td></td>
</tr>
</tbody>
</table>
DFTG 1417  Architectural Drafting - Residential  3-3-4
Architectural drafting procedures, practices, and symbols, including preparation of detailed working drawings for a residential structure with emphasis on light frame construction methods. All drawing assignments will be computer generated. Prerequisite: DFTG 1409.

DFTG 1491  Special Topics in Drafting and Design Technology/Technician General  2-4-4
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 will allow students to improve knowledge and skills in an area of interest or specialty through a research project.

DFTG 2317  Descriptive Geometry  2-4-3
Examination of the graphical solution to problems involving points, lines, and planes in space. Prerequisite: DFTG 1405 or concurrent enrollment.

DFTG 2323  Pipe Drafting  2-4-3
A study of pipe fittings, symbols, specifications and their applications to a piping process system. This application will be demonstrated through the creation of symbols and their usage in flow diagrams, plans, elevations, and isometrics. All drawing assignments will be computer generated. Prerequisite: DFTG 1409.

DFTG 2402  Machine Drafting  3-3-4
Production of detail and assembly drawings of machines, threads, gears, cams, tolerances and limit dimensioning, surface finishes, and precision drawings. Prerequisites: DFTG 1409.

DFTG 2412  Technical Illustration and Presentation  3-3-4
Introduction to pictorial drawings as used in industrial catalogs, assembly sheets, newspaper publications and promotional literature. Topics include pictorial drawing including isometrics, oblique, perspectives, charts, and graphs, shading, and use of different media including pencil and ink. Prerequisite: DFTG 1405, or concurrent enrollment

DFTG 2421  Topographical Drafting  3-3-4
A course in map drafting. Emphasis is given to plotting of surveyors field notes, plotting elevations, contour drawings, plan and profiles, and laying out traverses. All drawing assignments will be computer generated. Prerequisite: DFTG 1409.

DFTG 2438  Final Project - Advanced Drafting  3-3-4
A general drafting course in which students participate in a simulated project. The process from conception to conclusion is studied. All work done in this class will typify actual industrial projects. An employment resume, cover letter, and portfolio will be completed as part of the course requirements. All projects will be completed with the use of Computer-Aided Drafting (AutoCAD). Prerequisites: DFTG 1358, DFTG 1405, DFTG 1409, DFTG 2317, DFTG 2402, DFTG 2412, DFTG 2440 and ARCE 1452.

DFTG 2440  Solid Modeling/Design  3-3-4
A computer-aided modeling course. Development of three-dimensional drawings and models from engineering sketches and orthographic drawings and utilization of three-dimensional models in design work. Prerequisite: DFTG 1409.

DS— Developmental Studies
The credit received from these courses is not transferable and cannot be applied towards degree completion.

DSMA 0100  BASE NCBO Developmental Mathematics  1-0-1
The BASE NCBO Developmental Mathematics supports students in developing skills, strategies, and reasoning needed to succeed in mathematics, including communication and appropriate use of technology. Topics include the study of numeracy and the real number system; algebraic concepts, notation, and reasoning; quantitative relationships; mathematical models; and problem solving. This course will assist the student in developing the critical-thinking and problem-solving skills necessary for college level mathematics courses. This intervention is designed specifically for students assessed at BASE levels 3-4 in the TSIA and must be part of a student’s co-enrollment (co-requisite) in DSMA0300 Developmental Mathematics I. The intervention is a mainstreamed intensifier providing additional, just-in-time instructional support for the student’s success in DSMA0300. Co-Requirement: DSMA 0300. Course requires a granted petition from the department; please email dev.studies@ctcd.edu for help.

DSMA 0101  Base NCBO Foundations of Algebra  1-0-1
The BASE NCBO Developmental Mathematics supports students in developing skills, strategies, and reasoning needed to succeed in mathematics, including communication and appropriate use of technology. Topics include the study of numeracy and the real number system; algebraic concepts, notation, and reasoning; quantitative relationships; mathematical models; and problem solving. This intervention is designed specifically for students assessed at BASE levels 3-4 in the TSIA and must be part of a student’s co-enrollment (co-requisite) in DSMA0491 NCBO Foundations of Algebra or DSMA0499 NCBO Developmental Mathematics. The intervention is a mainstreamed intensifier providing additional, just-in-time instructional support for the student’s success in DSMA0491 or DSMA0499. This course will assist the student in developing the critical-thinking and problem-solving skills necessary for college level mathematics courses. Co-require: DSMA 0491 or DSMA 0499. Course requires a granted petition from the department; please email dev.studies@ctcd.edu for help.

DSMA 0190  NCBO STEM Intermediate Algebra Topic  0-1-1
NCBO STEM Intermediate Algebra Topics is designed to help students successfully complete their freshman level STEM mathematics in one term. This is accomplished through just-in-time interventions that use innovative learning approaches that, compared to traditional lecture-only classes, more effectively and efficiently prepare students to advance to PreCalculus. This course specifically focuses on the algebra concepts necessary for the student to complete their first level STEM mathematics concurrently to include relations and functions, inequalities, algebraic expressions and equations (absolute value, polynomial, radical, rational), with a special emphasis on linear and quadratic expressions and equations. Prerequisite: Department approval required.
**DSMA 0306 Introductory Algebra**  
3-0-3  
Introductory Algebra is designed to provide instruction and practice in performing fundamental algebraic operations involving real numbers, linear equations and inequalities, system of linear equations, polynomials, factoring, graphing, and selected application problems. Prerequisite: Appropriate TSI score or TSI exemption or completion of the appropriate level of the Developmental studies course. (Offered at locations that do not have a lab facility)

**DSMA 0307 Intermediate Algebra**  
3-0-3  
Intermediate Algebra requires an understanding of the topics taught in DSMA 0306. This course teaches such topics as rational expressions, radical, exponential and logarithmic equations, complex numbers, nonlinear inequalities, systems of nonlinear equations, quadratic equations, and functions and their graphs. This course will assist the student in developing the critical-thinking and problem-solving skills necessary for college-level mathematics courses. Prerequisite: Appropriate TSI score or TSI exemption or completion of the appropriate level of the Developmental studies course. (Offered at locations that do not have a lab facility)

**DSMA 0394 NCBO Developmental Math for Statistics**  
3-0-3  
NCBO Developmental Math for Statistics is the developmental mathematics co-requisite course designed to be completed with MATH 1342 Elementary Statistical Methods concurrently. This is accomplished through developmental education interventions that use innovative learning approaches that, compared to traditional lecture-only classes, more effectively and efficiently prepare students to advance. This course specifically focuses on the concepts of Developmental Mathematics I & II necessary for the student to complete Elementary Statistical Methods concurrently. The course includes an in-depth study and application of numeracy and the real number system; algebraic concepts, notation, and reasoning; quantitative relationships; mathematical models; and problem solving. Additional topics include: creating & interpreting graphs, solving & graphing linear equations and inequalities. This course will assist the student in developing the critical-thinking and problem-solving skills necessary for other developmental or college-level courses. Concurrent Enrollment: MATH-1342

**DSMA 0399 NCBO Developmental Mathematics**  
3-1-3  
This is a Non-Course-Based Option (NCBO) course, designed to accelerate the student through the developmental math. Emphasis is placed on those skills needed by the student to advance to a credit bearing mathematics course. This course is only offered in the evening in Summer.

**DSMA 0491 NCBO Foundations of Algebra**  
5-1-4  
This is a Non-Course-Based-Option (NCBO) course, designed to accelerate the student through Developmental Math. This course is designed specifically for those students that can be successful in the lower levels of the mathematics sequence in a faster paced setting but still need the lecture component of the course. This course will develop the students’ skills starting with arithmetic through basic algebra to include graphing and operations of polynomials. Lecture class: Students will be required to complete 16 hours in a computer lab outside of regular class time. Course requires a granted petition from the department; please email dev.studies@ctcd.edu for help.

**DSMA 0492 NCBO Beginning Algebra**  
3-1-4  
This is a Non-Course-Based (NCBO) course, designed specifically for students through the developmental math while being concurrently enrolled in Contemporary Mathematics (MATH 1332). Emphasis is placed on those skills needed by the student to be successful in a paired-class.

**DSMA 0493 NCBO Intermediate Algebra**  
3-1-4  
This is a Non-Course-Based-Option (NCBO) course, designed to accelerate the student through the developmental math while being concurrently enrolled in College Algebra (MATH 1314). Emphasis is placed on those skills needed by the student to be successful in a paired-course. Lecture class: Students will be required to complete 16 hours in a computer lab outside of regular class time. Prerequisite: Appropriate TSI score or TSI exemption or completion of the appropriate level of the Developmental studies course.

**DSMA 0499 NCBO Developmental Mathematics**  
5-1-4  
This is a Non-Course-Based-Option (NCBO) course, designed to accelerate the student through the developmental math. Emphasis is placed on those skills needed by the student to advance to a credit bearing mathematics course. Prerequisite: Appropriate TSI score or TSI exemption or completion of the appropriate level of the Developmental studies course. Course requires a granted petition from the department; please email dev.studies@ctcd.edu for help.

**DSRE 0302 Fundamentals of Reading I**  
3-0-3  
Fundamentals of Reading I (DSRE 0302) is a fundamental reading course designed to aid students in acquiring and improving the basic skills needed for reading college-level materials. Emphasis will be on word attack skills, vocabulary development, comprehension, fluency, and study and test-taking skills. (Offered at locations that do not have a lab facility) Prerequisite: Appropriate TSI score or TSI exemption or completion of the appropriate level of the Developmental studies course.

**DSRE 0303 Fundamentals of Reading II**  
3-0-3  
Fundamentals of Reading II (DSRE 0303) is designed to aid students in developing and reinforcing the skills needed for reading college-level materials. This course was developed for those who have successfully completed Developmental Reading I (DSRE 0300 or DSRE 0302). Emphasis will be on vocabulary development, literal and critical comprehension skills, study and test-taking skills, and fluency. Prerequisite: Appropriate TSI score or TSI exemption or completion of the appropriate level of the Developmental studies course. (Offered at locations that do not have a lab facility)

**DIRW 0403 Developmental Integrated Reading and Writing I**  
4-0-3  
Developmental Integrated Reading and Writing I is designed to help students develop reading and writing skills necessary to read academic texts and write essays. This course supports students in developing skills, strategies, and reasoning needed to succeed in English classes, including appropriate use of technology. Topics include the study of word attack skills, vocabulary development, comprehension, fluency, sentence, paragraph, and essay development, grammar and usage problems as they occur in the essays, and study and test-taking skills. This course is designed specifically for students assessed at BASE levels 3-4 in the TSIA and must be part of a student’s co-enrollment (co-requisite) in DIRW 0200 BASE NCBO Developmental Reading and Writing. This course will assist the student in developing the critical reading and academic writing skills necessary for college-level English courses.
### DIRW 0413 Developmental Integrated Reading and Writing II 3-1-4
The Integrated Reading and Writing course is designed to accelerate a student through Reading II and Writing II by combining both courses into a single semester course. Emphasis is placed on those reading and writing skills and abilities needed by the student for him or her to advance to a credit bearing English Composition course. DIRW 0413 is a prerequisite for ENGL 1301 for students who score below the college requirement set by the TSI. Prerequisite: Appropriate TSI score or TSI exemption or completion of the appropriate level of the Developmental studies course.

### ECON Economics (T)

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ECON 2301</td>
<td>Principles of Macroeconomics</td>
<td>3-0-3</td>
</tr>
<tr>
<td>ECON 2302</td>
<td>Principles of Microeconomics</td>
<td>3-0-3</td>
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</tbody>
</table>

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.

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.

### EDUC Education (T) see also TECA

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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>EDUC 1100</td>
<td>Learning Framework</td>
<td>1-0-1</td>
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<tr>
<td>EDUC 1301</td>
<td>Introduction to the Teaching Profession</td>
<td>3-1-3</td>
</tr>
<tr>
<td>EDUC 2301</td>
<td>Introduction to Special Populations</td>
<td>3-1-3</td>
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</tbody>
</table>

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.

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; provides students with opportunities to participate in early field observations at all levels of P-12 schools with varied and diverse student populations; provides students with support from college and school faculty, preferably in small cohort groups, for the purpose of introduction to and analysis of the culture of schooling and classrooms; course content should be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards; and course must include a minimum of 16 contact hours of field experience in P-12 classrooms. Prerequisite: EDUC 1301

An enriched, integrated pre-service course and content experience that: provides an overview of schooling and classrooms from the perspectives of language, gender, socioeconomic status, ethnic and academic diversity, and equity with an emphasis on factors that facilitate learning; provides students with opportunities to participate in early field observations of P-12 special populations; should be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards; must include a minimum of 16 contact hours of field experience in P-12 classrooms with special populations. Prerequisite: EDUC 1301

### ELMT Computer Information Technology and Systems (N) see also BCIS, CETT, COSC, CPMT, IMED, ITCC, ITNW, ITSC, ITSE, ITSW, ITSY

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<tr>
<td>ELMT 2435</td>
<td>Certified Electronics Technician Training</td>
<td>3-3-4</td>
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</table>

Review of electronics concepts and principles in preparation for sitting for a certification examination administered by an outside organization or agency. The purpose of this course is to prepare the student for the International Society of Certified Electronics Technicians Associate CET exam. Prerequisite: CETT 1449. Scheduled for December 2020 deactivation

### ELPT Construction Technology (N) see also CBFM, CNBT, CRPT, MBST, PFPB and WDWK

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ELPT 1429</td>
<td>Residential Wiring</td>
<td>3-3-4</td>
</tr>
</tbody>
</table>

Wiring methods for single family and multi-family dwellings. Includes load calculations, service entrance sizing, proper grounding techniques, and associated safety procedures.

