

ABDR Autobody Repair

ABDR 1419 Basic Metal Repair 2-7-4

In-depth coverage of basic metal principles and working techniques including proper tool usage and product application.

ABDR 1431 Basic Refinishing 2-6-4

An introduction to current refinishing products, shop safety, and equipment used in the automotive refinishing industry. Emphasis on surface preparation, masking techniques, and refinishing of trim and replacement parts. Prerequisite: ABDR 1419.

ABDR 1441 Structural Analysis and Damage Repair I 2-7-4

Expanded training in the roughing and shaping procedures on automotive sheet metal necessary to make satisfactory body repairs. Emphasis on the alignment of component parts such as doors, hood, front-end assemblies, and deck lids. Prerequisites: ABDR 1419 and 2447.

ABDR 1442 Structural Analysis and Damage Repair II (C&I Locations only) 3-3-4

Continuation of general repair and replacement procedures for damaged structural parts and collision damage. Prerequisites: ABDR 1419, 1441, and 2447.

ABDR 1449 Automotive Plastic and Sheet Molded Compound Repair 2-6-4

A comprehensive course in repair of interior and exterior plastics including the use of various types of adhesives and plastic welding. Prerequisite: ABDR 1419.

ABDR 2402 Auto Body Mechanical and Electrical Service (C&I Locations only) 2-7-4

A course in the repair, replacement, and/or service of collision damaged mechanical or electrical systems. Topics include drive train removal, reinstallation and service; cooling system service and repair; exhaust system service; and emission control systems. Additional topics include wire and connector repair, reading wiring diagrams, and troubleshooting. Prerequisite: ABDR 1419.

ABDR 2435 Structural Analysis and Damage Repair IV (C&I Locations only) 2-6-4

Extension of Structural Analysis and Damage Repair III providing skill development in the auto body application of theories to the repair and replacement of complete body units. Prerequisites: ABDR 1419, 1442 and 2447.

ABDR 2437 Structural Analysis and Damage Repair V (C&I Locations only) 2-7-4

Advanced development in the operation of equipment and the procedures involved in the repair of body structures. Special emphasis on conducting a thorough damage analysis as well as demonstrating proper pulling and anchoring techniques. Prerequisites: ABDR 1419, 2447, and 2435.

ABDR 2447 Advanced Auto Body Welding 2-7-4

This course is designed to provide the student with instruction in the use of those gas and electrical welding and cutting processes required in Auto Collision Repair. Basic gas welding and cutting, GMAW (MIG), resistance spot welding, and plasma arc cutting will be covered. Emphasis will be placed on safety; equipment selection and set up; the design, preparation, and fitting of weld joints; and the application of correct welding procedures to specific repair requirements. Prerequisite: ABDR 1419.

ABDR 2449 Advanced Refinishing 2-7-4

Skill development in multi-stage refinishing techniques. Further development in identification of problems and solutions in color matching and partial panel refinishing. Prerequisites: ABDR 1419 and 1431.

ABDR 2488 Internship- Autobody/Collision and Repair Technology/Technician 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 employer. Prerequisite: Department approval required.

ACCT Accounting

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.

AERM Aviation Maintenance Technology

Not offered in Texas

AERM 1203 Shop Practices-G 2-2-2

An introduction to the correct use of hand tools and equipment and precision measurement; identification of aircraft hardware; and the fabrication of fluid lines and tubing. Emphasis on procedures for testing, heat treating, and inspection of aircraft structures.

AERM 1205 Weight and Balance-G 2-2-2

An introduction to Federal Aviation Administration (FAA) required subjects relating to the weighing of aircraft, the performance of weight and balance calculations, and appropriate maintenance record entries.

AERM 1208 Federal Aviation Regulations-G 2-2-2

A course in the use and understanding of the Federal Aviation Administration and aircraft manufacturers' publications, forms, and records; and the exercise of mechanic privileges within prescribed limitations.

AERM 1210 Ground Operations-G 2-2-2
An introductory course in fuels, servicing methods and procedures, aircraft movement, securing and operations of aircraft, external power equipment, aircraft cleaning, and corrosion control.

AERM 1243 Instruments and Navigation/ Communications-G 2-1-2
A study of aircraft instruments and electronic flight instrument systems including testing and installing instruments; inspecting, checking, and troubleshooting navigation and communication systems; and inspecting and repairing antennas and electronic equipment installations.

AERM 1254 Aircraft Composites-A 2-2-2
A study of the inspection and repair of composite, fiberglass, honeycomb, and laminated structural materials including doors, windows, bonded structures, and interior furnishings.

AERM 1314 Basic Electricity-G 2-4-3
A study of aircraft electrical systems and their requirements including the use of ammeter, voltmeter, and ohmmeter; series and parallel circuits; inductance and capacitance; magnetism; converting alternating current (AC) to direct current (DC); controlling devices; maintenance and servicing of aircraft batteries; and reading and interpreting aircraft electrical diagrams to include solid state devices and logic functions.

AERM 1340 Aircraft Propellers-P 2-4-3
Fundamentals of construction of propellers. Skill development in inspection, servicing, and repair of fixed-pitch, constant-speed, and feathering propellers and governing systems. Instruction in removal, balancing, and installation of propellers.

AERM 1357 Fuel Metering & Induction System-P 2-4-3
A study of fuel metering and induction systems used on reciprocating and turbine engines including fuel metering systems, carburetors, induction systems, heat exchangers, and cooling systems.

AERM 1444 Aircraft Reciprocating Engines-P 3-4-4
A study of reciprocating engines and their development, operating principles, and theory. Instruction in engine instruments, lubricating, and exhaust systems.

AERM 1445 Airframe Electrical Systems-A 3-4-4
A study of airframe electrical systems including installation, removal, disassembly, and repair of electrical components and related wiring.

AERM 1449 Hydraulic, Pneumatic, and Fuel Systems-A 3-4-4
Skill development in inspecting, servicing, and maintaining aircraft fluid systems including hydraulics, pneumatics, and fuel. Application of basic concepts through detailed maintenance procedures.

AERM 1452 Aircraft Sheet Metal-A 2-6-4
A course in inspection and repair of sheet metal structures including forming, lay out, and bending of sheet metal and identification, selection, and installation of rivets and fasteners.

AERM 1456 Aircraft Powerplant Electrical 3-4-4
Theory, operation, and maintenance of powerplants including electrical, ignition, starting, and fire protection systems.

AERM 2231 Airframe Inspection-A 2-2-2
A study of the materials and procedures for completing a One Hundred Hour Inspection as per Federal Aviation Regulations and manufacturers' service information.

AERM 2341 Power Plant and Auxiliary Power Units-P 2-3-3
General principles of auxiliary power unit (APU) and powerplant systems and components.

AERM 2351 Aircraft Turbine Engine Overhaul-P 2-4-3
Topics address inspection, disassembly, reassembly, and replacement of gas turbine engines, sections, and components and operational troubleshooting and analysis.

AERM 2370 A&P Mechanic General Course 3-0-3
A course intended to prepare experienced aircraft mechanics to successfully complete the written, oral and practical exams for certification by the Federal Aviation Administration as Aviation Maintenance Technician. In-depth coverage of topics for A&P certification will include maintenance publications, FAA Regulations, weight & balance determination, blueprints, diagrams, corrosion control, basic electricity, aircraft materials and hardware, basic math and physics, basic aerodynamics and aircraft inspection fundamentals.

AERM 2371 Aircraft Airframe Course 3-0-3
A course intended to prepare experienced aircraft mechanics to successfully complete the written, oral and practical exams for certification by the Federal Aviation Administration as an Airframe Maintenance Technician. An in-depth coverage of topics pertaining to Airframe certification to include inspection, fabrication and repair of aircraft structures and components; application of aircraft finishes; sheet metal and composite structures; fuel systems; instrumentation; hydraulics; pneumatics and airframe electrical systems.

AERM 2372 Aircraft Power Plants and Systems 3-0-3
A course intended to prepare experienced aircraft mechanics to successfully complete the written, oral and practical exams for certification by the Federal Aviation Administration as a Powerplant Maintenance Technician. An in-depth coverage of topics pertaining to Power plant certification to include proper technique and procedures for maintaining, servicing, overhaul and inspections of both reciprocating and turbine engines. Other subjects to be covered include engine electrical, fuel, oil, cooling and propeller subsystems.

ANTH Anthropology

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 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: Sophomore standing in the drafting program.

ARTS Arts

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

AUMT 1405 Introduction to Automotive Technology 3-3-4
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.

AUMT 1407 Automotive Electrical Systems 2-7-4
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 and 2305.

AUMT 1410 Automotive Brake Systems 2-6-4
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.

AUMT 1416 Automotive Suspension and Steering Systems 2-6-4
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.

AUMT 1419 Automotive Engine Repair 3-3-4
Fundamentals of engine operation, diagnosis and repair. Emphasis on identification, inspection, measurements, and disassembly, repair, and reassembly of the engine. Prerequisites: AUMT 2434.

AUMT 1445 Automotive Climate Control Systems 2-6-4
Diagnosis and repair of manual/electronic climate control systems; includes the refrigeration cycle and EPA guidelines for refrigerant handling. Prerequisites: AUMT 2437.

AUMT 1472 Automotive Computer Systems 2-7-4
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 2437.

AUMT 2305 Automotive Engine Theory 2-2-3
Fundamentals of engine operation and diagnosis including lubrication and cooling systems. Emphasis on identification of components, measurements, inspections, and repair methods. Prerequisite: AUMT 1405.

AUMT 2413 Automotive Drive Train and Axles 2-6-4
A study of automotive clutches, clutch operation devices, manual transmissions/transaxles, and differentials with emphasis on the diagnosis and repair. Prerequisite: AUMT 1405.

AUMT 2417 Automotive Engine Performance Analysis I 2-7-4
Theory, operation, diagnosis of drivability concerns, and repair ignition and fuel delivery systems. Use of current engine performance diagnostic equipment. Prerequisites: AUMT 2437.

AUMT 2425 Automotive Automatic Transmission and Transaxle 2-6-4
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.

AUMT 2434 Automotive Engine Performance Analysis II 2-7-4
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.

AUMT 2437 Automotive Electronics 3-3-4
Study of electronic principles applied to microcomputers and communication systems. Includes digital fundamentals, and use of electronic test equipment. Prerequisites: AUMT 1407.

AUMT 2488 Internship - Automobile/Automotive Mechanics Technology/Technician 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 employer. Prerequisite: Department approval required.

BCIS Computer Science see also COSC

BCIS 1305 Business Computer Applications 2-4-4
Students will study computer terminology, hardware, and software related to the business environment. The focus of this course is on business productivity software applications and professional behavior in computing, including word processing (as needed), spreadsheets, databases, presentation graphics, and business-oriented utilization of the Internet. Prerequisites: None.

BIOL Biology

BIOL 1308 Biology for Non Science Majors I 3-0-3
Provides a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction. 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.

BIOL 1322 Nutrition and Diet Therapy I 3-0-3

Study of the chemical, physical, and sensory properties of food; nutritional quality; and food use and diet applications. 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.

BIOL 1406 Biology for Science Majors I 3-3-4

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. 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.

BIOL 1407 Biology for Science Majors II 3-3-4

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. 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.