### EMAP Public Administration/Homeland Security (N) see also HMSY

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>EMAP 1400</td>
<td>Principles of Basic Emergency Management</td>
<td>4-0-4</td>
</tr>
<tr>
<td>EMAP 2300</td>
<td>Developing Volunteer Resources and Decision Making</td>
<td>3-0-3</td>
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</tbody>
</table>

Overview of the Texas Emergency Management System and the concepts of emergency management and its integration of systems, basic definitions, identification of hazards, the role of the local emergency manager, including interaction among various government entities. This course is equivalent to the Texas Department of Emergency Management and the Federal Emergency Management Agency courses G230 and G610.

Management of volunteer services. Emphasizes decision-making, problem solving, and effective donation management planning and implementation. This course is equivalent to the Texas Department of Emergency Management and the Federal Emergency Management Agency courses G241 and G288.
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>EMAP 2301</td>
<td>Leadership and Effective Communication</td>
<td>3-0-3</td>
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<td></td>
<td>Analysis of personal and group dynamics in an emergency management setting. Examines the interpretation of the spoken and unspoken word and the effective utilization of public information processes of print, radio, and television media. This course is equivalent to the Texas Department of Emergency Management and the Federal Emergency Management Agency courses G240 and G242.</td>
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<tr>
<td>EMAP 2302</td>
<td>Managing Mass Casualty and Fatality Incidents</td>
<td>3-0-3</td>
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<td>Disaster scene control involving large numbers of casualties and fatalities; coordination of the responding agencies. Includes observation and critique of mass casualty disaster drills and critical incident stress debriefing.</td>
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<tr>
<td>EMAP 2355</td>
<td>Disaster Recovery</td>
<td>3-0-3</td>
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<td></td>
<td>Policies, concepts, and procedures of recovery. Addresses the various federal and state assistance programs. Emphasizes coordination of damage assessment, preparing documentation, and recovery procedures. This course is equivalent to the Texas Department of Emergency Management and the Federal Emergency Management Agency course G620.</td>
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<tr>
<td>EMSP 1147</td>
<td>Pediatric Life Support</td>
<td>1-0-1</td>
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<td></td>
<td>Theory and skills necessary for the management of pediatric or neonatal emergencies. This course was designed to be repeated multiple times to improve student proficiency.</td>
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<tr>
<td>EMSP 1160</td>
<td>Clinical-Emergency Medical Technology/Technician</td>
<td>0-6-1</td>
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<td></td>
<td>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. Upon successful completion of this course and EMSP 1401, students are eligible to take the exam to be certified as an Emergency Medical Technician. This course is only offered with EMSP 1401. See also admissions requirements.</td>
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<tr>
<td>EMSP 1170</td>
<td>Rapid Patient Assessment (Europe only)</td>
<td>1-0-1</td>
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<tr>
<td></td>
<td>The course is designed to train medical care providers to determine the seriousness of a patient’s condition in the first few minutes of a patient encounter. It focuses on the “Sick not Sick” method of assessment; a systematic initial assessment aimed at recognizing life threatening conditions. The method is then applied to multiple scenarios.</td>
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<tr>
<td>EMSP 1204</td>
<td>EMT Refresher</td>
<td>1-2-2</td>
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<tr>
<td></td>
<td>Update and review theory and skills necessary to meet national and/or state requirements for remediation or recertification as an Emergency Medical Technician (EMT).</td>
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<tr>
<td>EMSP 1271</td>
<td>Sports and Physical Training Injuries (Europe only)</td>
<td>2-0-2</td>
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<td></td>
<td>The course is designed for the pre-hospital care provider emphasizing musculoskeletal injuries incurred during physical activity. The course is designed to build upon and extend the knowledge gained by pre-hospital care providers during an Emergency Medical Technician certification course; or similar training.</td>
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<tr>
<td>EMSP 1272</td>
<td>EMT-B Refresher (Europe only)</td>
<td>2-0-2</td>
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<td></td>
<td>The course is designed to refresh the Certified Emergency Medical Technician Basic with changes in trends; policies; and procedures. This course includes a review of basic knowledge and skills required to meet the National Registry of Emergency Medical Technician Basic Recertification. The course follows the Department of Transportation Emergency Medical Technician Refresher curriculum and the new education standards.</td>
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<tr>
<td>EMSP 1273</td>
<td>Advanced Airway Management (Europe only)</td>
<td>2-0-2</td>
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<td></td>
<td>The anatomy and physiology of the respiratory system; the use of airway adjuncts; oxygen therapy; and airway care are reviewed. Then anatomical considerations and the steps in the performance of endotracheal and esophageal intubation in the adult are considered. Endotracheal intubation in the infant is presented. The steps to be followed in assisting a Paramedic during intubation are presented.</td>
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<tr>
<td>EMSP 1291</td>
<td>Special Topics in Emergency Medical Technology/Technician</td>
<td>2-0-2</td>
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<td></td>
<td>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.</td>
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<tr>
<td>EMSP 1305</td>
<td>Emergency Care Attendant</td>
<td>1-4-3</td>
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<td></td>
<td>Preparation for certification as an Emergency Care Attendant (ECA)/Emergency Medical Responder (EMR).</td>
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<tr>
<td>EMSP 1338</td>
<td>Introduction to Advanced Practice</td>
<td>3-0-3</td>
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<td>Fundamental elements associated with emergency medical services to include preparatory practices, pathophysiology, medication administration, and related topics. Prerequisites: Current CPR certification, National Registry certification, or Texas State certification as an Emergency Medical Technician (EMT). See also admission requirements.</td>
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<tr>
<td>EMSP 1355</td>
<td>Trauma Management</td>
<td>2-3-3</td>
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<td></td>
<td>Knowledge and skills in the assessment and management of patients with traumatic injuries. Prerequisites: Current CPR certification, National Registry certification, or Texas State certification as an Emergency Medical Technician (EMT). Co-requisite: EMSP 1356 and EMSX 1355. See also admission requirements.</td>
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<tr>
<td>EMSP 1356</td>
<td>Patient Assessment and Airway Management</td>
<td>2-3-3</td>
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<td></td>
<td>Knowledge and skills required to perform patient assessment, airway management, and artificial ventilation. Prerequisites: Current CPR certification, National Registry certification, or Texas State certification as an Emergency Medical Technician (EMT). Co-requisite: EMSP 1355 and EMSX 1356. See also admission requirements.</td>
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<tr>
<td>Course Code</td>
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<tr>
<td>EMSP 1391</td>
<td>Special Topics in Emergency Medical Technology/Technician</td>
<td>2-4-3</td>
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<tr>
<td>EMSP 1401</td>
<td>Emergency Medical Technician-Basic</td>
<td>2-7-4</td>
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<tr>
<td>EMSP 2135</td>
<td>Advanced Cardiac Life Support</td>
<td>1-0-1</td>
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<tr>
<td>EMSP 2143</td>
<td>Assessment Based Management</td>
<td>0-3-1</td>
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<tr>
<td>EMSP 2160</td>
<td>Clinical – Emergency Medical EMT Paramedic</td>
<td>0-3-1</td>
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<tr>
<td>EMSP 2164</td>
<td>Practicum-Emergency Medical Technology/Technician EMT Paramedic</td>
<td>0-10-1</td>
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<tr>
<td>EMSP 2206</td>
<td>Emergency Pharmacology</td>
<td>2-0-2</td>
</tr>
<tr>
<td>EMSP 2262</td>
<td>Clinical-Emergency Medical Technology/Technician EMT Paramedic</td>
<td>0-10-2</td>
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<tr>
<td>EMSP 2263</td>
<td>Clinical-Emergency Medical Technology/Technician EMT Paramedic</td>
<td>0-10-2</td>
</tr>
<tr>
<td>EMSP 2300</td>
<td>Methods of Teaching Emergency Medical Service</td>
<td>2-2-3</td>
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<tr>
<td>EMSP 2305</td>
<td>EMS Operations</td>
<td>3-0-3</td>
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<tr>
<td>EMSP 2330</td>
<td>Special Populations</td>
<td>2-2-3</td>
</tr>
<tr>
<td>EMSP 2434</td>
<td>Medical Emergencies</td>
<td>3-3-4</td>
</tr>
</tbody>
</table>

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.

Preparation for certification as an Emergency Medical Technician (EMT). Upon successful completion of this course and EMSP 1160, students are eligible to take the exam to be certified as an Emergency Medical Technician by the Texas Department of State Health Services and/or National Registry of EMT. Prerequisite: Current CPR certification. Co-requisite: EMSX 1401. See also admission requirements.

Theory and skills necessary for the management of cardiovascular emergencies as specified by the American Heart Association (AHA) guidelines. This course was designed to be repeated multiple times to improve student proficiency.

A summative experience covering comprehensive, assessment-based patient care management for the paramedic level. Prerequisites: EMSP 2444, EMSP 2434 and EMSP 2263. See also admission requirements.

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Co-requisite EMSP 2458. See also admission requirements.

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Upon successful completion of this internship course, students are eligible to take the exam to be certified as a Paramedic by the National Registry and then apply for Paramedic certification by the Texas Department of State Health Services. Prerequisites: EMSP 2262 and EMSP 2263. See also admission requirements.

A study of drug classifications, actions, therapeutic uses, adverse effects, routes of administration, and calculation of dosages. Prerequisites: Current CPR certification, National Registry certification, or Texas State certification as an Emergency Medical Technician (EMT). See also admission requirements.

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by clinical professional. Upon successful completion of this course, students are eligible to take the exam to be certified as an Advanced EMT by the National Registry and then apply for Paramedic certification by the Texas Department of State Health Services. This course is designed to meet the clinical requirements for the Advanced EMT portion of the program. Prerequisites: EMSP 1356 and EMSP 1355. Co-requisites: EMSP 2444 and EMSP 2434. See also admission requirements.

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by clinical professional. Upon successful completion of this course, students are eligible to enter their Field Internship (EMSP 2164). Prerequisites: EMSP 2262. Co-requisites: EMSP 2330, EMSP 2305, and EMSP 2143. See also admission requirements.

Focuses on instructional preparation, presentation, and evaluation, also essential knowledge, skills, and practices required to provide quality EMS educational programs applicable to the adult learner.

Knowledge and skills to safely manage multi-casualty incidents and rescue situations; utilize air medical resources; identify hazardous materials and other specialized incidents. Upon successful completion of this course, students are eligible to enter their Field Internship (EMSP 2164). Prerequisites: EMSP 2444, EMSP 2262 and EMSP 2434. Co-requisites: EMSP 2305, EMSP 2263, and EMSP 2143. See also admission requirements.

Knowledge and skills necessary to assess and manage ill or injured patients in diverse populations to include neonatology, pediatrics, geriatrics, and other related topics. Upon successful completion of this course, students are eligible to enter their Field Internship (EMSP 2164). Prerequisites: EMSP 2444, EMSP 2262 and EMSP 2434. Co-requisites: EMSP 2305, EMSP 2263, EMSP 2143 and EMSX 2330. See also admission requirements.

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. Upon successful completion of this course, the student is eligible to take the exam to be certified as a Paramedic by the National Registry and then apply for Paramedic certification by the Texas Department of State Health Services. Prerequisites: EMSP 1355 and EMSP 1356. Co-requisites: EMSP 2444, EMSP 2262, EMSP 1338 and EMSX 2434. See also admission requirements.
ENGL English (T)

ENGL 1301 Composition I 3-0-3
A study of the principles and techniques of written compositions including sentence structure, paragraph development, and paper organization. Also stresses the development of critical thinking as it applies to the textual analysis of expository prose. Prerequisite: Appropriate placement score or TSI exemption or completion of the appropriate level of Developmental Studies course.

ENGL 1302 Composition II 3-0-3
A continuation of ENGL 1301, emphasizing in more depth the principles and techniques of written compositions. Focus of compositions is on the development of critical thinking as it relates to the textual analysis of literary genres: the short story, poetry, drama, and the novel. Formal research paper is required. Prerequisite: ENGL 1301, or equivalent, with a grade of “C” or above.

ENGL 2307 Creative Writing I 3-0-3
This course provides practical experience in the techniques of imaginative writing. It is designed to engage students in practical criticism and contemporary trends while emphasizing the development of creative skills. Students will receive guidance and instruction in the skills and craft necessary to construct successful fiction (short stories) and poetry. Prerequisite: ENGL 1301, or equivalent, with a grade of “C” or above.

ENGL 2311 Technical and Business Writing 3-0-3
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. Prerequisite: ENGL 1301 or equivalent, with a grade of “C” or above.

ENGL 2322 British Literature I 3-0-3
A survey of English literature from Beowulf to the major writers of the 18th Century. Although careful attention is given to the historical, social, and intellectual developments that gave rise to the literature, the emphasis of the course is on individual selections themselves as outstanding expressions of the English literary heritage. The course employs critical reading, thinking, and writing skills in the analysis of a wide variety of selected readings. Prerequisites: ENGL 1301 and 1302, or equivalent, with a grade of “C” or above.

ENGL 2323 British Literature II 3-0-3
A survey of English literature from the early Romantic writers to the Twentieth Century. Although careful attention is given to the historical, social, and intellectual developments that gave rise to the literature, the emphasis of the course is on the individual selections themselves as outstanding expressions of the English literary heritage. The course employs critical reading, thinking, and writing skills in the analysis of a wide variety of selected readings. Prerequisites: ENGL 1301 and 1302, or equivalent, with a grade of “C” or above.

ENGL 2327 American Literature I 3-0-3
A survey of American literature from selected Pre-Colonial and Colonial literature to selected major writers of the American Renaissance period. Although careful attention is given to the historical, social, and intellectual developments that gave rise to the literature, the emphasis of the course is on the individual selections themselves as outstanding expressions of our American literary heritage. The course employs critical reading, thinking, and writing skills in the analysis of a wide variety of selected readings. Prerequisites: ENGL 1301 and 1302, or equivalent, with a grade of “C” or above.

ENGL 2328 American Literature II 3-0-3
A survey of American literature beginning with Walt Whitman and ending with selected major writers from the present. Although careful attention is given to the historical, social, and intellectual developments that gave rise to the literature, the emphasis is on the individual selections themselves as outstanding expressions of our American literary heritage. The course employs critical reading, thinking, and writing skills in the analysis of a wide variety of selected readings. Prerequisites: ENGL 1301 and 1302, or equivalent, with a grade of “C” or above.

ENGL 2332 World Literature I 3-0-3
A survey of the major works of world writers from ancient epics to Renaissance poetry. Emphasis will be placed on individual selections of literature as outstanding examples of literary masterpieces and on significant themes represented across the literature. Social, intellectual and historical developments will be examined to highlight literary development through the ages. The course employs critical reading, thinking, and writing skills in an analysis of a wide variety of selected readings. Prerequisites: ENGL 1301 and 1302, or equivalent, with a grade of “C” or above.

ENGL 2333 World Literature II 3-0-3
A survey of the major works of world writers from the Enlightenment to the Twenty-first Century. Emphasis will be placed on individual selections of literature as outstanding examples of literary masterpieces and on significant themes represented across the literature. Social, intellectual and historical developments will be examined to highlight literary development through the ages. The course employs critical reading, thinking, and writing skills in an analysis of a wide variety of selected readings. Prerequisites: ENGL 1301 and 1302, or equivalent, with a grade of “C” or above.
ENVR  Environmental Science (T)

ENVR 1401 Environmental Science I 3-3-4
A survey of the forces, including humans, that shape our physical and biologic environment, and how they affect life on Earth. Introduction to the science and policy of global and regional environmental issues, including pollution, climate change, and sustainability of land, water, and energy resources. Laboratory activities will reinforce concepts discussed in lecture. Prerequisites: Appropriate placement score or TSI exemption or completion of the appropriate level of Developmental Studies course. Co-requisite: ENVX 1401.

FIRT  Fire Protection (N)

FIRT 1301 Fundamentals of Fire Protection 3-0-3
Orientation to the fire service, career opportunities, and related fields. This course meets Fire and Emergency Services Higher Education (FESHE) Model Curriculum core requirements.

FIRT 1303 Fire and Arson Investigation I 3-0-3
In-depth study of basic fire and arson investigation practices. Emphasis on fire behavior principles related to fire cause and origin determination.

FIRT 1307 Fire Prevention Codes & Inspections 3-0-3
Study of local building and fire prevention codes. Emphasis on fire prevention inspections, practices, and procedures.

FIRT 1309 Fire Administration I 3-0-3
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.

FIRT 1311 Fire Service Hydraulics 3-0-3
Principles of the use of water in fire protection. Includes application of hydraulic principles to analyze and solve water supply problems. Not offered in Texas.

FIRT 1315 Hazardous Materials I 3-0-3
Study of the chemical characteristics and behavior of various materials. Topics include storage, transportation, handling hazardous emergency situations, and the most effective methods of hazard mitigation.

FIRT 1319 Firefighter Health and Safety 3-0-3
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.

FIRT 1329 Building Codes and Construction 3-0-3
Examination of building codes and requirements, construction types, and building materials. Topics include walls, floorings, foundations, and various roof types and the associated dangers of each. Not offered in Texas.

FIRT 1333 Fire Chemistry I 3-0-3
Introduction to the chemical nature and properties of inorganic compounds as related to the fire service. Topics include fundamental laws of chemistry, states of matter, gas laws, chemical bonding, and thermodynamics with applications to various industrial processes. Not offered in Texas.

FIRT 1338 Fire Protection Systems 3-0-3
Design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection, and portable fire extinguishers. This course meets Fire and Emergency Services Higher Education (FESHE) Model Curriculum core requirements.

FIRT 1347 Industrial Fire Protection 3-0-3
Study of industrial emergency response teams and specific concerns related to business and industrial facilities. Not offered in Texas.

FIRT 1349 Fire Administration II 3-0-3
In-depth study of fire service management as pertaining to budgetary requirements, administration, organization of divisions within the fire service, and relationships between the fire service and outside agencies.

FIRT 2309 Firefighting Strategies and Tactics I 3-0-3
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.

FIRT 2331 Firefighting Strategies and Tactics II 3-0-3
Continuation of Firefighting Strategies and Tactics I. Emphasis on use of incident command in large scale command problems and other specialized fire problems. Not offered in Texas.

FREN  French (T)

FREN 1411 Beginning French I 4-2-4
This course includes basic grammar drill, pronunciation drill, simple reading, and conversation.
**FREN 1412 Beginning French II** 4-2-4
Elementary grammar is completed. Pronunciation drill and reading-based conversation are continued. Common conversational phrases are stressed. Prerequisite: FREN 1411 with a grade of “C” or above.

**FREN 2311 Intermediate French I** 3-0-3
This course includes grammar review, composition, and reading of French masterpieces, with conversation based on material read. Prerequisite: FREN 1141 and 1412 with a grade of “C” or above.

**FREN 2312 Intermediate French II** 3-0-3
This course continues reading of French masterpieces and drill on syntax as needed for reading, composition, and conversation. Prerequisite: FREN 2311 with a grade of “C” or above.

**GEOG Geography (T)**

**GEOG 1301 Physical Geography** 3-0-3
This course introduces students to the processes that drive Earth’s physical systems. Students will explore the relationships among these physical systems, with emphasis on weather and climate, water, ecosystems, geologic processes and landform development, and human interactions with the physical environment.

**GEOG 1302 Human Geography** 3-0-3
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.

**GEOG 1303 World Regional Geography** 3-0-3
This course is an introduction to the world’s major regions seen through their defining physical, social, cultural, political, and economic features. These regions are examined in terms of their physical and human characteristics and their interactions. The course emphasizes relations among regions on issues such as trade, economic development, conflict, and the role of regions in the globalization process.

**GEOL Geology (T)**

**GEOL 1403 Physical Geology** 3-3-4
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. Laboratory activities will cover methods used to collect and analyze earth science data. Co-requisite: GEOX 1403

**GEOL 1404 Historical Geology** 3-3-4
A comprehensive survey of the history of life and major events in the physical development of Earth as interpreted from rocks and fossils. Laboratory 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. Prerequisite: GEOL 1403. Co-requisite: GEOX 1404

**GEOL 1405 Environmental Science** 3-2-4
A survey of the forces, including humans, that shape our physical and biologic environment, and how they affect life on Earth. Introduction to the science and policy of global and regional environmental issues, including pollution, climate change, and sustainability of land, water, and energy resources. Laboratory activities will cover methods used to collect and analyze earth science data.

**GERM German (T)**

**GERM 1411 Beginning German I** 4-2-4
This course includes basic grammar drill, pronunciation drill, simple reading, and conversation.

**GERM 1412 Beginning German II** 4-2-4
Elementary grammar is completed. Pronunciation drill and reading-based conversation are continued. Common conversational phrases are stressed. Prerequisite: GERM 1411 with a grade of “C” or above.

**GERM 2311 Intermediate German I** 3-0-3
This course includes grammar review, composition and practice in conversation, with readings in contemporary German writings. Includes short stories and some longer works, providing a conversational basis. Prerequisite: GERM 1141 and 1412 with a grade of “C” or above.

**GERM 2312 Intermediate German II** 3-0-3
This course continues reading in contemporary German writings and drill on syntax as needed for reading, composition, and conversation. Prerequisite: GERM 2311 with a grade of “C” or above.

**GOVT Government (T)**

**GOVT 2304 Introduction to Political Science** 3-0-3
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.

**GOVT 2305 Federal Government** 3-0-3
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.
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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>GOVT 2306</td>
<td>Texas Government</td>
<td>3-0-3</td>
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<tr>
<td>HAMG 1313</td>
<td>Front Office Management</td>
<td>3-0-3</td>
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<tr>
<td>HAMG 1321</td>
<td>Introduction to the Hospitality Industry</td>
<td>3-0-3</td>
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<tr>
<td>HAMG 1340</td>
<td>Hospitality Legal Issues</td>
<td>3-0-3</td>
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<tr>
<td>HAMG 1342</td>
<td>Guest Room Management</td>
<td>3-0-3</td>
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<tr>
<td>HAMG 2301</td>
<td>Principles of Food and Beverage Operations</td>
<td>3-0-3</td>
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<tr>
<td>HAMG 2307</td>
<td>Hospitality Marketing and Sales</td>
<td>3-0-3</td>
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<tr>
<td>HAMG 2332</td>
<td>Hospitality Financial Management</td>
<td>3-0-3</td>
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<tr>
<td>HAMG 2337</td>
<td>Hospitality Facilities Management</td>
<td>3-0-3</td>
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<tr>
<td>HAMG 2388</td>
<td>Internship - Hospitality Administration and Management</td>
<td>0-9-3</td>
</tr>
<tr>
<td>HART 1341</td>
<td>Residential Air Conditioning</td>
<td>2-4-3</td>
</tr>
<tr>
<td>HART 1401</td>
<td>Basic Electricity for HVAC</td>
<td>3-3-4</td>
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<tr>
<td>HART 1403</td>
<td>Air Conditioning Control Principles</td>
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<tr>
<td>HART 1407</td>
<td>Refrigeration Principles</td>
<td>3-3-4</td>
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<tr>
<td>HART 1445</td>
<td>Gas and Electric Heating</td>
<td>3-3-4</td>
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<tr>
<td>HART 2341</td>
<td>Commercial Air Conditioning</td>
<td>2-4-3</td>
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<tr>
<td>HART 2342</td>
<td>Commercial Refrigeration</td>
<td>2-4-3</td>
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<tr>
<td>HART 2431</td>
<td>Advanced Electricity for HVAC</td>
<td>3-3-4</td>
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</tbody>
</table>

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.

HAMG Hospitality Management (N) see also CHEF, IFWA, PSTR, RSTO and TRVM

Functions of front office operations as they relate to customer service. Includes a study of front office interactions with other departments in the lodging operation.

An exploration of the elements and career opportunities within the multiple segments of the hospitality industry.

A course in legal and regulatory requirements that impact the hospitality industry. Topics include Occupational Safety and Health Administration (OSHA), labor regulations, tax laws, tip reporting, franchise regulations, and product liability laws.

A study of the working relationship among housekeeping, front office, and maintenance in the lodging industry.

An overview of food and beverage management in various hospitality environments. Emphasizes cost controls from procurement to marketing and sales.

Identification of the core principles of marketing and sales in their impact on the hospitality industry.

Methods and application of financial management within the hospitality industry. Primary emphasis on sales accountability, internal controls, and report analysis.

Identification of hospitality building systems and facilities; to include sustainability and risk management.

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. Prerequisite: Consent of the program coordinator.

A study of components, applications, and installation of mechanical air conditioning systems including operating conditions, troubleshooting, repair, and charging of air conditioning systems. Prerequisite or Co-requisite: HART 1401 and 1407.

Principles of electricity as required by HVAC, including proper use of test equipment, electrical circuits, and component theory and operation. Prerequisite: department consent required.

A basic study of HVAC and refrigeration controls; troubleshooting of control components; emphasis on use of wiring diagrams to analyze high and low voltage circuits; a review of Ohm’s law as applied to air conditioning controls and circuits. Prerequisite: HART 1401 and 1407.

An introduction to the refrigeration cycle, heat transfer theory, temperature/pressure relationship, refrigerant handling, refrigeration components and safety. Prerequisite: Department consent required.

Study of the procedures and principles used in servicing heating systems including gas fired furnaces and electric heating systems. Prerequisite or Co-requisite HART 1401.

A study of components, applications, and installation of air conditioning systems with capacities of 25 tons or less. Prerequisits: HART 1401 and 1407.

Theory and practical application in the maintenance of commercial refrigeration; medium and low temperature applications and ice machines. Prerequisites: HART 1401 and 1407.

Advanced electrical instruction and skill building in installation and servicing of air conditioning and refrigeration equipment including detailed instruction in motors and power distribution, motors, motor controls, and application of solid state devices. Prerequisites: HART 1401, 1403, 1407 and 1445.
HIST 1301 United States History I
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.

HIST 1302 United States History II
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.

HIST 2301 Texas History
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.

HIST 2311 Western Civilization I
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 Reformation.

HIST 2312 Western Civilization II
A survey of the social, political, economic, cultural, religious, and intellectual history of Europe and the Mediterranean world from the 17th century to the modern era. Themes that should be addressed in Western Civilization II include absolutism and constitutionalism, growth of nation states, the Enlightenment, revolutions, classical liberalism, industrialization, imperialism, global conflict, the Cold War, and globalism.

HIST 2321 World Civilizations I
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.

HIST 2322 World Civilizations II
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.

HIST 2381 African-American History I
A survey of the social, political, economic, cultural, and intellectual history of people of African descent in the formation and development of the United States to the Civil War/Reconstruction period. African American History I includes the study of African origins and legacy, trans-Atlantic slave trade, and the experiences of African Americans during Colonial, Revolutionary, Early National, Antebellum, and the Civil War/Reconstruction Eras. This course will enable students to understand African American history as an integral part of U.S. history.
HIST 2382 African American History II 3-0-3
A survey of the social, political, economic, cultural, and intellectual history of people of African descent in the United States from the Civil War/Reconstruction period to the present. African American History II examines segregation, disenfranchisement, civil rights, migrations, industrialization, world wars, the Harlem Renaissance and the conditions of African Americans in the Great Depression, Cold War and post-Cold War eras. This course will enable students to understand African American history as an integral part of U.S. history.

HITT Office Technology (N) see also MDCA, POFI, POFM, and POFT

HITT 1301 Health Data Content and Structure 2-4-3
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.

HITT 1303 Medical Terminology II 2-4-3
A continuation of the study of medical terms through word origin and structure, abbreviations and symbols, surgical and diagnostic procedures, and medical specialties. Prerequisite: HITT 1305 or equivalent.