BIOL 1408 Biology for Non-Science Majors I 3-3-4

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.

BIOL 1411 General Botany 3-3-4

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. 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.

BIOL 1413 General Zoology 3-3-4

Fundamental biological concepts relevant to animals, including systematics, evolution, structure and function, cellular and molecular metabolism, reproduction, development, diversity, phylogeny, and ecology. 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.

BIOL 2401 Anatomy and Physiology I 3-3-4

Study of the structure and function of the human body. Main systems covered include; skeletal system, muscular system, integumentary system, immune system, digestive system, urinary system, lymphatic system, and reproductive system. Co-requisite: BIOX 2401. Completion of BIOL 1406 is recommended.

BIOL 2402 Anatomy and Physiology II 3-3-4

Study of the structure and function of the human body. Emphasis is on the function of body systems and interactions among body systems with emphasis on cardiovascular, respiratory, nervous, and endocrine systems. Integration of body systems is emphasized. Problem solving and interpretation of biomedical research is also stressed. Prerequisite: BIOL 2401 with a grade of "C" or better; must have been taken within the last five years. Co-requisite: BIOX 2402.

BIOL 2420 Microbiology for Non-science Majors 3-3-4

Study of the morphology, physiology, and taxonomy of representative groups of pathogenic and nonpathogenic microorganisms. Pure cultures of microorganisms grown on selected media are used in learning laboratory techniques. Includes a brief preview of food microbes, public health, and immunology. Co-requisite: BIOX 2420.

BIOL 2421 Microbiology for Science Majors 3-3-4

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. Prerequisite: CHEM 1411 and (BIOL 1406 and BIOL 1407) OR (BIOL 1411 AND BIOL 1413). Co-requisite BIOX 2421.

BIOL 2428 Vertebrate Zoology 3-3-4

Structure, development, physiology, and natural history of the vertebrate animals with emphasis on comparative evolution. Prerequisite: BIOL 1406, 1407, or 1413. Co-requisite: BIOX 2428. Completion of a college level science course is recommended.

BMGT Business Administration and Management 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 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 see also BMGT, HRPO and MRKG**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, planning, heading, organizing, staffing and controlling Enactus 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 Enactus 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**BUSI 1301 Business Principles 3-0-3**

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.

BUSI 1307 Personal Finance 3-0-3

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.

BUSI 2301 Business Law 3-0-3

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.

CBFM Maintenance Technology see also CNBT, ELPT, MBST, PFPB, and WDWK**CBFM 1334 Interior and Exterior Painting and Refinishing 2-4-3**

Interior and exterior painting and refinishing for commercial and residential applications. Prerequisite: CRPT 1429.

CBFM 2487 Internship-Building/Property Maintenance and Manager 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 employer. Prerequisite: Department approval required.

CDEC Child Development**CDEC 1170 Deployment and Military Families (Europe/PFEC only) 1-0-1**

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

CDEC 1172 Mentoring for Early Childhood Educators (Europe/PFEC only) 1-0-1

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.

CDEC 1173 Parenting for Healthy Families (Europe/PFEC only) 1-0-1

This course covers different models of parenting, and includes identification and reflection, of one's chosen style of parenting. The effects of parenting methods on children as well as a model of parenting that is correlated with healthy children will be presented and taught.

CDEC 1174 Technology in the Classroom (Europe/PFEC only) 1-0-1

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.

CDEC 1164 Practicum (or Field Experience) - Child Development 0-7-1

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Requires 112 hours at an approved Child Care facility. Prerequisite CDEC 1313 and CDEC 1319.

CDEC 1303 Families, School and Community 3-1-3

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 1311 Educating Young Children 3-1-3

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.

CDEC 1313 Curriculum Resources for Early Childhood Programs 3-0-3

A study of the fundamentals of developmentally appropriate curriculum design and implementation in early care and education programs for children birth through age 8.

CDEC 1317 Child Development Associate Training I 2-2-3

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.

CDEC 1318 Wellness of the Young Child 3-1-3

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 of 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 1319 Child Guidance 3-0-3

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.

CDEC 1321 The Infant and Toddler 3-0-3

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.

CDEC 1354 Child Growth & Development 3-0-3

Physical, emotional, social, and cognitive factors impacting growth and development of children through adolescence.

CDEC 1356 Emergent Literacy for Early Childhood 3-0-3

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.

CDEC 1358 Creative Arts for Early Childhood 3-0-3

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.

CDEC 1359 Children with Special Needs 3-0-3

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.

CDEC 2164 Practicum (or Field Experience) - Child Development 0-7-1

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Requires 112 hours at an approved Child Care facility. Prerequisite CDEC 1164.

CDEC 2288 Internship Child Care Provider/ Assistant 0-12-2

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. 192 hours required at student's qualifying place of employment; or an approved site, must work directly with young children, ages 0-8.

CDEC 2307 Math & Science for Early Childhood 3-0-3

An exploration of principles, methods, and materials for teaching children math and science concepts through discovery and play.

CDEC 2322 Child Development Associate Training II 2-2-3

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.

CDEC 2324 Child Development Associate Training III 2-2-3

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.

CDEC 2326 Administration of Programs for Children I 3-0-3

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.

CDEC 2328 Administration of Programs for Children II 3-0-3

An in-depth study of the skills and techniques in managing early care and education programs, including legal and ethical issues, personnel management, team building, leadership, conflict resolution, stress management, advocacy, professionalism, fiscal analysis, and planning parent education/partnerships. Prerequisite: Six hours of Child Development coursework.

CETT Computer Electronics Technology see also CPMT, CSIR, EECT, ELMT, HART, ITCC and ITNW

CETT 1303 DC Circuits 2-4-3

A study of the fundamentals of direct current including Ohm's law, Kirchhoff's laws and circuit analysis techniques. Emphasis on circuit analysis of resistive networks and DC measurements.

CETT 1305 AC Circuits 2-4-3

A study of the fundamentals of alternating current including series and parallel AC circuits, phasors, capacitive and inductive networks, transformers, and resonance. Prerequisite: CETT 1303.

CETT 1321 Electronic Fabrication 2-4-3

A study of electronic circuit fabrication techniques including printed circuit boards, wire wrapping, bread boarding, and various soldering techniques.

CETT 1325 Digital Fundamentals 2-4-3

An entry level course in digital electronics covering number systems, binary mathematics, digital codes, logic gates, Boolean algebra, Karnaugh maps, and combinational logic. Emphasis on circuit logic analysis and troubleshooting digital circuits.

CETT 1429 Solid State Devices 3-3-4

A study of diodes and bipolar semiconductor devices, including analysis of static and dynamic characteristics, bi techniques, and thermal considerations of solid state devices. Prerequisite: CETT 1305.

CETT 1441 Solid State Circuits 3-3-4

A study of various semiconductor devices incorporated in circuits and their applications. Emphasis on circuit construction, measurements, and analysis. Prerequisite: CETT 1429.

CETT 1449 Digital Systems 3-3-4

A course in electronics covering digital systems. Emphasis on application and troubleshooting digital systems using counters, registers, code converters, multiplexers, analog-to-digital to-analog circuits, and large-scale integrated circuits. Prerequisites CETT 1325 and CETT 1429.

CETT 1491 Special Topics in Computer Engineering Technology/Technician 3-3-4

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 was designed to be repeated multiple times to improve student proficiency. Prerequisites CETT 1429 and CETT 1449.

CETT 1509 DC-AC Circuits 4-3-5

Fundamentals of DC circuits and AC circuits operation including Ohm's law, Kirchhoff's laws, networks, transformers, resonance, phasors, capacitive and inductive and circuit analysis techniques.

CETT 2449 Research and Project Design 3-3-4

Principles of electrical/electronic design encompassing schematics wiring diagrams, materials lists, operating characteristics, completion schedules, and cost estimates. Prerequisites: CETT 1429 and CETT 1449.

CETT 2489 Internship-Computer Engineering Technology/Technician 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: Department approval required.

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

CHEF 1301 Basic Food Preparation 1-5-3

A study of the fundamental principles of food preparation and cookery to include Brigade System, cooking techniques, material handling, heat transfer, sanitation, safety, nutrition, and professionalism. National Restaurant Association (NRA) Food Production Certificate Examination.

CHEF 1302 Principles of Healthy Cuisine 1-7-3

Introduction to the principles of planning, preparation, and presentation of nutritionally balanced meals. Adaptation of basic cooking techniques to lower the fat and caloric content. Alternative methods and ingredients will be used to achieve a healthier cooking style. Prerequisite: CHEF 1301.

CHEF 1305 Sanitation and Safety 3-0-3

A study of personal cleanliness; sanitary practices in food preparation; causes, investigation, control of illness caused by food contamination (Hazard Analysis Critical Control Points); and work place safety standards.

CHEF 1341 American Regional Cuisine 2-4-3

A study of the development of regional cuisine in the United States with emphasis on the similarities in production and service systems. Application of skills to develop, organize, and build a portfolio of recipe strategies and production systems. Prerequisite: CHEF 1301.

CHEF 1345 International Cuisine 2-4-3

The study of classical cooking skills associated with the preparation and service of international and ethnic cuisine. Topics include similarities between food production systems used in the United States and other regions of the world. Prerequisite: CHEF 1301.

CHEF 1410 Garde Manger 2-6-4

A study of specialty foods and garnishes. Emphasis on design, techniques, and display of fine foods. Prerequisite: CHEF 1301.

CHEF 2301 Intermediate Food Preparation 1-8-3

Continuation of previous food preparation course. Topics include the concept of pre-cooked food items, as well as scratch preparation. Covers full range of food preparation techniques. Prerequisite: CHEF 1301.

CHEF 2302 Saucier 2-4-3

Instruction in the preparation of stocks, soups, classical sauces, contemporary sauces, accompaniments, and the pairing of sauces with a variety of foods. Prerequisite: CHEF 1301.

CHEF 2332 Buffet Theory and Production 2-4-3

Advanced concepts in the construction of inedible display items. Emphasis on buffet production, presentation, and service. The student will produce tallow, butter, and ice sculptures, and organize a buffet layout. Prerequisite: CHEF 1301.

CHEM Chemistry

CHEM 1406 Introductory Chemistry I 3-3-4

This course is a survey of the fundamentals of general chemistry with applications from medicine, modern living, agriculture, and the environment. This course is designed for non-science majors who need a lab science credit, for nursing students seeking a B.S. degree or background for physiology, and also for students who have very little or no chemical background. Prerequisite: Appropriate placement score or completion of the appropriate level of Developmental Studies course. Co-requisite: CHEX 1406.

CHEM 1407 Introductory Chemistry II 3-3-4

A survey of the fundamentals of organic and biochemistry for 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. Prerequisite: CHEM 1406, or CHEM 1411. 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. Prerequisite: Student must have completed MATH 1414 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. Prerequisite: CHEM 1411. Co-requisite: CHEX 1412.

CHEM 2423 Organic Chemistry I 3-4-4

The first of two courses designed to provide a foundation in organic chemistry. Fundamental principles of organic chemistry will be studied, including the structure, bonding, properties, and reactivity of organic molecules; and properties and behavior of organic compounds and their derivatives. Emphasis is placed on organic synthesis and mechanisms. Includes study of covalent and ionic bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and synthesis of simple molecules. This course is intended for students in science or pre-professional programs. Prerequisites: CHEM 1411 and CHEM 1412. Co-requisite: CHEX 2423.