HITT 1305 Medical Terminology I 2-4-3
Study of medical terms through word origin and structure. Introduction to abbreviations and symbols, surgical and diagnostic procedures, and medical specialties.

HITT 1341 Coding and Classification Systems 2-4-3
Fundamentals of coding rules, conventions, and guidelines using clinical classification systems.

HITT 1349 Pharmacology 2-4-3
Overview of the basic concepts of the pharmacological treatment of various diseases affecting major body systems. Prerequisite: HITT 1305 or MDCA 1309 is a recommended prerequisite or co-requisite for this course.

HITT 2335 Coding and Reimbursement Methodologies 2-4-3
Advanced coding techniques with emphasis on case studies, health records, and federal regulations regarding prospective payment systems and methods of reimbursement. Prerequisites: HITT 1341 and HITT 1305. Recommended Co-requisite: POFM 2310.

HITT 2361 Clinical – Health Information/Medical Records Technology/Technician 0-9-3
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. Prerequisite: Completion of all first and second semester courses in the degree plan and departmental approval required.

HMSY Public Administration/Homeland Security (N) see also EMAP

HMSY 1337 Introduction to Homeland Security 3-0-3
Overview of homeland security. Evaluation of the progression of homeland security issues throughout Texas and the United States. An examination of the roles undertaken and methods used by governmental agencies and individuals to respond to those issues.

HMSY 1338 Homeland Security Emergency Communications Management 3-0-3
A study of public safety communication system interactions. Topics include political and policy basis of emergency management, technology, mitigation, and disaster recovery. Includes an overview of incident command systems, emergency management, mitigation for emergency managers, and individual and community disaster education.

HMSY 1340 Homeland Security Intelligence Operations 3-0-3
A study of the intelligence community. Includes the role of intelligence and law enforcement. Topics include collection methods, management of operations, classification, production and analysis, and assessment of threat vulnerability. Source development will be conducted.

HMSY 1341 Critical Infrastructure Protection 3-0-3
Identification and analysis of critical infrastructure systems including security and threat assessments. Includes mitigation of threats as well as evaluation and revision of security measures in order to protect critical infrastructures.

HMSY 1342 Understanding and Combating Terrorism 3-0-3
Study of terrorism and reasons why America is a terrorist target. Includes methods of combating domestic and international terrorism, terrorist operations, cyber-terrorism, narco-terrorism, the mind of the terrorist, and organized crime’s impact on terrorism.

HMSY 1370 Information Technology Security for Homeland Security Specialists 3-0-3
This course covers the basics of information technology security. Topics covered are: the uses of cyber crime by terrorist organizations and their impact on our nation’s information-based infrastructure, government, corporate, and private institutions and citizens; how to protect data and infrastructure from cyber crimes and electronic terrorism. Desktop computer, organizational infrastructure, communications infrastructure, and network security will also be covered. The course includes a study of the uses of computer forensics and methods to defend against cyber attacks. It will examine applications with proven success and tie them to real-life scenarios.
This course will provide students with a broad understanding of the basic structure, roles and missions of the counterterrorism community in homeland security. The course will examine the definition of terrorism by investigating what motivates individuals to commit acts of terrorism, the political, legal, and policy measures that must be in place to execute counterterrorism measures, the rules of engagement in counterterrorism that affects commanders and policy makers, the role of both the legislature and courts regarding counterterrorism, the role of state sponsored terrorism and how the media influences counterterrorism operations and the implications of counterterrorism on homeland security and policies for the United States.

Students will participate in a comprehensive project from conception to conclusion. The student will be required to plan and develop a project consisting of research, design, and layout. A formal written report and a demonstration and presentation of the process and results are required. Prerequisite: Department approval required.

A study of the common set of procedures of the unified incident command system for organizing personnel, facilities, equipment, and communications to successfully coordinate multi-agency response. Includes the identification and application of key roles and functional responsibilities for professionally managing multi-agency incidents. Also covers one or more practical application exercises and/or scenarios.

This course is an exploration of the purposes and processes in the visual and performing arts (such as music, painting, architecture, drama, and dance) and the ways in which they express the values of cultures and human experience. Prerequisite: None

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.

International purchasing or sourcing. Includes the advantages and the barriers of purchasing internationally, global sourcing, procurement technology, and purchasing processes. Emphasizes issues of contract administration, location, and evaluation of foreign suppliers, total cost approach, exchange fluctuations, customs procedures, and related topics.

A simulation of a global environment. Students will engage in business practice and theory. The simulation may include researching foreign business cultures and importing and exporting products. Emphasizes participation in all business decisions related to running a simulated company.

An introduction to nutrition including nutrients, digestion and metabolism, menu planning, recipe modification, dietary guidelines and restrictions, diet and disease, and healthy cooking techniques.
IMED  Computer Information Technology and Systems (N)  see also BCIS, CETT, COSC, CPMT, ELMT, ITCC, ITNW, ITSC, ITSE, ITSW, ITSY

IMED  1316  Web Design I  2-4-3
Instruction in web design and related graphic design issues including mark-up languages, web sites, and browsers. Instruction in web page design specifications including HTML5, CSS3, and validation. Use of websites and browsers. Prerequisites: ITNW 1337.

ITAL  Italian (T)

ITAL  1411  Beginning Italian I  4-2-4
This course includes basic grammar drill, simple reading, and conversation.

ITAL  1412  Beginning Italian II  4-2-4
Elementary grammar is completed. Pronunciation drill and reading-based conversation are continued. Common conversational phrases are stressed. Prerequisite: ITAL 1411 with a grade of “C” or above.

ITAL  2311  Intermediate Italian I  3-0-3
This course includes grammar review, composition, and reading of Italian masterpieces, with conversation based on material read. Prerequisite: ITAL 1411 and ITAL 1412 with a grade of “C” or above.

ITAL  2312  Intermediate Italian II  3-0-3
This course continues reading of Italian masterpieces and drill on syntax as needed for reading composition and conversation. Prerequisite: ITAL 2311 with a grade of “C” or above.

ITCC  Computer Information Technology and Systems (N)  see also BCIS, CETT, COSC, CPMT, ELMT, IMED, ITCC, ITSC, ITSE, ITSW, ITSY

ITCC  1314  CCNA 1: Introduction to Networks  2-4-3
IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. By the end of the course, students will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes.

ITCC  1344  CCNA 2: Switching, Routing and Wireless Essentials  2-4-3
Describes the architecture, components and operations of routers and switches in small networks and introduces wireless local area networks (WLAN) and security concepts. Prerequisite: ITCC 1314 or ITNW 1325

ITCC  2420  CCNA 3: Enterprise Networking, Security, and Automation  3-3-4
Describes the architecture, components, operations and security to scale for large, complex networks, including wide area network (WAN) technologies. Emphasizes network security concepts and introduces network virtualization and automation. Prerequisite: ITCC 1344.

ITNW  Computer Information Technology and Systems (N)  see also BCIS, CETT, COSC, CPMT, ELMT, IMED, ITCC, ITSC, ITSE, ITSW, ITSY

ITNW  1308  Implementing and Supporting Client Operating Systems  2-4-3
The fundamentals of managing and configuring local, network, and distributed network clients. Topics may adapt to changes in industry practices. Prerequisites: ITNW 1325 or ITCC 1314 Will be available for course offering January 2021

ITNW  1309  Fundamentals of Cloud Computing  2-4-3
Introduction to Cloud computing from a business and technical perspective, including Cloud concepts, services, architecture, system integration, connectivity, data center migration, administration, security, compliance and technical support. Coverage includes preparation for industry certifications. Topics may adapt to changes in industry practices. Prerequisites: None Will be available for course offering January 2021

ITNW  1313  Computer Virtualization  2-4-3
Implement and support virtualization of clients of servers in a networked computing environment. This course explores installation, configuration, and management of computer virtualization workstation and servers. Prerequisite: 6 hours of Networking coursework (any combination of ITNW and/or ITCC).

ITNW  1316  Network Administration  2-4-3
An introduction to the basic concepts of network administration. Prerequisites: None

ITNW  1325  Fundamentals of Networking Technologies  2-4-3
Instruction in networking technologies and their implementation. Topics include the OSI reference model, network protocols, transmission media, and networking hardware and software. Prerequisites: None

ITNW  1336  Cloud Deployment and Infrastructure Management  2-4-3
Focus on Cloud infrastructure, deployment, security models, and key considerations in migrating to Cloud computing. Includes the technologies and processes required to build on-premise and Cloud environments, including computation, storage, networking, virtualization, business continuity, security, and management. Prerequisite: ITNW 1309. Will be available for course offering January 2021
ITNW 1337 Introduction to the Internet 2-4-3
Introduction to the Internet with emphasis on using the World Wide Web to locate, transfer, and publish information and create web pages using HTML. Develop and validate simple web pages containing basic features of image and video placement; forms; frames; lists; tables; font. Techniques and understanding of most current browsers - navigating; printing; automatic ftp through the browser; establishing favorites/bookmarks; creating RSS feeds; managing cookies and other settings and services. Survey and use of emerging technologies on the Internet such as blogs, social media, QR codes, and various Internet search tools (engines, directories, metacrawlers). Prerequisites: None

ITNW 1345 Implementing Network Directory Services 2-4-3
In-depth coverage of the skills necessary to install, configure, and administer Network Directory service. Prerequisites: ITNW1316 or concurrent enrollment.

ITNW 1454 Implementing and Supporting Servers 3-3-4
Implement, administer, and troubleshoot information systems that incorporate servers in a networked computing environment. Prerequisites: 12 hours of CITs coursework with at least 9 hours of Network coursework (any combination of ITNW and/or ITCC).

ITNW 2427 Advanced Cloud Concepts 3-3-4
Focus on enterprise Cloud architecture, with advanced topics including multi-Cloud platforms inclusive of computing, networking, storage, monitoring and database. Prerequisite: ITNW 1336 Will be available for course offering January 2021

ITNW 2488 Internship - Computer Systems Networking and Telecommunications 0-19-4
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: 30 semester hours in computer science courses and consent of the Department Chair.

ITSC  Computer Information Technology and Systems (N) see also BCIS, CETT, COSC, CPMT, ELMT, IMED, ITCC, ITNW, ITSE, ITSW, ITSY

ITSC 1301 Introduction to Computers 3-1-3
Overview of computer information systems. Introduces computer hardware, software, procedures, and human resources. COSC 1301 is an acceptable substitution for this course. Prerequisites: None

ITSC 1309 Integrated Software Applications I 2-4-3
Introduction to business productivity software suites using word processing, spreadsheets, databases, and/or presentation software. BCIS 1305 is an acceptable academic substitution for this course. Prerequisites: None

ITSC 1316 Linux Installation and Configuration 2-4-3
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. Prerequisite: None.

ITSC 1325 Personal Computer Hardware 2-4-3
Current personal computer hardware including assembly, upgrading, setup, configuration, and troubleshooting. Prerequisites: None

ITSC 1415 Project Management Software 3-3-4
Use of project management software for developing a project plan including timelines, milestones, scheduling, life cycle phases, management frameworks, skills, processes, and tools. Prerequisites: 6 semester hours in computer science courses.

ITSC 2325 Advanced Linux 2-3-3
Provides instruction in advance open-source Linux operating system. Develops directory services for clients, support users remotely, and install and configure network services. Prerequisite: ITSC 1316.

ITSC 2439 Personal Computer Help Desk Support 3-3-4
Diagnosis and solution of user hardware and software related problems with on-the-job and/or simulated projects. Prerequisites: 21 hours of CITS coursework.

ITSC 2486 Internship - Computer and Information Sciences, General 0-19-4
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: 30 semester hours in computer science courses and consent of the Department Chair.

ITSE  Computer Information Technology and Systems (N) see also BCIS, CETT, COSC, CPMT, ELMT, IMED, ITCC, ITNW, ITSC, ITSW, ITSY

ITSE 1302 Computer Programming 2-4-3
Introduction to computer programming including design, development, testing, implementation, and documentation. COSC 1336 is an acceptable academic substitution for this course. Prerequisite: ITSE 1329 or COSC 1315.