CHEM 2425 Organic Chemistry II 3-4-4

As a continuation of CHEM 2423, this course involves a more in-depth study of some of the topics covered in CHEM 2423. Advanced principles of organic chemistry will be studied, including the structure, properties, and reactivity of aliphatic and aromatic organic molecules; and properties and behavior of organic compounds and their derivatives. Emphasis is placed on organic synthesis and mechanisms. Includes study of covalent and ionic bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and synthesis of simple molecules. This course is intended for students in science or pre-professional programs. Prerequisite: CHEM 2423. Co-requisite: CHEX 2425.

CJCR Criminal Justice 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. Prerequisites: Consent of the Department Chair.

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.

CJCR 2324 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.

CJCR 2325 Legal Aspects of Corrections 3-0-3

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.

CJCR 2466 Practicum (or Field Experience) Corrections/Correctional Administration 0-28-4

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Prerequisite: Consent of the Department Chair.

CJLE Criminal Justice see also CJCR and CJSA

CJLE 1211 Basic Firearms 1-2-2

Instruction in firearm safety, cleaning and care techniques, proper shooting principles, and proficiency with a handgun and shotgun. Prerequisite: Department approval required.

CJLE 1333 Traffic Law and Investigation 3-0-3

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.

CJLE 1345 Intermediate Crime Scene Investigation 3-0-3

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. Prerequisites: CRIJ 2314/CJSA 1342 or Police Academy.

CJLE 2345 Vice and Narcotics Investigation 3-0-3

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. Prerequisite: CRIJ 2314/CJSA 1342.

CJLE 2486 Internship-Criminal Justice/Police Science 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.

CJSA Criminal Justice see also CJCR and CJLE

CJSA 1170 Alcohol Awareness/Intervention 1-0-1

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.

CJSA 1171 Police Brutality 1-0-1

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.

CJSA 1172 Topics for Parents 1-0-1

The course will focus on areas of concern for today's parents; on-line predators, teenage alcohol and drug abuse and teenage domestic violence. This course will provide students with knowledge concerning these areas that will provide additional avenues of communication.

CJSA 1173 Drug Recognition for Law Enforcement 1-0-1

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".

CJSA 1174 Terrorism as a Strategy 1-0-1

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.

CJSA 1175 Investigation of Sexual Abuse 1-0-1

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.

CJSA 1176 Introduction to Gangs and Gang Infiltration of the Military 1-0-1

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.

CJSA 1177 International Criminal Justice 1-0-1

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.

CJSA 1178 Criminal Deviance 1-0-1

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.

CJSA 1192 Special Topics in Criminal Justice/Law Enforcement Administration 1-0-1

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.

CJSA 1302 Private Security Officer Training 3-0-3

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.

CJSA 1308 Criminalistics I 3-0-3

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. Prerequisites: CRIJ 2314/CJSA 1342.

CJSA 1312 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 crime prevention.

CJSA 1313 Court Systems and Practices 3-0-3

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.

CJSA 1317 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.

CJSA 1318 Court Management 3-0-3

Exploration of operational issues in the administration of American courts. Topics include responsibilities of court personnel, records management, and organizational management topics.

CJSA 1322 Introduction to Criminal Justice 3-0-3

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.

CJSA 1327 Fundamentals of Criminal Law 3-0-3

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.

CJSA 1342 Criminal Investigation 3-0-3

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.

CJSA 1348 Ethics in Criminal Justice 3-0-3

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.

CJSA 1351 Use of Force 3-0-3

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. Prerequisite: Consent of Department Chair.

CJSA 1359 Police Systems and Practices 3-0-3

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.

CJSA 1393 Special Topics in Criminal Justice Studies 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. Prerequisite: CRIJ 1301/CJSA 1322 and consent of Department Chair.

CJSA 2300 Legal Aspects of Law Enforcement 3-0-3

Exploration of police authority. Topics include responsibilities and constitutional constraints, law of arrest, search and seizure, and police liability.

CJSA 2302 Police Management, Supervision, and Related Topics 3-0-3

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.

CJSA 2331 Child Abuse, Prevention and Investigation 3-0-3

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. Prerequisites: CRIJ 2314/CJSA 1342 or CRIJ 1313/CJSA 1317, or Police Academy.

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 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, SOCW 2361 and SOCW 2362.

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 additive 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 Maintenance Technology 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 Science see also BCIS**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.

CPMT Computer Electronics

Technology see also CETT, CSIR, EECT, ELMT, HART, ITCC and ITNW

CPMT 1303 Introduction to Computer Technology 2-4-3

A fundamental computer course that provides in-depth explanation of the procedures to utilize hardware and software. Emphasis on terminology, acronyms, and hands-on activities.

CPMT 1345 Computer Systems Maintenance 2-4-3

This course is designed to prepare student to challenge the Comp Tia A+ certification exam, providing an examination of the functions of the components within a computer system. Development of skills in the use of test equipment and maintenance aids to repair computer systems. Prerequisite: CETT 1325 and CETT 1429.

CPMT 1404 Microcomputer Systems Software 3-3-4

Skills development in the installation, configuration, maintenance and troubleshooting of system software in microcomputers.

CPMT 1449 Computer Networking Technology 3-3-4

This course is designed to prepare student to challenge the Comp Tia Net+ certification exam. Topics include: networking fundamentals, terminology, hardware, software, and network architecture. The course includes hands-on activities reinforcing local area network (LAN) and wide area network (WAN) concepts and networking installations and operations. Prerequisite: CETT 1325 and CPMT 1303.

CPMT 2350 Industry Certification Preparation 2-3-3

Overview of the objectives for industry specific certification exam(s). Prerequisite: ITCC 2408.

CPMT 2445 Computer System Troubleshooting 3-3-4

Principles and practices involved in computer system troubleshooting techniques and repair procedures including advanced diagnostic test programs and the use of specialized test equipment. Prerequisite: CPMT 1345.

CRIJ Criminal Justice

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 Maintenance Technology see also CBFM, CNBT, ELPT, MBST, PFPB and WDWK

CRPT 1411 Roof Systems 3-3-4

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 3-3-4

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 see also
CMSW, PSYT and SCWK

DAAC 1167 Practicum (or Field Experience) – Substance Abuse/Addiction Counseling 0-10-1

DAAC 1304 Pharmacology of Addiction 2-4-3
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.

DAAC 1309 Assessment Skill of Alcohol and Other Drug Addictions 2-4-3
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.

DAAC 1311 Counseling Theories 2-4-3
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.

DAAC 1319 Introduction to Alcohol and Other Drug Addictions 2-4-3
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 & diversity, prevention, intervention, & 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.

DAAC 2301 Therapeutic Communities in a Criminal Justice Setting 2-2-3
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.

DAAC 2306 Substance Abuse Prevention I 2-2-3
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.

DAAC 2307 Addicted Family Intervention 2-4-3
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.

DAAC 2341 Counseling Alcohol and Other Drug Addictions 2-4-3
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.

DAAC 2353 Substance Abuse Prevention II 2-2-3
In-depth exploration of research, evaluation methods and best practices in prevention program design.

DAAC 2354 Dynamics of Group Counseling 2-4-3
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.

DAAC 2367 Practicum (or Field Experience) – Substance Abuse/Addiction Counseling 0-22-3
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.

DFTG Computer-Aided Drafting and Design see also ARCE

DFTG 1405 Technical Drafting 3-3-4
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.

DFTG 1409 Basic Computer-Aided Drafting 3-3-4
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.

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: Sophomore standing in the Drafting Program.

DFTG 1458 Electrical/Electronics Drafting 3-3-4
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: Sophomore standing in the Drafting Program.

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 1405, DFTG 2417, or concurrent enrollment.

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 2417 Descriptive Geometry 3-3-4

Examination of the graphical solution to problems involving points, lines, and planes in space. Prerequisite: DFTG 1405.

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: Second semester Sophomore standing in the Drafting Program.

DFTG 2423 Pipe Drafting 3-3-4

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: Sophomore standing in the Drafting Program.

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: Second semester Sophomore standing in the Drafting program.

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.

DRAM Drama

DRAM 1310 Introduction to Theater 3-0-3

Survey of theater including its history, dramatic works, stage techniques, production procedures, and relation to other art forms. Participation in productions may be required. Prerequisite: None

DRAM 1351 Acting I 2-4-3

An introduction to the fundamental principles and tools of acting as used in auditions, rehearsals, and performances. This may include ensemble performing, character and script analysis, and basic theater terminology. This exploration will emphasize the development of the actor's instrument: voice, body and imagination. Prerequisite: None

DRAM 1352 Acting II 2-4-3

Exploration and further training within the basic principles and tools of acting, including an emphasis on critical analysis of oneself and others. The tools include ensemble performing, character and script analysis, and basic theater terminology. This will continue the exploration of the development of the actor's instrument: voice, body and imagination. Prerequisite: DRAM 1351 or Instructor Approval.

DRAM 2366 Introduction to Cinema 2-4-3

Survey and analyze cinema including history, film techniques, production procedures, selected motion pictures, and cinema's impact on and reflection of society. Prerequisite: None

DRAM 2367 Development of the Motion Picture II 2-4-3

The focus of this course could vary from semester to semester. It will follow an in-depth study of a specific element related to the motion picture art form. Some possible topics might include a focus on genre, sociological influence, technical art or directorial style. Prerequisite: None.

DS— Developmental Studies

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

DSED 0300 College Study Skills 3-0-3

This course is designed to provide an opportunity for students to develop, select, and use strategies necessary in becoming prepared and successful in college and life. Emphasis in this particular course will be placed on the transference of high-level study skills to practical classroom situations and include the areas of time management, effective listening and note taking, concentration, learning through media, reading, retention of information, taking examinations, creativity, and leadership.

DSMA 0300 Developmental Mathematics I 5-1-3

Developmental Mathematics I is designed to help the student make the transition from arithmetic to algebra. This is accomplished through in-depth coverage of the fundamentals of whole numbers, fractions, decimals, percents, sign numbers, order of operations, prime factorization, greatest common factor, variable expressions, introduction to graphs and linear equations. A computer lab where students practice math skills is required. Prerequisite: Appropriate TSI score or TSI exemption or completion of the appropriate level of the Developmental studies course.

DSMA 0301 Developmental Mathematics II 5-1-3

Developmental Mathematics II 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. A computer lab where students practice math skills is required. Prerequisite: Appropriate TSI score or TSI exemption or completion of the appropriate level of the Developmental studies course.

DSMA 0303 Developmental Mathematics IV 5-1-3

Developmental Mathematics IV requires an understanding of the topics taught in DSMA 0301. This course teaches such topics as rational expressions, rational exponents and radicals, 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. A computer lab where students practice math skills is required. Prerequisite: Appropriate TSI score or TSI exemption or completion of the appropriate level of the Developmental studies course.

DSMA 0304 Fundamentals of Mathematics II 3-0-3

Fundamentals of Mathematics II is designed to help the student make the transition from arithmetic to algebra. This is accomplished through in-depth coverage of the fundamentals of whole numbers, fractions, decimals, percents, sign numbers, order of operations, prime factorization, greatest common factor, variable expressions, introduction to graphs and linear equations. (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.

DSMA 0305 Pre-Algebra 4-0-3

This course is designed for the student who requires a flexible schedule and possesses the commitment and self-discipline to benefit from interactive on-line learning. This course includes an in-depth coverage of the fundamentals of whole numbers, fractions, decimals, percents, sign numbers, order of operations, prime factorization, greatest common factor, variable expressions, introduction to graphs and linear equations. A computer, internet connection, and designated course software to facilitate interactive learning must be available. This course is offered online. Prerequisite: Appropriate TSI score or TSI exemption or completion of the appropriate level of the Developmental studies course.

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, rational exponents and radicals, 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 0309 Fundamentals of Algebra 4-0-3

Fundamentals of Algebra is designed for the student who requires a flexible schedule and possesses the commitment and self-discipline to benefit from interactive on-line learning. This course 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. A computer, internet connection, and designated course software to facilitate interactive learning must be available. Prerequisite: Appropriate TSI score or TSI exemption or completion of the appropriate level of the Developmental studies course. This course is offered online.

DSMA 0310 Intermediate Algebra 4-0-3

Intermediate Algebra is designed for the student who requires a flexible schedule and possesses the commitment and self-discipline to benefit from interactive on-line learning. This course requires an understanding of the topics taught in DSMA 0309. This course teaches such topics as rational expressions, rational exponents and radicals, 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. A computer, internet connection, and designated course software to facilitate interactive learning must be available. Prerequisite: Appropriate TSI score or TSI exemption or completion of the appropriate level of the Developmental studies course. This course is offered online.

DSRE 0300 Developmental Reading I 2-2-3

Developmental Reading I (DSRE 0300) 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. Each student is required to log 16 hours in the developmental studies computer lab to practice the reading skills addressed in class. Prerequisite: Appropriate TSI score or TSI exemption or completion of the appropriate level of the Developmental studies course.

DSRE 0301 Developmental Reading II 2-2-3

Developmental Reading II (DSRE 0301) 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. Each student is required to log 16 hours in the developmental studies computer lab to practice the reading skills addressed in class. Prerequisite: Appropriate TSI score or TSI exemption or completion of the appropriate level of the Developmental studies course.

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)

DSRE 0311 Developmental Reading II 4-0-3

Developmental Reading II (DSRE 0311) is designed for the student who requires a flexible schedule and who possesses the commitment and self-discipline to benefit from interactive on-line learning. This course is designed to aid students in developing and reinforcing the skills needed for reading college-level materials. Emphasis will be on vocabulary development, literal and critical comprehension skills, study and test-taking skills, and fluency. A computer, internet connection, and designated course software to facilitate interactive learning must be available. Prerequisite: Appropriate TSI score or TSI exemption or completion of the appropriate level of the Developmental studies course. This course is offered online.

DSWR 0301 Developmental Writing I 3-1-3

Developmental Writing I is a fundamental English course designed to aid the student in acquiring the basic skills needed for college-level writing. Primary emphasis is placed on sentence and paragraph development, with additional attention given to problems in grammar and usage as these problems occur in the paragraphs. Prerequisite: Appropriate TSI score or TSI exemption or completion of the appropriate level of the Developmental studies course. A computer lab where students practice writing skills is required.

DSWR 0302 Developmental Writing II 3-1-3

Developmental Writing II is a fundamental English course designed to aid the student in acquiring the basic skills needed for college-level writing. Primary emphasis is placed on essay development; with attention given to problems in grammar and usage as these problems occur in the essays. Prerequisite: Appropriate TSI score or TSI exemption or completion of the appropriate level of the Developmental studies course. A computer lab where students practice writing skills is required.

DSWR 0303 Fundamentals of Writing I 3-0-3

Fundamentals of Writing I is a fundamental English course designed to aid the student in acquiring the basic skills needed for college-level writing. Primary emphasis is placed on sentence and paragraph development, with additional attention given to problems in grammar and usage as these problems occur in the paragraphs. 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)

DSWR 0304 Fundamentals of Writing II 3-0-3

Fundamentals of Writing II is a fundamental English course designed to aid the student in acquiring the basic skills needed for college-level writing. Primary emphasis is placed on essay development, with attention given to problems in grammar and usage as these problems occur in the essays. 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)

DSWR 0311 Developmental Writing II 4-0-3

Developmental Writing II is designed for the student who requires a flexible schedule and possesses the commitment and self-discipline to benefit from interactive on-line learning. This course's purpose is to aid students in developing and reinforcing the skills needed for college-level writing. This course emphasizes essay writing, with attention given to grammar, mechanical, and usage problems as they occur in the context of the essay. A computer, internet connection, and designated course software to facilitate interactive learning must be available. Prerequisite: Appropriate TSI score or TSI exemption or completion of the appropriate level of the Developmental studies course. This course is offered online.

ECON Economics**ECON 2301 Principles of Macroeconomics 3-0-3**

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.

ECON 2302 Principles of Microeconomics 3-0-3

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 see also TECA**EDUC 1301 Introduction to the Teaching Profession 3-1-3**

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.

EDUC 2301 Introduction to Special Populations 3-1-3

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.

EECT Communications Electronics see also CETT, CPMT, CSIR, ELMT, HART, ITCC and ITNW**EECT 1474 Basic Communications Circuits 3-3-4**

An introduction to communications circuits used in both the two way and broadcast medium of transmission and reception with heavy emphasis on reception. Prerequisite: CETT 1429.

EECT 1476 Digital Communications 3-3-4

A broad coverage of digital communications including telephone data communications and voice synthesis. Prerequisite: CETT 1425 and CETT 1429.

EECT 2435 Telecommunications 3-3-4

A study of modern telecommunications systems incorporating microwave, satellite, optical, and wire/cable-based communications systems. Instruction in installation, testing, and maintenance of communications systems components.

EECT 2439 Communications Circuits 3-3-4

A study of communications systems with emphasis on amplitude modulation, frequency modulation, phase modulation, and digital pulse modulation. Discussion of several types of modulators, demodulators, receivers, transmitters, and transceivers. Prerequisite: EECT 1474.

ELMT Communications Electronics see also CETT, CPMT, CSIR, EECT, HART, ITCC and ITNW**ELMT 1301 Programmable Logic Controllers 2-4-3**

An introduction to programmable logic controllers as used in industrial environments including basic concepts, programming, applications, troubleshooting of ladder logic, and interfacing of equipment. Prerequisites: CETT 1425 and CETT 1429.

ELMT 1311 Solar Fundamentals 3-1-3

The study of heat transference, motors, pumps and other mechanical devices; solid state switches; photovoltaic plates and energy conversion; thermal dynamics; and solar energy.

ELMT 1402 Solar Photovoltaic Systems 3-3-4

Design and installation of solar photovoltaic systems and their applications.

ELMT 2339 Advanced Programmable Logic Controllers 2-4-3

Advanced applications of programmable logic controllers as used in industrial environments including concepts of programming, industrial applications, troubleshooting ladder logic, and interfacing of equipment. Prerequisite: ELMT 1301.

ELMT 2435 Certified Electronics Technician Training 3-3-4

Review of electronics concepts and principles in preparation for sitting for a certification examination administered by an outside organization or agency. Prerequisite: CETT 1449.

ELMT 2437 Electronic Troubleshooting, Service, and Repair 3-3-4

In-depth coverage of electronic systems, maintenance, troubleshooting, and repair. Topics include symptom identification, proper repair procedures, repair checkout, and preventive maintenance. Emphasis on safety and proper use of test equipment. May be offered as a capstone course. Prerequisites: CETT 1449.

ELPT Maintenance Technology see also CBFM, CNBT, CRPT, MBST, PFPB and WDWK**ELPT 1411 Basic Electrical Theory 3-3-4**

Basic theory and practice of electrical circuits. Includes calculations as applied to alternating and direct current.

ELPT 1429 Residential Wiring 3-3-4

Wiring methods for single family and multi-family dwellings. Includes load calculations, service entrance sizing, proper grounding techniques, and associated safety procedures. Prerequisite: ELPT 1411.

EMAP Public Administration/ Homeland Security see also HMSY**EMAP 1345 Hazard Mitigation and Debris Management 3-0-3**

Hazard mitigation process and available methodologies which, when applied, will contribute to reducing the vulnerability of a jurisdiction. Includes an in-depth study of potential funding mechanisms including the Hazard Mitigation Grant Program.

EMAP 1400 Principles of Basic Emergency Management 4-0-4

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.

EMAP 1440 Disaster Exercise Design & Evaluation 4-0-4

Twelve-step process in the development of emergency management exercises, beginning with assessing a jurisdiction's exercise needs and continuing through criteria-based evaluation and after-action reporting. This course will provide students with detailed information concerning the system for command, control and coordination of emergency response. This course is equivalent to the Texas Department of Emergency Management and the Federal Management Agency course G920.

EMAP 2300 Developing Volunteer Resources and Decision Making 3-0-3

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.

EMAP 2301 Leadership and Effective Communication 3-0-3

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.

EMAP 2302 Managing Mass Casualty and Fatality Incidents 3-0-3

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.

EMAP 2355 Disaster Recovery 3-0-3

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.

EMSP Emergency Medical Technology**EMSP 1108 Emergency Vehicle Operations 0-2-1**

Discussion, demonstration, and driving range practice. Addresses operation of vehicles in emergency and non-emergency modes.

EMSP 1147 Pediatric Advanced Life Support 1-0-1

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.

EMSP 1160 Clinical-Emergency Medical Technology/Technician 0-6-1

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 EMT-Basic. This course is only offered with EMSP 1401.

EMSP 1166 Practicum/Field Experience-Emergency Medical Technology/Technician 0-7-1

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Direct supervision is provided by the clinical professional, generally a clinical preceptor. A health practicum may be a paid or unpaid learning experience. Upon successful completion of this course, EMSP 1356 and EMSP 1355, students are eligible to take the exam to be certified as an AEMT or EMT-I. This course is only offered with EMSP 1356 and EMSP 1355.

EMSP 1167 Practicum/Field Experience-Emergency Medical Technology/Technician 0-8-1

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Direct supervision is provided by the clinical professional, generally a clinical preceptor. A health practicum may be a paid or unpaid learning experience. This course is designed to meet Practicum requirements for EMSP 2444 and EMSP 2434. Prerequisites: Current CPR certification. Co-requisites: EMSP 2444 and 2434. See also admission requirements.

EMSP 1170 Rapid Patient Assessment (Europe only) 1-0-1

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.

EMSP 1204 EMT Refresher 1-2-2

Update and review theory and skills necessary to meet national and/or state requirements for remediation or recertification as an Emergency Medical Technician (EMT).

EMSP 1268 Practicum/Field Experience-Emergency Medical Technology/Technician 0-14-2

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Direct supervision is provided by the clinical professional, generally a clinical preceptor. A health practicum may be a paid or unpaid learning experience. Upon successful completion of this course and EMSP 2143, students are eligible to take the exam to be certified as an EMT-P by the Texas Department of State Health Services and/or National Registry of EMT. Prerequisites: Current CPR certification. Co-requisite: EMSP 2330, 2143, 2338. See also admission requirements.