ITSE 1329 Programming Logic and Design 3-1-3
Problem-solving applying structured techniques and representation of algorithms using design tools. Includes testing, evaluation, and documentation. Techniques and application for programming design and development for desktop, web, and database application. Prerequisites: None
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ITSE 1359</td>
<td>Introduction to Scripting Languages</td>
<td>2-4-3</td>
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<td></td>
<td>Introduction to scripting languages including basic data types, control structures, regular expressions, input/output, and textual analysis.</td>
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<td>Prerequisites: None</td>
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<tr>
<td>ITSE 2402</td>
<td>Intermediate Web Programming</td>
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<td>Techniques for Web development. Includes server-side and client-side scripting. Prerequisites: ITSE 1329 and ITNW 1337.</td>
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<td>ITSW Computer Information Technology and Systems (N) see also BCIS, CETT, COSC, CPMT, ELMT, IMED, ITCC, ITNW, ITSC, ITSE, ITSY</td>
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<td>ITSW 1307 Introduction to Database</td>
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<td>Introduction to database theory and the practical applications of a database. Prerequisites: ITSE 1329 or ITSE 1359 or COSC 1315.</td>
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<td>ITSY Computer Information Technology and Systems (N) see also BCIS, CETT, COSC, CPMT, ELMT, IMED, ITCC, ITNW, ITSC, ITSE, ITSW</td>
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<td>ITSY 1342 Information Technology Security</td>
<td>2-4-3</td>
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<td>Instruction in security for network hardware, software, and data, including physical security; backup procedures; relevant tools; encryption; and protection from viruses. Prerequisites: 3 hours of Network coursework (ITNW or ITCC) or concurrent enrollment.</td>
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<td>ITSY 2345 Network Defense and Countermeasures</td>
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<td>This is a practical application and comprehensive course that includes the planning, design, and construction of defenses for a complex network that will sustain an attack, document events, and mitigate the effects of the attack. Prerequisite: ITSY 2401.</td>
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<td>ITSY 2401 Firewalls and Network Security</td>
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<td>Identify elements of firewall design, types of security threats and responses to security attacks. Use Best Practices to design, implement, and monitor a network security plan. Examine security incident postmortem reporting and ongoing network security activities. Prerequisites: ITSC 1316 or ITNW 1325 or ITCC 1314 or concurrent enrollment with either.</td>
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<td>ITSY 2459 Security Assessment and Auditing</td>
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<td>Capstone experience for the security curriculum. Synthesizes technical material covered in prior courses to monitor, audit, analyze, and revise computer and network security systems to ensure appropriate levels of protection are in place to assure regulatory compliance. Prerequisites: 12 semester hours of Information Technology Security coursework (ITSY) or departmental approval.</td>
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<td>ITSY 2486 Internship - Computer and Information Systems Security</td>
<td>0-19-4</td>
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<td>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: 29 semester hours in computer science courses and consent of the Department Chair.</td>
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<td>KORE Nigerian (T)</td>
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<td>KORE 1411</td>
<td>Beginning Korean I</td>
<td>4-2-4</td>
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<td>This course includes basic grammar drill, pronunciation drill, simple reading, and conversation.</td>
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<tr>
<td>KORE 1412</td>
<td>Beginning Korean II</td>
<td>4-2-4</td>
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<td>Elementary grammar is completed. Pronunciation drill and reading-based conversation are continued. Common conversational phrases are stressed. Prerequisite: KORE 1411 with a grade of “C” or above.</td>
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<tr>
<td>KORE 2311</td>
<td>Intermediate Korean I</td>
<td>3-0-3</td>
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<td>This course includes grammar review, composition, and reading with conversation based on material read. Prerequisite: KORE 1411 and 1412 with a grade of “C” or above.</td>
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<tr>
<td>KORE 2312</td>
<td>Intermediate Korean II</td>
<td>3-0-3</td>
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<td>This course continues reading and drill on syntax as needed for reading, composition, and conversation. Prerequisite: KORE 2311 with a grade of “C” or above.</td>
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<td>LGLA Paralegal/Legal Assistant (N)</td>
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<td>LGLA 1301</td>
<td>Legal Research and Writing</td>
<td>3-0-3</td>
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<td>Presents the fundamentals of legal research and writing emphasizing the paralegal’s role including resources and processes used in legal research and writing.</td>
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<tr>
<td>LGLA 1307</td>
<td>Introduction to Law and the Legal Profession</td>
<td>3-0-3</td>
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<td>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.</td>
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<tr>
<td>LGLA 1317</td>
<td>Law Office Technology</td>
<td>3-0-3</td>
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<td>Computer technology and software applications within the law office emphasizing the paralegal’s role in the use of law office technology. Prerequisite: Completion of BCIS 1305 or ITSC 1309 is recommended.</td>
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</table>
LGLA 1345 Civil Litigation 3-0-3
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.

LGLA 1351 Contracts 3-0-3
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.

LGLA 1353 Wills, Trust and Probate Administration 3-0-3
Fundamental concepts of the law of wills, trusts, and probate administration emphasizing the paralegal’s role.

LGLA 1355 Family Law 3-0-3
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.

LGLA 1372 National Security Law 3-0-3
Emphasizes emerging issues of national security laws, terrorism and national security crimes, national security detentions and trials, military tribunals, and clandestine operations. It includes legal challenges to Intelligence Operations and Collection, as well as legal issues involved in detaining and interrogating terrorist suspects, and prosecution of accused terrorists and their supporters in criminal courts and before military tribunals.

LGLA 1391 Special Topics in Paralegal/Legal Assistance 3-0-3
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.

LGLA 2303 Torts and Personal Injury Law 3-0-3
Fundamental concepts of tort and personal injury law including intentional torts, negligence, and strict liability with emphasis on the paralegal’s role.

LGLA 2311 Business Organizations 3-0-3
Basic concepts of business organizations including law of agency, sole proprietorships, partnerships, corporations, and other emerging business entities with emphasis on the paralegal’s role.

LGLA 2313 Criminal Law and Procedure 3-0-3
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.

LGLA 2321 Military Law 3-0-3
Principles of operation and management of military law are presented as applicable to paralegals including detailed coverage of Uniform Code of Military Justice (UCMJ), claims, military administrative law, legal assistance, and civil law as it applies to the military.

LGLA 2333 Advanced Legal Document Preparation 3-0-3
The use of office technology skills in preparation of legal documents by paralegals based on hypothetical situations drawn from various areas of law. Prerequisite: LGLA 1345.

LGLA 2335 Advanced Civil Litigation 3-0-3
Implementation of advanced civil litigation techniques with emphasis on the paralegal’s role. Builds upon skills acquired in prior civil litigation courses. Prerequisite: LGLA 1345.

LGLA 2388 Internship- Paralegal/Legal Assistant 0-9-3
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. Prerequisite: Department approval required.

LMGT Logistics (N)

LMGT 1319 Introduction to Business Logistics 3-0-3
A systems approach to managing activities associated with traffic, transportation, inventory management, warehousing, packaging, order processing, and materials handling.

LMGT 1321 Introduction to Materials Handling 3-0-3
Introduces the concepts and principles of materials management to include inventory control and forecasting activities.

LMGT 1323 Domestic and International Transportation Management 3-0-3
An overview of the principles and practices of transportation and its role in the distribution process. Emphasis on the physical transportation systems involved in the United States as well as on global distribution systems. Topics include carrier responsibilities and services, freight classifications, rates, tariffs, and public policy and regulations. Also includes logistical geography and the development of skills to solve logistical transportation problems and issues.

LMGT 1325 Warehouse and Distribution Center Management 3-0-3
Emphasis on physical distribution and total supply chain management. Includes warehouse operations management, hardware and software operations, bar codes, organizational effectiveness, just-in-time, and continuous replenishment.
MATH 1314  College Algebra  3-0-3
A study of relations and functions, polynomial functions and equations of degree higher than two, exponential and logarithmic functions and equations, matrices, and determinants, sequences and series, the binomial theorem, and mathematical induction. This course satisfies the mathematics requirement in most curricula, except mathematics and engineering. Please check your degree plan to determine the status of this course in your program of study. This course is occupationally related and serves as preparation in careers in sciences, social sciences, and business. This course does not meet the prerequisite for Pre-Calculus. Prerequisites: Appropriate placement score or TSI exemption or completion of the appropriate level of Developmental Studies course or concurrent enrollment in DSMA 0493/NCBO Intermediate Algebra.

MATH 1316  Plane Trigonometry  3-0-3
Topics include trigonometric functions, radian and degree measure, circular functions, solving right and oblique triangle problems, deriving and verifying trigonometric identities, inverse trigonometric functions, and solving conditional equations. Prerequisites: Appropriate placement score or completion of the appropriate level of Developmental Studies course.

MATH 1324  Mathematics for Business and Social Sciences  3-0-3
The application of common algebraic functions, including polynomial, exponential, logarithmic, and rational, to problems in business, economics, and the social sciences are addressed. 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. Prerequisite: Appropriate placement score or TSI exemption or completion of the appropriate level of Developmental Studies course.

MATH 1325  Calculus for Business and Social Sciences  3-0-3
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. Prerequisite: MATH 1324 or MATH 1414.

MATH 1332  Contemporary Mathematics (Quantitative Reasoning)  3-0-3
Topics include sets, logic, number theory, geometric concepts, consumer finance, and an introduction to probability and statistics. Prerequisite: Appropriate placement score or TSI exemption or completion of the appropriate level of Developmental Studies course or concurrent enrollment in DSMA 0492/NCBO Beginning Algebra. This course is for non-mathematics, non-science, and non-business students.

MATH 1342  Elementary Statistical Methods  3-0-3
Topics include the collecting, organizing, and displaying of data; measures of central tendency, measures of variation, histograms, probability; probability distributions, binomial distributions, normal distributions, linear regression and their applications. Prerequisites: Appropriate placement score or TSI exemption or completion of the appropriate level of Developmental Studies course or concurrent enrollment in DSMA 0394/NCBO Developmental Math for Statistics.

MATH 1350  Mathematics for Teachers I  3-0-3
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. This course is the first semester of a two-semester sequence designed for prospective elementary and middle school teachers. This course extends the foundational ideas of mathematics so that prospective elementary/middle school teachers have an explicit understanding of elementary analysis. Prerequisite: A grade of “C” or above in MATH 1314.

MATH 1351  Mathematics for Teachers II  3-0-3
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 is the second semester of a two-semester sequence designed for prospective elementary and middle school teachers. This course extends the foundational ideas of mathematics so that prospective elementary/middle school teachers have an explicit understanding of these concepts. Prerequisite: A grade of “C” or above in MATH 1314.

MATH 1414  College Algebra (Calculus Path)  4-0-4
A study of relations and functions, polynomial functions and equations of degree higher than two, exponential and logarithmic functions and equations, matrices, and determinants, sequences and series, the binomial theorem, and mathematical induction. This course satisfies the mathematics requirement in most curricula, and is the prerequisite for Pre-Calculus. Please check your degree plan to determine the status of this course in your program of study. This course is occupationally related and serves as preparation for careers in mathematics and engineering. Prerequisites: Appropriate placement score or TSI exemption or completion of the appropriate level of Developmental Studies course.

MATH 2318  Linear Algebra  3-0-3
Topics include finite dimensional vector spaces; linear transformations and matrices; quadratic forms; and eigenvalues and eigenvectors. Prerequisite: MATH 2414 with a grade of “C” or better within the last 5 years.

MATH 2320  Differential Equations  3-0-3
First and second order differential equations and their applications. Laplace Transforms, Fourier Series, and their applications. Prerequisite: MATH 2414 with a grade of “C” or better.

MATH 2412  Pre calculus Math  4-0-4
Topics include applications of algebra and trigonometry to the study of elementary functions and their graphs including polynomial, rational, exponential, logarithmic, and trigonometric functions. Prerequisite: MATH 1414 with a grade of “C” or better within the last 5 years. (A previous study of trigonometry is helpful but not required.)
MATH 2413 Calculus I 4-0-4
Calculus I is a first course in calculus which emphasizes limits and continuity; the Fundamental Theorem of Calculus; derivatives and techniques of differentiation; applications of the derivative to maximizing or minimizing a function; the chain rule; the mean value theorem; rate of change problems; curve sketching; definite and indefinite integration of algebraic, trigonometric, and transcendental functions; and an application to calculation of areas. Prerequisite: MATH 2412 with a grade of “C” or above.

MATH 2414 Calculus II 4-0-4
Calculus II is a second course in calculus which emphasizes differentiation and integration techniques of transcendental functions; parametric equations and polar coordinates; techniques of integration; sequences and series; and improper integrals. Prerequisite: MATH 2413 with a grade of “C” or better within the last 5 years.

MATH 2415 Calculus III 4-0-4
Calculus III is a third course in calculus which emphasizes vectors and vector-valued functions; partial differentiation; Lagrange multipliers; multiple integrals; Jacobians; and application of the line integral which includes Green’s Theorem, the Divergence Theorem, and Stoke’s Theorem. Prerequisite: MATH 2414 with a grade of “C” or better within the last 5 years.

MBST Construction Technology (N) see also CBFM, CNBT, CRPT, ELPT, PFPB and WDWK

MBST 1507 Masonry I 2-7-5
Introduction to masonry including safety, tools and equipment, masonry materials, theory, terminology, federal and state guidelines, building plans, mortar mixing and spreading. Emphasis on the fundamentals of laying bricks and block. Prerequisite: CRPT 1429.

MDCA Office Technology (N) see also HITT, POFI, POFM and POFT

MDCA 1302 Human Disease/Pathophysiology 2-4-3
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. Prerequisite or Co-requisite: HITT 1305 or MDCA 1309 is recommended.

MDCA 1309 Anatomy and Physiology for Medical Assistants 2-4-3
Emphasis on structure and function of human cells, tissues, organs, and systems with overview of common pathophysiology.

MRKG Business Administration and Management (N) see also BMGT, BUSG and HRPO

MRKG 1302 Principles of Retailing 3-0-3
Introduction to the retailing environment and its relationship to consumer demographics, trends, and traditional/nontraditional retailing markets. The employment of retailing techniques and the factors that influence modern retailing.

MRKG 1311 Principles of Marketing 3-0-3
Introduction to basic marketing functions; identification of consumer and organizational needs; explanation of economic, environmental, psychological, sociological, and global issues; and description and analysis of the importance of marketing research.

MRKG 2333 Principles of Selling 3-0-3
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.

MT- Military Contract Courses (N)

BMGT 1177 Critical and Creative Thinking (NCO Lead) 1-0-1
This course is designed to provide the students with the skills and knowledge required to develop structured approaches to critical/creative thinking and problem solving in the workplace.

MTBC 1170 Conducting Briefings (NCO Lead SUM11/ASM13) (select locations) 1-0-1
Teaches how to prepare and conduct military style information briefings. Special attention is given to organizing material, to developing effective delivery skills and the use of audiovisual aids to enhance briefings.

MTBC 1171 Effective Writing I (NCO Lead SUM11/ASM13) (select locations) 1-0-1
The course explains the communications process; describes the writing process; and covers identifying, analyzing and constructing effective sentences and paragraphs.

MTBC 1173 Effective Writing II (NCO Lead SUM11/ASM13) (select locations) 1-0-1
Building on the student’s basic knowledge of grammar and writing techniques, this course concentrates on improving writing skills through the use of practical exercises.

MTCS 1173 Introduction to Computers (NCO Lead MISP/SUM11) (select locations) 1-0-1
A beginner course designed to help students with little or no computer experience understand computer hardware and software, computer terminology, and the Windows desktop operating system. This course should be followed up with other computer courses.
MTCS 1174 Academic Research Using the Internet (NCO Lead MISP/SUM11/ASM13) (select locations) 1-0-1
This course is designed to help students conduct research online by teaching them a variety of online search strategies, how to evaluate sources, the ethical responsibility associated with plagiarism and how to avoid it, using online library databases to conduct research, and creating and using the Modern Language Association (MLA) AND/OR THE American Psychological Association (APA) DOCUMENTATION STYLES IN Microsoft Word. Students should be able to demonstrate basic computer, Internet, and word processing skills. MTCS 1173 Introduction to computers, MTMC 1170 Internet, MTCS 1175 Basic Keyboarding Using the Computer, and MTMC 1172 Word Processing are recommended, but not required.

MTCS 1175 Basic Keyboarding Using the Computer (NCO Lead) (SUM11, MISP, ASM13) 1-0-1
This course is designed to teach students the basics of ergonomics, proofreading, basic correspondence and touch typing using a personal computer. Students should be able to type a minimum of 25 WPM to successfully complete the course. Prerequisite: Student must be able to demonstrate basic computer skills. Completion of MTCS 1173 is recommended.

MTES 1170 Professional Ethics (NCO Lead SUM11/ASM13) (select locations) 1-0-1
This course examines current definitions of ethics and provides opportunities for group and personal analysis of ethical issues. Participants will gain experience in making ethically-related decisions through exercises with case studies. The lecture material and group exercises will increase participant awareness in the principles involved in ethical decision making.

MTES 1171 Professional Values (NCO Lead SUM11/ASM13) (select locations) 1-0-1
This course is a study of the Seven Army Values and their application to military and personal life. It is designed to acquaint the student with the Army Seven Values, distinguish between professional values and personal values, and understand how they apply to their unit, community and nation.

MTHO 1170 Historical Principles of War (NCO Lead SUM11/ASM13) (select locations) 1-0-1
This course provides the student with an understanding of the nine principles of war with specific battle examples of each; discusses their application to the history of the United States military; enables the student to apply the military concepts and principles used in past engagements to that of the present and future missions of the military.

MTHO 1171 Middle East Culture (Europe Military Science Management) 1-0-1
To provide soldiers with a general knowledge of the culture of the people who inhabit the Middle East. This course will provide a brief overview of the history and culture to include: governmental structure, politics, influence of nomadic tribes, religious influence, heritage, family roles, arts, education, business wealth, poverty, jobs, language, health and medicine. Food, drink, dress, etiquette, holidays, organizations, and media are also covered. (Military Science Management-AAS)

MTHO 1370 Historical Principles of War (Europe Military Science Management) 3-0-3
This course focuses on the history of the United States Military and the professional values and ethics of the military profession. Strategies and tactics used by the United States Military in selected engagements throughout its history will be covered. (Military Science Management-AAS)

MTHR 1170 Preparing Efficiency Reports (NCO Lead SUM11/ASM13) (select locations) 1-0-1
This course is designed to teach the student aspects of the NCO Evaluation Reporting System (NCOERS) to include its development, functions, purpose, forms, preparation of forms, and proper processing of forms. The student will learn how to record counseling sessions; prepare and process the efficiency report; recognize prohibited comments on the efficiency report; and become familiar with the various avenues of appeal.

MTHR 1171 Performance Oriented Training (NCO Lead SUM11/ASM13) (select locations) 1-0-1
This course is designed to provide the student with a basic knowledge and understanding of the rationale, methods, techniques, and procedures for determining training needs; the selection of resources to enhance training effectiveness; and how to prepare, present and evaluate training.

MTHR 1172 Prevention of Sexual Harassment (NCO Lead SUM11/ASM13) (select locations) 1-0-1
This course provides students with an overview of sexual harassment including definition, cause, impact, and suggested approaches for dealing with sexual harassment problems when they arise in the workplace. It examines ethical guidelines and actions supervisors can take to avoid sexual harassment. It also includes how to objectively handle complaints.

MTHR 1173 Counseling Practicum Technique (NCO Lead SUM11/ASM13) (select locations) 1-0-1
Examines the counseling role of supervisors. Emphasizes speaking, listening, and writing skills through simulated counseling situations and the preparation of the leadership counseling forms. The course reviews leadership principles and positive counseling techniques by analyzing various case studies.

MTHR 1174 Time Management (NCO Lead SUM11/ASM13) (select locations) 1-0-1
Teaches efficient use of time management and organizational skills. Supervisors learn to eliminate time wasters, increase productivity, better distribute work and schedule tasks more efficiently.

MTHR 1175 Career Management (NCO Lead SUM11/ASM13) (select locations) 1-0-1
This course provides students with the basic management techniques for career management. It will assist individuals in building a base of information for career planning, training and professional development and establishing and working with career goals for themselves and their subordinates.

MTHR 1176 Stress Management (NCO Lead SUM11/ASM13) (select locations) 1-0-1
This course explores the relationship between stress and work performance. Provides mechanisms that will enable participants to manage personal stress constructively, help subordinates cope with stress, and reduce stress in the workplace. Emphasis on reducing stress levels to achieve high performance in organizations.
This course provides the student with the tools to become more understanding of themselves and others. It presents techniques to better deal with difficult people. It defines the basic differences between people in an attempt to create a better understanding of those with whom we work. It reviews the basic model for dealing with these differences.

This course will provide a basic understanding of crime prevention. It will also cover the historical background, fundamental concepts, and techniques for the deterrence and prevention of crime.

Develops complex skills in setting goals, planning and coordinating objectives, and allocating resources. Managerial styles and models are applied to simulated and real problems.

Working with management problems such as inventory control, planning the efficient use of available resources and creative problem-solving within the limitations of budget constraints.

To prepare students to better perform duties as a government contracting officer representative (COR) and oversee contracts in both garrison and deployed environments and focus on ensuring contractors fulfill the obligations to the government.

This course is designed to assist supervisors to increase knowledge about performance, job satisfaction, and efficiency of oneself and subordinates at the work site. The course will suggest and demonstrate a systematic process to organize work methods and work environments in order to accomplish more work in less time using fewer resources. The course provides techniques for increasing productivity at the work site.

This course provides a basic understanding of crisis prevention. It will also cover the historical background, fundamental concepts, and techniques for the deterrence and prevention of crime.

This course provides basic knowledge about cultural awareness, including cultural heritage, work force diversity, human rights and communications. Students will be able to identify and demonstrate benefits of valuing diversity and effective cultural contacts. Includes behavioral expectations and standards in the business environment.

This course provides the student with the tools to become more understanding of themselves and others. It presents techniques to better deal with difficult people. It defines the basic differences between people in an attempt to create a better understanding of those with whom we work. It reviews the basic model for dealing with these differences.

This course provides students with the basic management techniques for planning personal financial affairs and developing a base of information to use during the counseling of subordinates, including budgetary controls, family budgets, financial concepts, credit, debt, and insurance.

This course provides students with the basic management techniques for planning personal financial affairs and developing a base of information to use during the counseling of subordinates, including budgetary controls, family budgets, financial concepts, credit, debt, and insurance.

This course is designed to provide students with the knowledge and tools needed to define desired work performance and design/implement appropriate strategies to improve performance. Topics include a behavioral approach to management, performance standards, motivation, leadership, communication, and worker training. Participants will learn behavioral theories and complete practical exercises that provide experience leading to improved work performance.

This course provides the student with the tools to become more understanding of themselves and others. It presents techniques to better deal with difficult people. It defines the basic differences between people in an attempt to create a better understanding of those with whom we work. It reviews the basic model for dealing with these differences.

This course is an introduction about management’s role in intervening and preventing a crisis situation. The purpose of this class is to provide managers with a basic knowledge and how to handle a crisis on the following topics; suicide, depression, stress, finances, domestic violence, sexual assault, substance abuse, and PTSD. This class provides a series of interactive exercises, training videos and case studies that allow students to generate their own crisis management plans for their organizations based upon material learned through Crisis Management I and II.
MTMC NCO Lead Microcomputer Courses (N)

MTMC 1170 Internet (NCO Lead MISP/ASM13) 1-0-1
This is an introductory course designed to teach students about the World Wide Web, using search engines, information security, e-commerce, e-mail, Ethernet and wireless networks, and installing a home network. Prerequisite: Student should be able to demonstrate basic computer skills. MTCS 1173 Introduction to Computers and MTCS 1175 Basic Keyboarding Using the Computer are recommended, but not required.

MTMC 1171 Spreadsheet Applications (NCO Lead MISP/ASM13) (select locations) 1-0-1
A basic course of instruction to Microsoft Excel, a spreadsheet application. Learning objectives include: Working with formulas and functions, formatting worksheets, and linking worksheets.

MTMC 1172 Word Processing Applications (NCO Lead MISP/ASM13) (select locations) 1-0-1
A basic course of instruction with Microsoft Word. The class will emphasize creating new documents, working with autotext, creating styles, use of proofreading tools, copying, cutting and pasting. The course will also cover manipulating the screen display, creating sections & columns, using pictures with text, and creating headers & footers. Prerequisite: Basic knowledge of Windows required (MTCS 1173).

MTMC 1173 Data Base Applications (NCO Lead MISP/ASM13) (select locations) 1-0-1
This is an introductory course for Microsoft Access, a database management software program, designed to help students create and modify simple databases, filter and sort records, format a datasheet, create and modify a table and its fields, join related tables, create forms for data entry, and create reports and queries to analyze data. Prerequisite: Students should be able to demonstrate basic computer and word processing skills. MTCS 1173 Introduction to Computers, MTCS 1175 Basic Keyboarding Using the Computer, MTMC 1172 Word Processing, and MTMC 1171 Spreadsheet Applications are recommended, but not required.

MTMC 1174 Microsoft Outlook (NCO Lead MISP) (select locations) 1-0-1
This course is an introduction to Microsoft Outlook, a desktop management that helps students organize and share information on their desktop and communicate with others. Outlook can be used to manage intranet and Internet email, appointments, contacts, tasks, and to make notes and journal entries.

MTMC 1175 Web Page Development I (NCO Lead MISP) (select locations) 1-0-1
This is an introductory course for SharePoint Designer, a web authoring program, designed to teach students how to create, modify, and format simple web pages for personal or professional use. Prerequisite: MTMC 1172 Word Processing is required. Students should also be able to demonstrate basic computer and Internet skills. MTCS 1175 Basic Keyboarding Using the Computer and MTMC 1170 Internet are recommended, but not required.

MTMC 1176 Microsoft Power Point (NCO Lead MISP/ASM13) (select locations) 1-0-1
This is an introductory course for Microsoft PowerPoint, a presentation software program, designed to teach students how to create, modify, and format custom electronic presentations for personal school, or professional use. Students will learn presentation basics and work with images, sounds, movie clips, and custom animation effects. Students should be able to demonstrate basic computer skills. Prerequisite: MTCS 1173 Introduction to Computers, MTMC 1170 Internet, MTCS 1175 Basic Keyboarding Using the Computer, and MTMC 1172 Word Processing are recommended, but not required.

MTMC 1177 Desktop Publishing Application (NCO Lead MISP/ASM13) 1-0-1
This is an introductory course for Microsoft Publisher, a desktop publishing software program, designed to teach students how to create personal or professional looking publications such as letterhead, envelopes, advertisements, business cards, flyers, postcards, and more. Prerequisite: Students should be able to demonstrate basic computer and word processing skills. MTCS 1173 Introduction to Computers, MTMC 1170 Internet, MTCS 1175 Basic Keyboarding Using the Computer and MTMC 1172 Word Processing are recommended but not required.

MTMC 2171 Microsoft Excel Advanced (NCO Lead MISP/ASM13) (select locations) 1-0-1
This is an advanced course for Microsoft Excel, a spreadsheet software program, designed to teach students advanced formulas and functions, how to create and modify Pivot Tables, analyze and organize data, work with Excel on the web, import external data, and work with simple macros and other objects. Prerequisite: Students should be able to demonstrate basic computer, internet, and word processing skills. MTCS 1173 Introduction to Computers, MTMC 1170 Internet, MTCS 1175 Basic Keyboarding Using the Computer, MTMC 1172 Word Processing, and MTMC 1171 Spreadsheet applications are recommended, but not required.

MTMC 2172 Microsoft Word Advanced (NCO Lead MISP/ASM13) (select locations) 1-0-1
This is an advanced course for Microsoft Word, a word processing software program, designed to teach students about mail merge, collaboration tools working with long documents, forms, templates, and macros. Prerequisite: Student should be able to demonstrate basic computer, internet and word processing skills. MTCS 1173 Introduction to Computers, MTMC 1170 Internet, MTCS 1175 Basic Keyboarding Using the Computer, and MTMC 1172 Word Processing are recommended, but not required.

MTMC 2173 Microsoft Power Point Advanced (select locations) 1-0-1
This course advances the principles learned in Microsoft Power Point MTMC 1176 by exploring more features of Power Point including graphics, portability, design and presentations. MTMC 1176 is recommended but not required.

MTMC 2175 Web Page Development II (NCO Lead MISP) (select locations) 1-0-1
This is an advanced course for SharePoint Designer, a web authoring program, designed to teach students to create simple web pages using frames, basic Hypertext Markup Language (HTML) codes, online forms, and publish and manage web pages. Prerequisite: Student must be able to demonstrate basic computer, Internet, and word processing skills. (MTCS 1173, MTMC 1170, MTCS 1175, MTMC 1172, MTMC 1175) are recommended, but not required.
MTMS 1170 Military Science I
A study of first-line to mid-level supervision. The course reviews procedures in the context of the standard supervisory roles of directing, problem solving, decision-making, and personal relations at the primary leader level.