EMSP 1271 Sports and Physical Training Injuries (Europe only) 2-0-2

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 EMT-B certification course; or similar training.

EMSP 1272 EMT-B Refresher (Europe only) 2-0-2

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 EMT-B Refresher curriculum.

EMSP 1273 Advanced Airway Management (Europe only) 2-0-2

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 an EMT-P during intubation are presented.

EMSP 1291 Special Topics in Emergency Medical Technology/Technician 2-0-2

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.

EMSP 1305 Emergency Care Attendant 2-3-3

Preparation for certification as an Emergency Care Attendant (ECA)/Emergency Medical Responder (EMR).

EMSP 1338 Introduction to Advanced Practice 3-0-3

Fundamental elements associated with emergency medical services to include preparatory practices, pathophysiology, medication administration, and related topics.

EMSP 1355 Trauma Management 2-3-3

Knowledge and skills in the assessment and management of patients with traumatic injuries. Upon successful completion of this course, EMSP 1356 and EMSP 1166, students are eligible to take the exam to be certified as an AEMT or EMT-I. Prerequisites: Current CPR certification, EMSP 1401, EMSP 1160, or national registry certification, or any state certification as an EMT-Basic. See also admission requirements.

EMSP 1356 Patient Assessment and Airway Management 2-3-3

Knowledge and skills required to perform patient assessment, airway management, and artificial ventilation. Prerequisites: Current CPR certification, EMSP 1401, EMSP 1160, or national registry certification, or any state certification as an EMT-Basic. See also admission requirements.

EMSP 1391 Special Topics in Emergency Medical Technology/Technician 2-4-3

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.

EMSP 1401 Emergency Medical Technician-Basic 2-6-4

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 EMT-Basic by the Texas Department of State Health Services and/or National Registry of EMT. Prerequisite: Current CPR certification. See also admission requirements.

EMSP 2135 Advanced Cardiac Life Support 1-0-1

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

EMSP 2143 Assessment Based Management 0-3-1

A capstone experience covering comprehensive, assessment based patient care management. Includes specific care when dealing with pediatric, adult, geriatric, and special-needs patients. Upon successful completion of this course and EMSP 1268, students are eligible to take the exam to be certified as an EMT-P by the Texas Department of State Health Services and/or National Registry of EMT. Prerequisites: Current CPR certification, EMSP 2330. Co-requisite: EMSP 1268. See also admission requirements.

EMSP 2160 Clinical – Emergency Medical EMT Paramedic 0-3-1

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.

EMSP 2300 Methods of Teaching Emergency Medical Service 2-2-3

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.

EMSP 2330 Special Populations 2-2-3
Knowledge and skills necessary to assess and manage ill or injured patients in diverse populations to include neonatology, geriatrics, and other related topics. Upon successful completion of this course, EMSP 2444, EMSP 2434, EMSP 1167, EMSP 2143, EMSP 1268 and EMSP 2338, students are eligible to take the exam to be certified as an EMT-P by the Texas Department of State Health Services and/or National Registry of EMT. Prerequisites: Current CPR certification, EMSP 1167. See also admission requirements.

EMSP 2338 EMS Operations 3-0-3
Knowledge and skills to safely manage multi-casualty incidents and rescue situations; utilize air medical resources; identify hazardous materials and other specialized incidents. Prerequisites: Current CPR certification, EMSP 1401. Co-requisites: EMSP 2143, EMSP 2330, EMSP 1268. See also admission requirements.

EMSP 2434 Medical Emergencies 3-3-4
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, EMSP 2444, EMSP 1167, EMSP 2330, EMSP 2143, 2338 and EMSP 1268, students will be eligible to take the exam to be certified as an EMT-P by the Texas Department of State Health Services and/or National Registry of EMT. Prerequisites: Current CPR certification, EMSP 1401 and EMSP 1160. See also admissions requirements.

EMSP 2444 Cardiology 3-3-4
Assessment and management of patients with cardiac emergencies. Includes single and multi-lead ECG interpretation. Upon successful completion of this course, EMSP 2434, EMSP 1167, EMSP 2330, EMSP 2143 EMSP 2338 and EMSP 1268, students will be eligible to take the exam to be certified as an EMT-P by the Texas Department of State Health Services and/or National Registry of EMT. Prerequisites: Current CPR certification, EMSP 1401 and EMSP 1160. See also admission requirements.

EMSP 2458 Critical Care Paramedic 3-3-4
Prepares healthcare personnel to function as members of a critical care transport team.

ENGL English

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 2308 Creative Writing II 3-0-3
This course provides practical experience in the techniques of imaginative writing. The focus of this course will be genre specific. This course is designed to guide the student in completing a detailed outline of a working novel. It will expose students to constructive criticism of their own work, and develop appropriate critiquing skills to be applied to the writings of others. The course will also focus on developing skills to set and meet timelines for the completion of a large project. Prerequisite: ENGL 1301.

ENGL 2311 Technical and Business Writing 3-0-3
Study of technical, scientific, and business writing including reports, proposals, and other papers. The course also includes presentation of oral reports. 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 reading. 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**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. Prerequisites: Appropriate placement score or TSI exemption or completion of the appropriate level of Developmental Studies course. Co-requisite: ENVX 1401.

FIRT Fire Protection**FIRT 1301 Fundamentals of Fire Protection 3-0-3**

Overview to fire protection, career opportunities in fire protection and related fields, philosophy and history of fire protection/service, fire loss analysis, organization and function of public and private fire protection services, fire departments as part of local governments, laws and regulations affecting the fire service, fire service nomenclature, specific fire protection functions, and basic fire chemistry and physics. Includes introduction to fire protection systems and introduction to fire strategy and tactics.

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

Study of firefighter occupational safety and health in emergency and non-emergency situations.

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.

FIRT 1345 Hazardous Materials II 3-0-3

In-depth study of mitigation practices and techniques to effectively control hazardous material spills and leaks. Not offered in Texas.

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. Not offered in Texas.

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 manpower and equipment to mitigate the emergency.

FIRT 2319 Fire Chemistry II 3-0-3

Chemical compounds related to the fire service. Includes effective selection of extinguishing agents and method of application. Not offered in Texas.

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**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 1411 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**GEOG 1300 Principles of Geography 3-0-3**

This is an introductory-level course that combines physical and cultural geography using a spatial approach. The course examines the physical environment of the Earth and explains maps, covers man’s adaptation to environmental extremes, and explores man’s use of his environment ranging from adaptation within a tribal culture to the highly modernized urban world.

GEOG 1301 Physical Geography 3-0-3

A course which examines the physical characteristics of the Earth’s environment using maps as a primary tool for expressing location and interrelationships. Principle discussion topics are the atmosphere and oceans, weather, climate, environments of earth materials and vegetation, earth processes, land forms and their development.

GEOG 1302 Cultural Geography 3-0-3

Introduction to the concepts which provide a foundation for continued study of geography. Includes the different elements of natural environment as related to human activities, modes of living, and map concepts. The first semester emphasizes physical geography and the second semester emphasizes cultural geography.

GEOG 1303 World Regional Geography 3-0-3

The study of major developing and developed regions of the world stressing their similarities and differences and their physical and cultural spatial interrelationships. An additional emphasis is the diversity of ideas and practices to be found in those regions.

GEOLOGY**GEOG 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. Co-requisite: GEOX 1403

GEOG 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. Prerequisites: GEOG 1403 Physical Geology Co-requisite: GEOX 1404

GEOG 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.

GERM German**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 1411 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**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.

GOVT 2306 Texas Government 3-0-3

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 see also CHEF, IFWA, PSTR, RSTO and TRVM**HAMG 1313 Front Office Procedures 3-0-3**

A study of the flow of activities and functions in today’s lodging operation. Topics include a comparison of manual, machine-assisted, and computer-based methods for each front file function.

HAMG 1321 Introduction to the Hospitality Industry 3-0-3

Introduction to the Hospitality Industry introduces students to the various elements of the Hospitality field. It provides an in-depth overview of the world’s largest and fastest growing business. Topics include growth, development and organization of the foodservice and lodging industries; human resources; marketing; security, engineering and maintenance of hospitality facilities; and career opportunities within the hospitality industry.

HAMG 1324 Hospitality Human Resource Management 3-0-3

A study of the principles and procedures of managing people in the hospitality workplace.

HAMG 1340 Hospitality Legal Issues 3-0-3

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.

HAMG 1342 Guest Room Maintenance 3-1-3

Demonstrates the working relationship in the lodging industry between housekeeping and maintenance. American Hotel and Lodging Association (AH&LA) certification course. Student must attain a score of 70% or higher on certification test to receive National Certification.

HAMG 2301 Principles of Food and Beverage Operations 3-0-3

An introduction to food, beverage, and labor cost controls with an overview of the hospitality industry from procurement to marketing. Examination of cost components including forecasting, menu planning and pricing, logistical support, production, purchasing, and quality assurance.

HAMG 2307 Hospitality Marketing and Sales 3-0-3

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

HAMG 2332 Hospitality Financial Management 3-0-3

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

HAMG 2337 Hospitality Facilities Management 3-0-3

Identification of building systems, facilities management, security and safety procedures. American Hotel and Lodging Association (AH&LA) certification course. Student must attain a score of 70% or higher on certification test to receive National Certification.

HAMG 2372 Hospitality Industry Training 3-0-3

This course provides a thorough look at training by addressing how to assess and analyze the training needs of new and established operations; design, implement, and evaluate training programs for non-management employees; manage the basic training functions; and train the trainer programs.

HAMG 2388 Internship - Hospitality Administration and Management 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: Consent of the Program Director.

HART Heating, Air Conditioning and Refrigeration**HART 1401 Basic Electricity for HVAC 3-3-4**

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

HART 1403 Air Conditioning Control Principles 3-3-4

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.

HART 1407 Refrigeration Principles 3-3-4

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

HART 1441 Residential Air Conditioning 3-3-4

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.

HART 1445 Gas and Electric Heating 3-3-4

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.

HART 2431 Advanced Electricity for HVAC 3-3-4

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.

HART 2436 Air Conditioning Troubleshooting 3-3-4

An advanced course in application of troubleshooting principles and use of test instruments to diagnose air conditioning and refrigeration components and system problems including conducting performance tests. Prerequisites: HART 1401, 1403, 1407 and 1445.

HART 2438 Air Conditioning Installation and Startup 3-3-4

A study of air conditioning system installation, refrigerant piping, condensate disposal, and air cleaning equipment with emphasis on startup and performance testing. Prerequisite or co-requisite: HART 1407.

HART 2441 Commercial Air Conditioning 3-3-4

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

HART 2442 Commercial Refrigeration 3-3-4

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

HART 2445 Residential Air Conditioning System Design 3-3-4

Study of the properties of air and results of cooling, heating, humidifying or dehumidifying; heat gain and heat loss calculations including equipment selection and balancing the air system. Prerequisite: HART 1407.

HART 2449 Heat Pumps 3-3-4

A study of heat pumps, heat pump control circuits, defrost controls, auxiliary heat, air flow, and other topics related to heat pump systems. Prerequisites: HART 1401, 1403, and 1407.

HART 2488 Internship - Heating, A/C, Ventilation and Refrigeration Maintenance Technology/Technician (HAC, HACR) 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 employer. Prerequisite: Department approval required.