MTMS 1171 Psychology of Personal Adjustment I
The course is designed to meet the needs of Soldiers, Sailors, Marines and Airmen and their families before, during, and after deployments. Students will be able to demonstrate the skills of problem solving, goal setting, and conflict resolution. Instruction to take place in either a classroom or on-line setting with 16 hours of instruction.

MTMS 1172 Psychology of Personal Adjustment II
The course is designed to meet the needs of Soldiers, Sailors, Marines and Airmen and their families before, during, and after deployments. Students will be able to demonstrate the skills of problem solving, goal setting, and conflict resolution. Instruction to take place in either a classroom or on-line setting with 16 hours of instruction.

MTMS 1173 Psychology of Personal Adjustment III
The course is designed to meet the needs of Soldiers, Sailors, Marines and Airmen and their families before, during, and after deployments. Students will be able to demonstrate the skills of problem solving, goal setting, and conflict resolution. Instruction to take place in either a classroom or on-line setting with 16 hours of instruction.

MTMS 1174 Terrorism in the Middle East
This course will examine various elements of terrorism in the Middle East and is designed to explore the origins, characteristics and current trends in worldwide terrorism. The course will look at the difference between political and fundamentalist terrorist activities and their targets. The class will examine the key characteristics or traits of known terrorist groups and the psychological aspects of the suicide bomber. The course will also explore the relationship of terrorism to international relations and how the future of military action may be changed.

MTMS 1270 Military Science II
A fundamental course on the basics of applied management in the context of the military, its missions, organization, and operations. The course concentrates on the basic leadership level of employing personnel and equipment. Prerequisite: MTMS 1170 or consent of the instructor.

MTMS 1271 Setting Goals, and Objectives
Combination of formal instruction and practical exercises in establishing objectives under conditions of constrained resources. An in-depth look at the military mission essential task list approach for defining training goals, setting strategies, and assessing effectiveness.

MTMS 1272 Job Performance and Motivation
An in-depth personnel management study of motivational theories and their application to the military. Includes both older needs theory and more current equity and group behavior models and their implications for leaders in today’s environments.

MTMS 1273 Fundamentals of Leadership
An introduction to the theories of motivation, with a focus on their practical application reflected in current military leadership fundamentals. This course includes an overview of the traits, techniques, and styles common to all effective leaders.

MTMS 1274 Professionalism and Responsibility
An organizational behavior approach that examines the beliefs, values, and norms of the organization; how they impact on the individual; and implications for managers. Military culture is used throughout the course to illustrate how professionalism and responsibility are defined and measured by the degree of similarity between the individual and the organization.

MTMS 1275 Personnel Counseling
Personnel Counseling is intended to provide managers and other professionals with a systematic set of skills to help them and their subordinates cope effectively with the challenges and problems of the organization, the job, and the people.

MTMS 2270 Professional Development of the Manager
Course explores effective training of junior-level leaders. Studies the tools of proper delegation of tasks and assistance to subordinates in problem solving. Emphasis will be placed on the effectiveness of active and passive styles of leadership in reinforcing good performance and motivating towards excellence.

MTMS 2271 Military Science III
An applied management course at the advanced leadership level, concentrating on the mid-level management skills required to employ assets at higher levels of command. Course covers situational analysis, staffing procedures, communications, planning and controlling operations, and evaluations.

MTMS 2272 Management and Learning Strategies
A course for leaders who want to explore further into the arena of training in organizations, including needs assessment, instruction techniques, and evaluation procedures. Also addressed is training for career changes, cross training, and the implications of fair labor standards.
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<tr>
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<tr>
<td>MTMS 2370</td>
<td>Advanced Leadership</td>
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<tr>
<td>MTMS 2371</td>
<td>Management Problems</td>
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<td>MUSI 1306</td>
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<td>PFPB 2409</td>
<td>Residential Const. Plumbing I</td>
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<tr>
<td>PFPB 2445</td>
<td>Residential Const. Plumbing II</td>
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<td>PHIL 1301</td>
<td>Introduction to Philosophy</td>
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<td>PHYS 1402</td>
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**MTMS 2370 Advanced Leadership**
Advanced management study with an in-depth look at the differences and similarities of leadership and management. This course includes all elements of the management function, leadership styles, and communication.

**MTMS 2371 Management Problems**
Case study approach in practical application of management theory to the everyday problems of managers. Study groups work out their own solutions and exchange ideas with other groups in presentation and critique forums.

**MTMS 2372 Ethics in Management**
The purpose of this course is to study the major ethics theories and their relationship to business management. The course provides actual case studies in which ethical principles are used in solving today’s business management problems.

**MUSI Music (T)**

**MUSI 1306 Music Appreciation**
This course is designed for the general college student. It emphasizes intelligent, directed listening to music with attention focused on the materials, the forms and the periods and styles of music. Course work will also cover the relation of music to other areas of cultural development. Prerequisite: None.

**MUSI 1307 Music Literature**
An in-depth study of the music, literature and history from the 15th through the 21st centuries. Emphasis will be placed on principle forms and composers of the literature of those historical periods. This course is designed for music majors, but is also appropriate for any student who has prior musical knowledge. Prerequisite: None.

**PFPB Construction Technology (N) see also CBFM, CNBT, CRPT, ELPT, MBST and WDWK**

**PFPB 2409 Residential Const. Plumbing I**
Skill development in the procedures and techniques employed by a plumber in the rough-in and top-out stages of a new home or the remodeling of an older home.

**PFPB 2445 Residential Const. Plumbing II**
Installation of residential plumbing fixtures used in single- and multi-family housing. Prerequisite: PFPB 2409.

**PHIL Philosophy (T)**

**PHIL 1301 Introduction to Philosophy**
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.

**PHIL 1304 Introduction to World Religions**
A comparative study of world religions, including but not limited to Hinduism, Buddhism, Judaism, Christianity and Islam.

**PHIL 2303 Introduction to Logic**
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.

**PHIL 2306 Introduction to Ethics**
The systematic evaluation of classical and/or contemporary ethical theories concerning the good life, human conduct in society, morals, and standards of value.

**PHIL 2307 Introduction to Social and Political Philosophy**
A study of major issues in social and political theory and/or the work of major philosophical figures in this area.

**PHIL 2321 Philosophy of Religion**
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.

**PHYS Physics (T)**

**PHYS 1401 College Physics I**
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. Laboratory activities will reinforce concepts discussed in lecture. Prerequisite: MATH 1314 and (MATH 1316 OR MATH 2412) Co-requisite: PHYX 1401.

**PHYS 1402 College Physics II**
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. Laboratory activities will reinforce concepts discussed in lecture. Prerequisite: PHYS 1401. Co-requisite: PHYX 1402.
PHYS 1403 Stars and Galaxies 3-2-4
This course is a study of stars, galaxies, and the universe outside our solar system. Laboratory activities will reinforce concepts discussed in lecture. TSI Skills: M.

PHYS 1404 Solar System 3-2-4
This course is a study of the sun and its solar system, including its origin. Laboratory activities will reinforce concepts discussed in lecture. TSI Skills: M.

PHYS 1405 Elementary Physics I 3-3-4
Conceptual level survey of topics in physics intended for liberal arts and other non-science majors. Offered at C&I locations only.

PHYS 1415 Physical Science I 3-3-4
Course, designed for non-science majors, that surveys topics from physics, chemistry, geology, astronomy, and meteorology. Prerequisite: None. Co-requisite: PHYX 1415.

PHYS 2425 University Physics I 3-3-4
Fundamental principles of physics, using calculus, for science, computer science, and engineering majors; the principles and applications of classical mechanics, including harmonic motion, physical systems and thermodynamics; and emphasis on problem solving. Laboratory activities will reinforce concepts discussed in lecture. Prerequisite: MATH 2413. Co-requisite: PHYX 2425.

PHYS 2426 University Physics II 3-3-4
Principles of physics for science, computer science, and engineering majors, using calculus, involving the principles of electricity and magnetism, including circuits, electromagnetism, waves, sound, light, and optics. Laboratory activities will reinforce concepts discussed in lecture. Prerequisites: PHYS 2425 and MATH 2414. Co-requisite: PHYX 2426.

POFI Office Technology (N) see also HITT, MDCA, POFM and POFT

POFI 1301 Computer Applications I 2-4-3
This course is an overview of office computer applications including current terminology and technology. An introduction to computer hardware, software applications, and procedures. Prerequisite: Keyboarding skills or concurrent enrollment in keyboarding course recommended.

POFI 1349 Spreadsheets 2-4-3
Skill development in concepts, procedures, and application of spreadsheets. Prerequisite: POFI 1301.

POFI 2301 Word Processing 2-4-3
Word processing software focusing on business applications. Prerequisite: POFT 1329 with a minimum grade of “C”.

POFI 2331 Desktop Publishing 2-4-3
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. Prerequisite: Keyboarding and word processing skills or concurrent enrollment in word processing course recommended.

POFI 2386 Internship - Business/Office Automation/Technology/Data Entry 0-9-3
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. Completion of course requires 144 contact hours as well as strong keyboarding/word processing proficiency and written communication skills. Concurrent enrollment in or completion of first year Office Technology courses recommended. Departmental approval required.

POFM Office Technology (N) see also HITT, MDCA, POFI and POFT

POFM 1302 Medical Software Applications 2-4-3
Medical software applications for the management and operation of health care information systems. Keyboarding proficiency recommended.

POFM 1317 Medical Administrative Support 2-4-3
Instruction in medical office procedures including appointment scheduling, medical records creation and maintenance, telephone communications, coding, billing, collecting, and third party reimbursement.

POFM 1327 Medical Insurance 2-4-3
Survey of medical insurance including the life cycle of various claim forms, terminology, patient relations, and legal and ethical issues. Prerequisite: HITT 1305. Keyboarding and computer skills recommended.

POFM 2310 Intermediate Medical Coding 2-4-3
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. Prerequisites: HITT 1341.

POFM 2386 Internship - Medical Administrative/Executive Assistant and Medical Secretary 0-9-3
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. Departmental approval required upon completion of certificate requirements.
### POFT Office Technology (N)  see also HITT, MDCA, POFI and POFM

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>POFT 1301</td>
<td>Business English</td>
<td>2-4-3</td>
</tr>
<tr>
<td>POFT 1307</td>
<td>Proofreading and Editing</td>
<td>2-3-3</td>
</tr>
<tr>
<td>POFT 1309</td>
<td>Administrative Office Procedures I</td>
<td>2-4-3</td>
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<tr>
<td>POFT 1319</td>
<td>Records and Information Management I</td>
<td>2-4-3</td>
</tr>
<tr>
<td>POFT 1325</td>
<td>Business Math Using Technology</td>
<td>2-4-3</td>
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<tr>
<td>POFT 1329</td>
<td>Beginning Keyboarding</td>
<td>2-4-3</td>
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<tr>
<td>POFT 1349</td>
<td>Administrative Office Procedures II</td>
<td>2-4-3</td>
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<tr>
<td>POFT 2312</td>
<td>Business Correspondence and Communication</td>
<td>2-4-3</td>
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<tr>
<td>POFT 2333</td>
<td>Advanced Keyboarding</td>
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### PSTR Hospitality Management (N)  see also CHEF, HAMG, IFWA, RSTO and TRVM

<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>PSTR 1301</td>
<td>Fundamentals of Baking</td>
<td>2-4-3</td>
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<tr>
<td>PSTR 1302</td>
<td>Cake Baking and Production</td>
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<tr>
<td>PSTR 1305</td>
<td>Breads and Rolls</td>
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<tr>
<td>PSTR 1306</td>
<td>Cake Decorating I</td>
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<tr>
<td>PSTR 2307</td>
<td>Cake Decorating II</td>
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</tr>
<tr>
<td>PSTR 2331</td>
<td>Advanced Pastry Shop</td>
<td>2-4-3</td>
</tr>
<tr>
<td>PSTR 2350</td>
<td>Wedding Cakes</td>
<td>1-5-3</td>
</tr>
</tbody>
</table>
PSYC  Psychology (T)

**PSYC 1300 Learning Framework** 3-0-3
A study of the 1) research and theory in the psychology of learning, cognition, and motivation, 2) factors that impact learning, and 3) 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.

**PSYC 2301 General Psychology** 3-0-3
Survey of the major psychological topics, theories and approaches to the scientific study of behavior and mental processes.

**PSYC 2308 Child Psychology** 3-0-3
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.

**PSYC 2314 Life Span Growth and Development** 3-0-3
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.

**PSYC 2315 Psychology of Adjustment** 3-0-3
Study of the processes involved in adjustment of individuals to their personal and social environments.

**PSYC 2316 Psychology of Personality** 3-0-3
The study of various approaches to determinants, development, and assessment of personality.

**PSYT  Mental Health Services (N) see also CMSW, DAAC and SCWK**

**PSYT 1309 Health Psychology** 2-2-3
An exploration of behavioral medicine and the interdependence of mind, body, and spirit. Topics include stress and its effect on body systems, techniques for improving and maintaining health and physiological, psychological, behavioral, and social effects of disease and disabilities.

**PSYT 1429 Interviewing and Communication Skills** 3-3-4
This course provides instruction for the development of interviewing and communication skills in professional relationships. Students are encouraged to explore personal issues which may affect their ability to remain objective in the clinical setting. Demonstration of skills learned serves as an integral part of the lab process. Recommended: to be taken in the first semester.

**PSYT 2321 Crisis Intervention** 2-2-3
Examination of crisis management and intervention theories in assisting clients in crisis situations. This course introduces assessment skills and techniques in rating the severity of crisis in three areas; affective, cognitive and behavioral.

**PSYT 2331 Abnormal Psychology** 2-2-3
An examination and assessment of the symptoms, etiology, and treatment procedures of mental, emotional, and behavioral disorders. Attention is paid to diagnostic criteria, predisposing factors, and dual diagnosis. Recommended prerequisite: PSYC 2301.