HIST History

HIST 1301 United States History I 3-0-3

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 3-0-3

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 3-0-3

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 3-0-3

A survey of the social, political, economic, cultural, religious, and intellectual history of Europe and the Mediterranean world from human origins to the 17th century. Themes that should be addressed in Western Civilization I include the cultural legacies of Mesopotamia, Egypt, Greece, Rome, Byzantium, Islamic civilizations, and Europe through the Middle Ages, Renaissance, and Reformations.

HIST 2312 Western Civilization II 3-0-3

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 2381 African-American History 3-0-3

Historical, economic, social, and cultural development of minority groups. May include African-American, Mexican American, Asian American, and Native American issues.

HITT Office Technology see also MDCA, MRMT, POFI, POFM, and POFT

HITT 1249 Pharmacology 1-3-2

Overview of the basic concepts of the pharmacological treatment of various diseases affecting major body systems. Recommended prerequisites: HITT 1305 or MDCA 1409.

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. Introduction to 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. Prerequisites: HITT 1301 and HITT 1305.

HITT 2166 Practicum 0-8-1

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Prerequisites: Completion of all courses in the certificate except HITT 2346 and Departmental approval. HITT 2346 may be taken as a co-requisite with HITT 2166.

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 1303.

HITT 2346 Advanced Medical Coding 2-4-3

Advanced concepts of ICD and CPT coding rules, conventions, and guidelines in complex case studies. Investigation of government regulations and changes in health care reporting. Prerequisites: POFM 1327, POFM 2310 and Departmental approval.

HMSY Public Administration/ Homeland Security 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 1339 Homeland Security Emergency Contingency Planning 3-0-3

Procedures for developing, implementing, and updating an Emergency Contingency Plan that outlines public agencies and private industry response, recovery, and mitigation. Includes types of aid available to individuals and communities after a disaster. Also covers interagency and intergovernmental emergency preparedness, planning, training, and exercises are included.

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

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 1343 Weapons of Mass Destruction 3-0-3

This course covers hazard and risk assessment, crime scene preservation, chemical agents, biological agents, radiological agents, explosive devices, detection-sampling and plume models, and personal protection methods. The critical role of first responders in weapons of mass destruction, mitigation, and survival will also be presented. Discussion will include historical events related to the use of weapons of mass destruction.

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.

HMSY 1371 Counter Terrorism 3-0-3

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.

HMSY 1470 Final Project in Homeland Security and Emergency Management 4-0-4

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.

HMSY 2337 Managing a Unified Incident Command 3-0-3

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.

HMSY 2476 Internship- Homeland Security and Emergency Management 0-12-4

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: Department approval required.

HRPO Business Administration and Management see also BMGT, BUSG and MRKG**HRPO 1311 Human Relations 3-0-3**

Practical application of the principles and concepts of the behavioral sciences to interpersonal relationships in the business and industrial environment.

HRPO 2301 Human Resources Management 3-0-3

Behavioral and legal approaches to the management of human resources in organizations.

HUMA Humanities**HUMA 1315 Fine Arts Appreciation 3-0-3**

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

IFWA Hospitality Management see also CHEF, HAMG, PSTR, RSTO and TRVM**IFWA 1318 Nutrition for the Food Service Professional 3-0-3**

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 Science see also ITNW, ITSC, ITSE, ITSW and 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**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.

ITNW Computer Science see also IMED, ITSC, ITSE, ITSW and ITSY

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

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 1353 Supporting Network Server Infrastructure 2-4-3
Installing, configuring, managing, and supporting a network infrastructure. Prerequisites: ITNW1316 or concurrent enrollment.

ITNW 1358 Network+ 2-4-3
Assists individuals in preparing for the Computing Technology Industry Association (CompTIA) Network+ certification exam and career as a network professional. Prerequisites: None

ITNW 1454 Implementing and Supporting Servers 3-3-4
Implement, administer, and troubleshoot information systems that incorporate servers in a networked computing environment. Prerequisites: ITNW1316 and ITNW1345.

ITNW 2354 Internet/Intranet Server 2-4-3
Advanced concepts in the designing, installing, and administration of an Internet/Intranet server. Prerequisites: ITNW1316, ITNW1345, and ITNW1353.

ITNW 2356 Designing a Network Directory Infrastructure 2-4-3
Design, implement, and support a network directory infrastructure in a multi-domain environment. Prerequisites: ITNW1345 or concurrent enrollment.

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.

ITNW Electronics see also CETT, CPMT, CSIR, EECT, ELMT, HART and ITCC

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.

ITNW 1451 Fundamentals of Wireless LANs 3-3-4
Designing, planning, implementing, operating, and troubleshooting wireless LANs (WLANs). Includes WLAN design, installation, and configuration; and WLAN security issues and vendor interoperability strategies. Prerequisite: Department approval.

ITSC Computer Science see also IMED, ITNW, ITSE, ITSW and ITSY

ITSC 1301 Introduction to Computers 3-1-3
Overview of computer information systems. Introduces computer hardware, software, procedures, and human resources. 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. Prerequisites: None

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

ITSC 1405 Intro. to PC Operating Systems 3-3-4
Introduction to personal computer operating systems including installation, configuration, file management, memory and storage management, control of peripheral devices, and use of utilities. Prerequisites: 6 semester hours in computer science courses.

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 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: 12 semester hours in computer science courses.

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 Science see also IMED, ITNW, ITSC, ITSW and ITSY

ITSE 1302 Computer Programming 2-4-3
Introduction to computer programming including design, development, testing, implementation, and documentation. Prerequisites: ITSE 1329.

ITSE 1329 Programming Logic and Design 2-4-3
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

ITSE 2402 Intermediate Web Programming 3-3-4
Techniques for Web development. Includes server-side and client-side scripting. Prerequisites: ITSE 1329 and ITNW 1337.

ITSE 2421 Object-Oriented Programming 3-3-4
Introduction to object-oriented programming. Emphasis on the fundamentals of design with classes, including development, testing, implementation, and documentation. Includes object-oriented programming techniques, classes, and objects. Prerequisites: ITSE 1329.

ITSE 2459 Advanced Computer Programming 3-3-4
Advanced programming techniques including file access methods, data structures, modular programming, program testing and documentation. Prerequisites: ITSE1 329 or ITSE 1302.

ITSE 2486 Internship - Computer Programming/ Programmer, 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: 29 semester hours in computer science courses and consent of the Department Chair

ITSW Computer Science see also IMED, ITNW, ITSC, ITSE and ITSY

ITSW 1307 Introduction to Database 2-4-3
Introduction to database theory and the practical applications of a database. Prerequisites: ITSE 1329.

ITSY Computer Science see also IMED, ITNW, ITSC, ITSE and ITSW

ITSY 1342 Information Technology Security 2-4-3
Instruction in security for network hardware, software, and data, including physical security; backup procedures; relevant tools; encryption; and protection from viruses. Prerequisites: None

ITSY 2401 Firewalls and Network Security 3-3-4
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: ITNW 1358.

ITSY 2441 Security Management Practices 3-3-4
In-depth coverage of security management practices, including asset evaluation and risk management; cyber law and ethics issues; policies and procedures; business recovery and business continuity planning; network security design; and developing and maintaining a security plan. Prerequisites: 6 semester hours of Information Technology Security coursework (ITSY).

ITSY 2442 Incident Response & Handling 3-3-4
In-depth coverage of incident response and incident handling, including identifying sources of attacks and security breaches; analyzing security logs; recovering the system to normal; performing postmortem analysis; and implementing and modifying security measures. Prerequisites: 6 semester hours of Information Technology Security coursework (ITSY).

ITSY 2459 Security Assessment and Auditing 3-3-4
Course Description: 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)

ITSY 2486 Internship - Computer and Information Systems Security 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: 29 semester hours in computer science courses and consent of the Department Chair

JAPN Japanese

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

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

JAPN 2311 Intermediate Japanese I 3-0-3
Review and application of skills in listening, comprehension, and speaking; introduction to advanced grammar patterns; and acquisition of additional Japanese characters. Prerequisite JAPN 1411 and 1412 with a grade of "C" or above.

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

KORE Korean

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

KORE 1412 Beginning Korean II 4-2-4
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.

KORE 2311 Intermediate Korean I 3-0-3
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.

KORE 2312 Intermediate Korean II 3-0-3
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.

LGLA Paralegal/Legal Assistant

LGLA 1300 Elder Law 3-0-3
Fundamental concepts of elder law, including financial and estate planning, public benefits, health care, personal planning and protection, and consumer protection emphasizing the paralegal's role in elder law.

LGLA 1301 Legal Research and Writing 3-0-3
Presents the fundamentals of legal research and writing emphasizing the paralegal's role including resources and processes used in legal research and writing.

**LGLA 1304 Military and National Security
Legal Issues 3-0-3**

Emphasizes the role of the paralegal and presents fundamentals of the United States military legal system including an introduction to the Uniform Code of Military Justice, military regulations, and court decisions involved in military law emphasizing emerging issues of national security laws.

**LGLA 1307 Introduction to Law and the
Legal Profession 3-0-3**

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.

LGLA 1317 Law Office Technology 3-0-3

Computer technology and software applications within the law office emphasizing the paralegal's role in the use of law office technology. Prerequisite: ITSW 1401 or ITSC 1409.

LGLA 1343 Bankruptcy 3-0-3

Fundamental concepts of bankruptcy law and procedure are presented including individual and business liquidation and reorganization with emphasis on the paralegal's role.

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 1349 Constitutional Law 3-0-3

An overview of the United States Constitution and its articles, amendments, and judicial interpretations. Includes separation of powers, checks and balances, governmental structures and process, and individual rights in relation to government.

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 1357 Juvenile Law 3-0-3

Fundamental concepts of juvenile law for paralegals including differences between the criminal and juvenile justice systems, detention, adjudication, disposition, certification procedures, and related issues within the public education system.

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 2307 Law Office Management 3-0-3

Fundamentals of principles and structure of management, administration, and substantive systems in the law office including law practice technology as applied to paralegals.

LGLA 2309 Real Property 3-0-3

Presents fundamental concepts of real property law including the nature of real property, rights and duties of ownership, land use, voluntary and involuntary conveyances, and the recording of and searching for real estate documents emphasizing the paralegal's role in property law.

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 2331 Advanced Legal Research & Writing 2-3-3

Builds on previous legal research and writing courses and covers standard and electronic research techniques and preparation of complex legal documents with emphasis on the paralegal's role. Prerequisite LGLA 1303.

**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.

MATH Mathematics

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 meets the college core requirement and is recommended for students planning to transfer to bachelor's degree programs. Prerequisites: DSMA 0303 or equivalent with a grade of "C" or better or acceptable evaluation scores. NAVY AND PACIFIC FAR EAST CAMPUSES ONLY.

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 1414 or MATH 1324.

MATH 1332 Contemporary Mathematics I 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. 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. This course is for non-mathematics, non-science, and non-business students.

MATH 1350 Fundamentals of Mathematics 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 1414.

MATH 1351 Fundamentals of Mathematics 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 1414.