**PSYT 2345 Principles of Behavior Management and Modification** 2-2-3
An analysis of behavior management and cognitive theories and techniques with emphasis on their applications. Topics covered include basic principles of behavior and behavior change, procedures to establish new behaviors, and procedures to increase desirable behaviors and decrease undesirable behaviors. Genetic, cultural, environmental, and social factors will be considered, as well as predisposing factors, perceptions, and prior learning.

**RSTO  Hospitality Management (N) see also CHEF, HAMG, IFWA, PSTR and TRVM**

**RSTO 1204 Dining Room Service** 3-0-2
Introduces the principles, concepts, and systems of professional table service. Topics include dining room organization, scheduling, and management of food service personnel.

**RSTO 1301 Beverage Management** 3-0-3
A study of the beverage service of the hospitality industry including spirits, wines, beers, and non alcoholic beverages. Topics include purchasing, resource control, legislation, marketing, physical plant requirements, staffing, service, and the selection of wines to enhance foods.

**RSTO 1313 Hospitality Supervision** 3-0-3
Fundamentals of recruiting, selection, and training of food service and hospitality personnel. Topics include job descriptions, schedules, work improvement, motivation, and applicable personnel laws and regulations. Emphasis on leadership development.

**RSTO 1321 Menu Management** 3-0-3
A study of the food service principles involved in menu planning, layout, and evaluation for a variety of types of facilities and service methods. Emphasis on analysis of menu profitability, modification, commodity use, and other activities generated by the menu.
RSTO 1325  Purchasing for Hospitality Operations  3-0-3
Study of purchasing and inventory management of foods and other supplies to include development of purchase specifications, determination of order quantities, formal and informal price comparisons, proper receiving procedures, storage management, and issue procedures. Emphasis on product cost analysis, yields, pricing formulas, controls, and record keeping at each stage of the purchasing cycle.

RUSS  Russian (T)

RUSS 1411  Beginning Russian I  4-2-4
This course includes basic grammar drill, pronunciation drill, simple reading, and conversation.

RUSS 1412  Beginning Russian II  4-2-4
Elementary grammar is completed. Pronunciation drill and reading-based conversation are continued. Common conversational phrases are stressed. Prerequisite: RUSS 1411 with a grade of “C” or above.

RUSS 2311  Intermediate Russian I  3-0-3
This course includes grammar review, composition, and reading with conversation based on material read. Prerequisites: RUSS 1411 and 1412 with a grade of “C” or above.

RUSS 2312  Intermediate Russian II  3-0-3
This course continues reading and drill on syntax as needed for reading, composition, and conversation. Prerequisite: RUSS 2311 with a grade of “C” or above.

SCWK  Mental Health Services (N)  see also CMSW, DAAC and PSYT

SCWK 2301  Assessment and Case Management  2-4-3
Exploration of procedures to identify and evaluate an individual’s and/or family’s strengths, weaknesses, problems, and needs in order to develop an effective plan of action. Topics include oral and written communications essential for screening, assessment, and case management to determine the need for prevention, intervention, and/or referral. Prerequisites: CMSW 1309, DAAC 1319, PSYT 1329, PSYT 2321, PSYT 2331.

SOCI Sociology (T)

SOCI 1301  Introduction to Sociology  3-0-3
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.

SOCI 1306  Social Problems  3-0-3
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.

SOCI 2301  Marriage and The Family  3-0-3
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.

SOCI 2319  Minority Studies  3-0-3
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.

SOCW  Mental Health Services (N)

SOCW 2361  Introduction to Social Work  3-0-3
An overview of the history and development of social work as a profession. The course is designed to foster a philosophical, historical, and critical understanding of the social work profession, including social work values, ethics, and areas of practice utilized under a Generalist Intervention Model. (SOCW 2361 is included in the Social Work Field of Study.)

SOCW 2362  Social Welfare: Legislature, Programs and Services  3-0-3
This course offers a historical and contemporary examination of legislature and resulting programs, policies, and services in the context of the social welfare system in the United States. Special attention is given to the political, economic, environmental, and social conditions that prompted the development of legislature to meet the needs of vulnerable populations. Societal responses to legislation are also considered. (SOCW 2362 is included in the Social Work Field of Study.)

SOCW 2389  Academic Cooperative  3-0-3
A supervised experiential learning course designed to integrate program study with introductory exposure to the field of social work. In conjunction with individual study and/or seminars, the student will set specific goals and objectives in the study of social work and/or social institutions. The academic cooperative is not a social work skills-based practice experience, but instead, an observational volunteer experience. The course must include a minimum of 80 contact hours (48 hours in a social service setting). Prerequisite: SOCW 2361 Recommended Prerequisite: SOCW 2362.
SPAN Spanish (T)

SPAN 1411 Beginning Spanish I 4-2-4
The study of basic Spanish grammar with the development of frequently used vocabulary. This course develops students’ speaking, listening, reading and writing skills so they will be able to express their own ideas and interact with others. Some culture points are integrated to introduce students to the everyday lives of Spanish speakers in the twenty-one countries of the Spanish-speaking world.

SPAN 1412 Beginning Spanish II 4-2-4
The study of basic Spanish grammar and vocabulary development continued from the SPAN 1411 curriculum. Prerequisite: SPAN 1411 with a “C” or above.

SPAN 2311 Intermediate Spanish I 3-0-3
The study of grammar and vocabulary with emphasis on conversation and writing. This course will introduce students to Spanish culture and history as well as Latin American culture and history. Prerequisites: SPAN 1411 and SPAN 1412 with a “C” or above.

SPAN 2312 Intermediate Spanish II 3-0-3
The continuation of SPAN 2311. Emphasis on complex grammar, composition and conversation about Spanish American topics. Prerequisite: SPAN 2311 with a “C” or above.

SPCH Speech (T)

SPCH 1315 Public Speaking 3-0-3
Course encompasses both theory and practice of communicating with others and includes research, composition, organization, and delivery of speeches for various purposes and occasions.

SPCH 1318 Interpersonal Communication 3-0-3
Theory, examples, and participation in exercises to improve effective one-to-one and small-group communication.

SPCH 1321 Business and Professional Communication 3-0-3
Theories and skills of speech communication as applied to business and professional situations. Includes participating in an interview, preparing a resume and cover letter, engaging in problem-solving discussions, and delivering public speeches.

SPCH 2341 Oral Interpretation 3-0-3
Study and practice in the principles of oral reading of literature. Stresses analyzing good literature and recreating the logical and emotional content for an audience. Also includes group oral interpretation.

TECA Child Development (T)

TECA 1303 Families, School, & Community 3-1-3
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 must be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards and coincide with the National Association for the Education of Young Children position statement related to developmentally appropriate practices for children from birth through age eight. Requires students to participate in field experiences with children from infancy through age 12 in a variety of settings with varied and diverse populations. The course includes a minimum of 16 hours of field experiences.

TECA 1311 Educating Young Children 3-1-3
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 must be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards and coincide with the National Association for the Education of Young Children position statement related to developmentally appropriate practices for children from birth through age eight. Requires students to participate in field experiences with children from infancy through age 12 in a variety of settings with varied and diverse populations; and the course includes a minimum of 16 hours of field experiences.

TECA 1318 Wellness of the Young Child 3-1-3
A study of the factors that impact the well-being of the young child including healthy behavior, food, nutrition, fitness, and safety practices. Focuses on local and national standards and legal implications of relevant policies and regulations. Course content must be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards and coincide with the National Association for the Education of Young Children position statement related to developmentally appropriate practices for children from birth to age eight. Requires students to participate in field experiences with children from infancy through age 12 in a variety of settings with varied and diverse populations. Course includes a minimum of 16 hours of field experiences.

TECA 1354 Child Growth & Development 3-0-3
This course is a study of the physical, emotional, social, and cognitive factors impacting growth and development of children through adolescence.

TECM Industrial Mathematics (N)

TECM 1301 Industrial Mathematics 3-0-3
This course will cover math skills applicable to industrial occupations, including fraction and decimal manipulation, measurement, percentage, and problem solving techniques for equations and ratio/proportion applications.
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<tr>
<th>Course Code</th>
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<th>Credits</th>
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<tbody>
<tr>
<td>TRVM 2301</td>
<td>Introduction to Convention/Meeting Management</td>
<td>3-0-3</td>
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<tr>
<td>WDK 1413</td>
<td>Cabinet Making I</td>
<td>2-5-4</td>
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<tr>
<td>WDK 2351</td>
<td>Cabinet Making II</td>
<td>2-4-3</td>
</tr>
<tr>
<td>WLDG 1312</td>
<td>Introduction to Flux Cored Arc Welding</td>
<td>2-4-3</td>
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<tr>
<td>WLDG 1313</td>
<td>Introduction to Blueprint Reading for Welders</td>
<td>2-4-3</td>
</tr>
<tr>
<td>WLDG 1317</td>
<td>Introduction to Layout and Fabrication</td>
<td>2-4-3</td>
</tr>
<tr>
<td>WLDG 1323</td>
<td>Welding Safety, Tools, and Equipment</td>
<td>2-4-3</td>
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<tr>
<td>WLDG 1425</td>
<td>Introduction to Oxy-Fuel Welding and Cutting</td>
<td>3-3-4</td>
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<tr>
<td>WLDG 1428</td>
<td>Introduction to Shielded Metal Arc Welding (SMAW)</td>
<td>3-3-4</td>
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<tr>
<td>WLDG 1430</td>
<td>Introduction to Gas Metal Arc (GMAW) Welding</td>
<td>3-3-4</td>
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<tr>
<td>WLDG 1434</td>
<td>Introduction to Gas Tungsten Arc (GTAW) Welding</td>
<td>3-3-4</td>
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<tr>
<td>WLDG 1435</td>
<td>Introduction to Pipe Welding</td>
<td>3-3-4</td>
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<tr>
<td>WLDG 1457</td>
<td>Intermediate Shielded Metal Arc Welding (SMAW)</td>
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<td>WLDG 2406</td>
<td>Intermediate Pipe Welding</td>
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<tr>
<td>WLDG 2435</td>
<td>Advanced Layout and Fabrication</td>
<td>3-3-4</td>
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<tr>
<td>WLDG 2443</td>
<td>Advanced Shielded Metal Arc Welding (SMAW)</td>
<td>2-6-4</td>
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</table>

Overview of the meetings and convention industry and the various aspects and skills involved in planning and managing meetings, conventions and expositions. Emphasis on types of meetings, meeting markets, industry suppliers, budget and program planning, site selection and contract negotiations, registration and housing, food and beverage requirements, function and meeting room setup, and audiovisual requirements.

Design and construction of base cabinets and wall cabinets for kitchens and bathrooms. Emphasis on the safe use of portable and stationary power tools. Prerequisite: CRPT 1429.

Advanced skills in machine woodworking and hand craftsmanship. Emphasizes advanced design and door and drawer construction, laminate installation. Prerequisite: WDK 1413.

An overview of terminology, safety procedures, and equipment set-up. Practice in performing various joints using Flux Cored Arc Welding (FCAW) equipment.

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. Prerequisite: WLDG 1323.

A fundamental course in layout and fabrication related to the welding industry. Major emphasis on structural shapes and use in construction. Prerequisite: WLDG 1313, WLDG 1323 and WLDG 1425.

An introduction to welding careers, equipment and safety practices, including OSHA standards for industry.

An introduction to oxy-fuel welding and cutting, safety, set up and maintenance of oxy-fuel welding, and cutting equipment and supplies. Prerequisite: WLDG 1323.

An introduction to the shielded metal arc welding process. Emphasis is placed on power sources, electrode selection, oxy-fuel cutting, and various joint designs. Instruction provided in SMAW fillet welds in various positions. Prerequisites: WLDG 1323 and WLDG 1425.

Principles of gas metal arc (GMAW) welding, setup and use of GMAW equipment, and safe use of tools and equipment. Instruction in various joint designs. Prerequisites: WLDG 1323.

Principles of gas tungsten arc welding (GTAW), including setup, GTAW equipment. Instruction in various positions and joint designs. Prerequisites: WLDG 1323.

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. Prerequisite: WLDG 1457.

A study of the production of various fillets and groove welds. Preparation of specimens for testing in various positions. Prerequisite: WLDG 1428.

A comprehensive course of pipe using the shielded metal arc welding (SMAW) process. Welding will be done in various positions. Topics covered include electrode selection, equipment setup and safe shop practices. Prerequisite: WLDG 1435.

An advanced course in layout and fabrication. Includes production and fabrication of layout, tools, and processes. Emphasis on application of fabrication and layout skills. Prerequisite: WLDG 1317.

Advanced topics based on accepted welding codes. Training provided with various electrodes in shielded metal arc welding processes with open V-groove joints in all positions. Prerequisites: WLDG 1323 and WLDG 1457.
<table>
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<tr>
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<tr>
<td>WLDG 2447</td>
<td>Advanced Gas Metal Arc Welding (GMAW)</td>
<td>3-3-4</td>
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<tr>
<td></td>
<td>Advanced topics in gas metal arc welding (GMAW). Includes welding in various positions. Prerequisite: WLDG 1430.</td>
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<tr>
<td>WLDG 2451</td>
<td>Advanced Gas Tungsten Welding (GTAW)</td>
<td>3-3-4</td>
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<tr>
<td></td>
<td>Advanced topics in GTAW welding, including welding in various positions and directions. Prerequisite: WLDG 1434.</td>
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<tr>
<td>WLDG 2453</td>
<td>Advanced Pipe Welding</td>
<td>2-7-4</td>
</tr>
<tr>
<td></td>
<td>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.</td>
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<tr>
<td>WLDG 2488</td>
<td>Internship - Welder/Welding Technology</td>
<td>0-19-4</td>
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<td>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. Prerequisite: Department approval required.</td>
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</tbody>
</table>