MATH 1414 College Algebra 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 meets the college core requirement and is recommended for students planning to transfer to bachelor's degree programs. Graded exercises, guided practice, and graded quizzes will be completed in a non-lecture, lab environment requiring a minimum of one contact hour per week of activity. 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 above.

MATH 2412 Precalculus 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 above. (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 above.

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 above.

MBST Maintenance Technology 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 see also HITT, MRMT, 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.

MDCA 1409 Anatomy and Physiology for Medical Assistants 3-4-4
Emphasis on structure and function of human cells, tissues, organs, and systems with overview of common pathophysiology.

MGMT Military Contract Courses (Air Force Reserve)

MGMT 2172 Introduction to Management Theory 1-0-1
This course examines management theories and also covers management functions, problem solving, and decision making. Air Force Reserve Contract Only

MGMT 2173 Leadership Communications in Management 1-0-1
The major objective of the course is to improve professional managerial capabilities through the enhancement of supervisor-worker communications skills. Air Force Reserve Contract Only

MRKG Business Administration and Management 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.

MRMT Office Technology see also HITT, MDCA, POFI, POFM, and POFT

MRMT 1307 Medical Transcription I 2-4-3
Fundamentals of medical transcription with hands-on experience in transcribing physician dictation including basic reports such as history and physicals, discharge summaries, consultations, operative reports, and other medical reports.

Utilizes technology compatible with industry standards. Designed to develop speed and accuracy. Prerequisite: HITT 1305 or concurrent enrollment. Keyboarding proficiency and written communication skills recommended.

MRMT 2166 Practicum - Medical Transcription/Transcriptionist 0-8-1
Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Prerequisite: completion of all courses in the certificate and Departmental approval.

MRMT 2333 Medical Transcription II 2-4-3
Transcription of medical reports with increasing speed and accuracy including history and physicals, consultations, discharge summaries, operative reports, and other medical reports. Prerequisite: MRMT 1307.

MRMT 2357 Advanced Medical Transcription 2-4-3
Application of highly developed medical transcription skills. Includes use of technology and medical resources to produce correct medical documents from their inception as dictated materials to their inclusion in the patient health record. Prerequisite: MRMT 2333 or Departmental approval.

MT- Military Contract Courses

BMGT 1177 Critical and Creative Thinking 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) (Europe) (Bolling) (Cont.) 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) (Europe) (Cont.) 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) (Europe) (Cont.) 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 SUM11) (Cont.) 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 SUM11/ASM13 (Cont.) 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 (SUM11/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 or have successfully completed MTCS 1173 Introduction to Computers.

MTES 1170 Professional Ethics (NCO Lead SUM11/ASM13) (Europe) (Cont.) 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) (Cont.) 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) (Cont.) 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) (Europe) (Cont.) 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) (Cont.) 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) (Europe) 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) (Europe) (Cont.) 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) (Europe) (Cont.) 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) (Europe) 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) (Cont.) 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.

MTIR 1170 Interpersonal Relationships (NCO Lead SUM11/ASM13) (Europe) (Cont.) 1-0-1

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.

MTLE 1170 Crime Prevention (SUM11, ASM13) 1-0-1

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.

MTLM 1170 Managerial Planning (NCO Lead SUM11/ASM13) (Europe) 1-0-1

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

MTLM 1171 Managing Resources (NCO Lead SUM11/ASM13) (Europe) (Cont.) 1-0-1

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.

MTLM 1172 Government Contracting (Europe) 1-0-1

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.

MTMM 1170 Increasing Work Site Efficiency (NCO Lead SUM11/ASM13) (Europe) 1-0-1

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.

MTMM 1171 Problem Solving (NCO Lead SUM11/ASM13) (Europe) (Cont.) 1-0-1

This course presents an effective problem solving and decision making model for management settings and offers hands-on practice in using problem solving techniques. This course includes defining, analyzing, and solving management problems. It is designed to present a logical approach to problem solving, and step-by-step process for the achievement of desired results.

MTOB 1170 Styles of Leadership (NCO Lead SUM11/ASM13) (Europe) (Cont.) 1-0-1

A study of the current Army thoughts on leadership with hands-on practice in developing and practicing a leadership style within the framework of the military organization.

MTOB 1171 Improving Work Performance (NCO Lead SUM11/ASM13) (Europe) 1-0-1

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.

MTPF 1170 Personal Financial Management I (NCO Lead SUM11/ASM13) (Europe) (Cont.) 1-0-1

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 risk management, bank accounts, borrowing, investing, and insurance.

MTPF 1171 Personal Financial Management II (NCO Lead SUM11/ASM13) (Europe) (Cont.) 1-0-1

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 investment concepts, mutual funds, IRAs, retirement, and estate planning. Prerequisite: MTPF 1170.

POFT 1132 Workplace Diversity (SUM11, ASM13) 1-0-1

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.

PSYT 1170 Crisis Intervention I (SUM11, ASM13) 1-0-1

This course is an introduction to the nature and characteristics of crisis intervention awareness. This course provides basic knowledge and awareness about the various crises that can happen in any organization and includes: suicide, domestic violence, sexual assault, substance abuse, and PTSD. This course provides a framework for a study of crisis intervention awareness.

PSYT 1171 Crisis Intervention II 1-0-1

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 harassment, 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**MTMC 1170 Internet (NCO Lead/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 ASM13) (Cont.) 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 ASM13) (Cont.) 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 ASM13) (Cont.) 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) (Cont.) 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) (Cont.) 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 ASM13) (Cont.) 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/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 ASM13) (Cont.) 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 ASM13) (Cont.) 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 (NCO Lead ASM13) (Cont.) 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) (Cont.) 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.

MTMC 2176 Microsoft Access Advanced Topics (NCO Lead ASM13) (Cont.) 1-0-1
This is an advanced course for Microsoft Access, a database management software program, designed to teach students how to create advanced queries, modify form controls and properties, modify report controls and properties, create calculating fields, and create and modify simple macros. Prerequisites: Students must be able to demonstrate basic computer, Internet and word processing skills. (MTCS 1173, MTMC 1170, MTCS 1175, MTMC 1172, MTMC 1171, MTMC 1173) are recommended, but not required.

MTMS Military Science Management

MTMS 1170 Military Science I 1-0-1
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 1-0-1
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 1-0-1
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 problems 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 1-0-1

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 1-0-1

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 2-0-2

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 2-0-2

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 2-0-2

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 2-0-2

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 2-0-2

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 2-0-2

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 2-0-2

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 2-0-2

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 2-0-2

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.

MTMS 2370 Advanced Leadership 3-0-3

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 3-0-3

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 3-0-3

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

MUSI 1306 Music Appreciation 3-0-3

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 3-0-3

An in-depth study of the music, literature and history from the 15th through the 20th 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 Maintenance Technology *see also* CBFM, CNBT, CRPT, ELPT, MBST and WDWK

PFPB 2409 Residential Const. Plumbing I 3-3-4

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 3-3-4

Installation of residential plumbing fixtures used in single- and multi-family housing. Prerequisite: PFPB 2409.

PHIL Philosophy

PHIL 1301 Introduction to Philosophy 3-0-3

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 3-0-3

A comparative study of world religions, including but not limited to Hinduism, Buddhism, Judaism, Christianity and Islam.

PHIL 1316 History of Religions I 3-0-3

History of Religions I is a comparative study of world religions This course investigates the history of ancient Israel's religion in comparison with the religions of the indigenous peoples and Israel's neighbors: Egypt, Assyria, and Babylon. Student's will study the Hebrew Bible for what it teaches about how ancient Israelites worshiped. Students will also study how ancient Israel's religious systems compared with those of their neighbors.

PHIL 1317 History of Religions II 3-0-3

History of Religions II is a comparative study of world religions This course investigates the history of earliest Christianity in comparison to the religions and philosophies of the Greco-Roman world and early Judaism. Students will study the New Testament for what it teaches about how earliest Christians worshiped. Students will also study how early Christian religious systems and ideas compared with those of their neighbors.

PHIL 2303 Introduction to Logic 3-0-3

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 3-0-3

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 3-0-3

A study of major issues in social and political theory and/or the work of major philosophical figures in this area.

PHYS Physical Science**PHYS 1401 College Physics I 3-3-4**

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. Prerequisite: MATH 1414 and (MATH 1316 OR MATH 2412) Co-requisite: PHYX 1401.

PHYS 1402 College Physics II 3-3-4

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. Prerequisite: PHYS 1401. Co-requisite: PHYX 1402.

PHYS 1403 Stars and Galaxies 3-2-4

This course is designed to give an overview of the visible universe. The objective throughout this course is to explain how astronomers know the many curious things they have learned about our universe. It brings the universe alive, in a sense, by showing the drama of the birth, evolution, and death of stars. What is the universe? Did the universe have a beginning? Will the universe last forever? These cosmological questions are answered in a qualitative way. The chances of life elsewhere in the universe, and how we might know about it are discussed. Planetarium and Observatory are used extensively. Methods of instruction include practical laboratory experiments, application of modern technology, and guided discussions. The course is structured around the lecture-lab format (i.e., depending on the topic, it may be necessary to do a hands-on activity before lecturing on the concept). The class meets twice a week, three hours per day.

PHYS 1404 Solar System 3-2-4

This course is an introduction to Astronomy. The approach is very qualitative, but simple mathematics skills are required. The course is designed to explain the origin of the Solar System including the Sun and its nine planets, and smaller bodies - satellites (moon) orbiting the planets, asteroids, and comets. The students are also exposed to the basic idea of the function of a telescope. Planetarium and Observatory are used extensively. Methods of instruction include practical laboratory experiments, application of modern technology, and guided discussions. The course is structured around the lecture-lab format (i.e., depending on the topic, it may be necessary to do a hands-on activity before lecturing on the concepts). The class meets twice a week, three hours per day.

PHYS 1405 Elementary Physics I 3-3-4

A survey of the fundamental principles of physics designed to acquaint students with the basic concepts of classical and modern physics which are the foundation of everyday phenomena. Offered at C&I locations only.

PHYS 1415 Physical Science I 3-3-4

This is an introductory course on Physical Science for the first year non-science majors; strongly recommended for students in teacher training program. It is designed to provide skills needed for success in other science classes and for improving science literacy. The course emphasizes the basic concepts in Physics, Chemistry, Earth Science, and Astronomy. Methods of instruction include practical laboratory experiments, application of modern technology, and guided discussions. The course is structured around the lecture-lab format (i.e., depending on the topic, it may be necessary to do a hands-on activity before lecturing on the concept). The class meets twice a week, three hours per day. 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. 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. Prerequisites: PHYS 2425 and MATH 2414. Co-requisite: PHYX 2426.

POFI Office Technology see also HITT, MDCA, MRMT, 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: An introduction to a computer application course or equivalent recommended.

POFI 2301 Word Processing 2-4-3

Word processing software focusing on business applications. Prerequisite: POFT 1329.

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.

POFI 2387 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 second year Office Technology courses recommended. Departmental approval required.

POFM Office Technology see also HITT, MDCA, MRMT. 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 or POFM 1300.

POFM 2333 Medical Document Production 2-4-3

Create, format and produce publishable documents. Prerequisites: MRMT 1307 and MRMT 2333.

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.

POFM 2387 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 see also HITT, MDCA, MRMT. POFI and POFM

POFT 1207 Proofreading and Editing 2-1-2

Instruction in proofreading and editing skills necessary to assure accuracy in business documents.

POFT 1301 Business English 2-4-3

Introduction to a practical application of basic language usage skills with emphasis on fundamentals of writing and editing for business. Keyboarding skills recommended.

POFT 1309 Administrative Office Procedures I 2-4-3

Study of current office procedures, duties and responsibilities applicable to an office environment.

POFT 1319 Records and Information Management I 2-4-3

Introduction to basic records and information management systems, including manual and electronic filing. Keyboarding skills or other computer literacy course recommended.

POFT 1325 Business Math Using Technology 2-4-3

Skills development in business math problem solving using office technology.

POFT 1329 Beginning Keyboarding 2-4-3

Skill development in keyboarding techniques. Emphasis on development of acceptable speed and accuracy levels and formatting basic documents.

POFT 1349 Administrative Office Procedures II 2-4-3

In-depth coverage of office procedures with emphasis on decision making, goal setting, management theories, and critical thinking. Prerequisite: POFT 1301, POFT 1329 and concurrent enrollment in or completion of second year office technology courses recommended.

POFT 2312 Business Correspondence and Communication 2-4-3

Development of writing and presentation skills to produce effective business communications. Prerequisites: POFT 1301 or ENGL 1301.

POFT 2333 Advanced Keyboarding 2-4-3

A continuation of keyboarding skills in advanced document formatting emphasizing speed, accuracy, and decision-making. Keyboarding and word processing skills recommended.

POFT 2386 Internship - Administrative Assistant and Secretarial Science, General 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.

POFT 2387 Internship - Administrative Assistant and Secretarial Science, General 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 second year Office Technology courses recommended. Departmental approval required.

POFT 2388 Internship - General Office Occupations and Clerical Services 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.

POFT 2389 Internship - General Office Occupations and Clerical Services 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 second year Office Technology courses recommended. Departmental approval required.

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

PSTR 1301 Fundamentals of Baking 2-4-3

Fundamentals of baking including dough, quick breads, pies, cakes, cookies, tarts, and doughnuts. Instruction in flours, fillings, and ingredients. Topics include baking terminology, tool and equipment use, formula conversions, functions of ingredients, and the use of proper flours.

PSTR 1302 Cake Baking and Production 2-4-3

Principles and techniques of cake production. Emphasizes ingredient identification, functions, mixing, and baking. Prerequisite: PSTR 1301.

PSTR 1306 Cake Decorating I 2-4-3

Introduction to skills, concepts and techniques of cake decorating.

PSTR 2307 Cake Decorating II 1-5-3

A course in decoration of specialized and seasonal products. Prerequisite: PSTR 1306.

PSTR 2331 Advanced Pastry Shop 2-4-3

A study of classical desserts, French and international pastries, hot and cold desserts, ice creams and ices, chocolate work, and decorations. Emphasis on advanced techniques. Prerequisite: PSTR 1301.

PSTR 2350 Wedding Cakes 1-7-3

Skills, concepts, and techniques for preparing wedding cakes. Includes marzipan, plastic chocolate-rolled fondant, chocolate garnish, flower making, and royal icing piping work. Prerequisite: PSTR 1306.

PSYC Psychology

PSYC 1300 Learning Framework 3-0-3

This course is a study of research and theory in the psychology of learning, cognition, and motivation. The basis for the conceptual framework include factors that impact learning, strategic learning and the application of learning. Students use self-assessment instruments to help them identify personality types, learning styles, and vocational interest to help identify individual strengths and weakness as critical thinkers. Students are ultimately expected to integrate and apply the learning skills discussed across their academic program to become efficient and proficient learners in all subjects. Recommended: to be taken in the first semester.

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. Prerequisite: PSYC 2301.

PSYT Mental Health Services 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 1329 Interviewing and Communication Skills 2-4-3

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.

PTMC PFEC NCO-LEAD

PTMC 1170 Internet 1-0-1
This course provides a basic instruction of the internet. The course covers the history of the internet, using a web browser, using search engines, understanding net etiquette, navigating the World Wide Web, searching the internet, using Web integration and Active Desktop features, using electronic mail and e-mail enhancements, exploring newsgroups and using other internet resources.

PTMC 1171 Spreadsheet Applications 1-0-1
This course introduces participants to the worksheet and graphics capabilities of spreadsheet applications software. The course is occupationally related and will prepare the learner to use spreadsheets both in their military profession and, if applicable, to business-related careers.

PTMC 1172 Word Processing Application 1-0-1
The course is an overview of word processing for the operator. The learner will demonstrate applications in directory/files management.

PTMC 1173 Data Base Application 1-0-1
The purpose of this course is to provide the student with hands-on experience with automated records and reports management utilizing computers and software programs. The database management program used in this course is Microsoft Access.

PTMC 1174 Microsoft Outlook 1-0-1
This course provides intermediate level instruction in the use of Microsoft Outlook. The course covers communicating through email, utilization of the task manager, schedule, and journal function, as well as, security measures, reminder options, and information management skills. Additionally, the integration of Outlook with Microsoft Office components will be taught.

PTMC 1175 Microsoft Front Page 1-0-1
An introductory course to webpage design and creation. Front Page is a desktop application used to author, modify, publish, and manage webpage content.

PTMC 1176 Microsoft Power Point 1-0-1
An introductory course in Microsoft Power Point. Creating and editing presentations, inserting graphical elements, building slide shows and presenter preparation will be covered.

PTMC 2171 Microsoft Excel Advanced 1-0-1
Advanced course of instruction on spreadsheets using Microsoft Excel. This course advances the principles learned in Spreadsheet Applications PTMC 1171 by teaching advanced formulas and functions as well as the database, analytical and report features of Excel. Spreadsheet applications PTMC 1171 is recommended but not required.

PTMC 2172 Microsoft Word Advanced 1-0-1
An advanced course of instruction for word processing using Microsoft Word that extends and enhances what is taught in Word Processing Applications PTMC 1172. Instruction will focus on creating and working with reports and large documents that include; tables, charts, images and worksheets. Completion of PTMC 1172 Word processing Applications is recommended, but not required.

PTMC 2175 Microsoft Front Page Advanced 1-0-1
An advanced course in webpage design and creation. The course will integrate advanced features of FrontPage with basic Hyper Text Mark-up Language (HTML).

PTMC 2176 Microsoft Access Advanced 1-0-1
This course expands and builds upon skills developed in Database Applications, PTMC 1173. Relational Databases, related data-tables, sub-forms, advanced form features, advanced report features, queries and customizing charts will be covered.

PTMC 2179 MS Access Application Development 1-0-1
This course is an introduction to Database Development that expands and builds upon skills developed in an Introductory Database Management course. This course will teach students how to use Access as an application generator.

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

RSTO 1204 Dining Room Service 1-3-2
Introduces the principles, concepts, and systems of professional table service. Topics include dining room organization, scheduling, and management of food service personnel. American Hotel and Lodging Association (AH&LA) certification course. Student must attain a score of 70% or higher on certification test to receive National Certification.

RSTO 1221 Menu Management 2-0-2
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 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 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.

RSTO 2301 Principles of Food and Beverage Controls 3-0-3

A study of financial principles and controls of food service operation including review of operation policies and procedures. Topics include financial budgeting and cost analysis emphasizing food and beverage labor costs, operational analysis, and international and regulatory reporting procedures.

RSTO 2307 Catering 2-2-3

Principles, techniques, and applications for both on-premises, off-premises, and group marketing of catering operations including food preparation, holding, and transporting techniques.

RSTO 2405 Management of Food Production and Service 2-4-4

A study of quantity cookery and management problems pertaining to commercial and institutional food service, merchandising and variety in menu planning, and customer food preferences. Includes laboratory experiences in quantity food preparation and service.

SCWK Mental Health Services 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

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

SOCW 2361 Introduction to Social Work 3-0-3

This course explores the development of the philosophy and practice of social work in the United States, survey of the fields and techniques of social work.

SOCW 2362 Social Welfare as a Social Institution 3-0-3

Introduction to the study of modern social work, the underlying philosophy and ethics of social work, and the major divisions and types of social work together with their methods and objectives are explored.

SPAN Spanish

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

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

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 is aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards; 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 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 is aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards; 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 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. Focus on local and national standards and legal implications of relevant policies and regulations; course content is aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards; 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.

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

TRVM 1300 Introduction to Travel and Tourism 3-0-3

An overview of the travel industry. Emphasis on travel careers and the impact of tourism on society.

TRVM 2301 Introduction to Convention/Meeting Management 3-0-3

Overview of the meetings and convention industry and the various aspects and skills involved in planning and managing meetings and conventions. 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. American Hotel and Lodging Association (AH&LA) certification course. Student must attain a score of 70% or higher on certification test to receive National Certification.

WDWK Maintenance Technology

WDWK 1413 Cabinet Making I 2-5-4

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 .

WDWK 2451 Cabinet Making II 3-3-4

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

WLDG Welding

WLDG 1313 Introduction to Blueprint Reading for Welders 2-4-3

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.

WLDG 1323 Welding Safety, Tools, and Equipment 2-4-3

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

WLDG 1417 Introduction to Layout and Fabrication 3-3-4

A fundamental course in layout and fabrication related to the welding industry. Major emphasis on structural shapes and use in construction.

WLDG 1425 Introduction to Oxy-Fuel Welding and Cutting 3-3-4

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.

WLDG 1428 Introduction to Shielded Metal Arc Welding (SMAW) 3-3-4

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.

WLDG 1430 Introduction to Gas Metal Arc (GMAW) Welding 3-3-4

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 and WLDG 1428.

**WLDG 1434 Introduction to Gas Tungsten Arc
(GTAW) Welding 3-3-4**

Principles of gas tungsten arc welding (GTAW), including setup, GTAW equipment. Instruction in various positions and joint designs. Prerequisites: WLDG 1323 and WLDG 1428.

WLDG 1435 Introduction to Pipe Welding 3-3-4

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.

**WLDG 1457 Intermediate Shielded Metal Arc
Welding (SMAW) 3-3-4**

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

**WLDG 2413 Intermediate Welding Using
Multiple Processes 2-7-4**

Instruction using layout tools and blueprint reading with demonstration and guided practices with some of the following welding processes: oxy-fuel gas cutting and welding, shielded metal arc welding (SMAW), gas metal arc welding (GMAW), flux-cored arc welding (FCAW), gas tungsten arc welding (GTAW) or any other approved welding process.

WLDG 2435 Advanced Layout and Fabrication 3-3-4

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 1417.

**WLDG 2443 Advanced Shielded Metal Arc
Welding (SMAW) 2-7-4**

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.

**WLDG 2447 Advanced Gas Metal Arc
Welding (GMAW) 3-3-4**

Advanced topics in gas metal arc welding (GMAW). Includes welding in various positions. Prerequisite: WLDG 1430.

**WLDG 2451 Advanced Gas Tungsten Welding
(GTAW) 3-3-4**

Advanced topics in GTAW welding, including welding in various positions and directions. Prerequisite: WLDG 1434.

WLDG 2453 Advanced Pipe Welding 2-7-4

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. Prerequisite: WLDG 2406.

**WLDG 2488 Internship - Welder/Welding
Technology 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: Department approval required.