

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. Recommended prerequisite or co-requisite: 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. Recommended prerequisites or co-requisites: ABDR 1419 and 1471.

ABDR 1442 Structural Analysis and Damage Repair II 3-3-4
Continuation of general repair and replacement procedures for damaged structural parts and collision damage. Recommended prerequisites: ABDR 1419, 1441, and 1471.

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. Recommended prerequisite or co-requisite: ABDR 1419.

ABDR 1471 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. Recommended prerequisite or co-requisite: ABDR 1419.

ABDR 1472 Auto Body Glass, Hardware and Trim 2-7-4
This course is designed to provide the student with instruction in the removal, replacement, and service of both stationary and moveable automotive glass as well as related interior and exterior hardware such as manual and power lock mechanisms and regulators. The removal and replacement/repair of exterior and interior trim is also covered. Recommended prerequisite or co-requisite: ABDR 1419.

ABDR 2402 Auto Body Mechanical and Electrical Service 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. Recommended prerequisite or co-requisite: ABDR 1419.

ABDR 2435 Structural Analysis and Damage Repair IV 2-6-4
Extension of Structural Analysis and Damage Repair II providing skill development in the auto body application of theories to the repair and replacement of complete body units. Recommended prerequisites: ABDR 1419, 1442 and 1471.

ABDR 2437 Structural Analysis and Damage Repair V 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. Recommended prerequisites: ABDR 1419, 1471, and 2435.

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. Recommended prerequisite: 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. Recommended prerequisite: Satisfactory completion of all other technical courses in the program.

ACCT Accounting

ACCT 2301 Principles of Financial Accounting 3-0-3
An introduction to accounting concepts and their application in transaction analysis and financial statement preparation; analysis of financial statements; and asset, liability, and equity accounting in proprietorships, partnerships, and corporations.

ACCT 2302 Principles of Managerial Accounting 3-0-3
An introduction to the use of accounting information as an aid to management decision making. Topics include cost behavior, budgeting, responsibility accounting, cost control, and product costing. Prerequisite: ACCT 2301.

ACNT Accounting

ACNT 1311 Introduction to Computerized Accounting 2-4-3
Introduction to utilizing the computer in maintaining accounting records, making management decisions, and processing common business applications with primary emphasis on a general ledger package. Prerequisites: ACNT 1325 or equivalent recommended.

ACNT 1325 Principles of Accounting I 2-4-3
A study of accounting concepts and their application in transaction analysis and financial statement preparation and asset and equity accounting in proprietorships and corporations. Emphasis on accounting cycle for service and merchandising enterprises.

ACNT 1326 Principles of Accounting II 2-4-3
A study of the fundamentals of managerial accounting. Emphasis on budgeting, planning, management decision making, and analysis of financial reports. Prerequisites: ACNT 1325 or equivalent recommended.

ACNT 1331 Federal Income Tax: Individual 3-0-3
Basic instruction in the tax laws as currently implemented by the Internal Revenue Service providing a working knowledge of preparing taxes for the individual.

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 and 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 Power Plant 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.

AIRP Aviation Science see also AVIM

AIRP 1305 Aircraft Science 3-0-3

An introduction to the study of basic sciences in the aeronautical field as they may be applied to theoretical and practical application in aircraft construction and design.

ANTH Anthropology

ANTH 2301 Physical Anthropology 3-0-3
Principles of physical anthropology, human evolution, race, heredity, the organic basis of culture, and cultural history through the Paleolithic stage.

ANTH 2302 Introduction to Archeology 3-0-3
Overview of human origins and biocultural adaptations. Introduces methods and theory in the excavation and interpretation of material remains of past cultures.

ANTH 2346 General Anthropology 3-0-3
Study of human beings, their antecedents and related primates, and their cultural behavior and institutions. Introduces the major sub-fields: physical and cultural anthropology, archeology, linguistics, and ethnology.

ANTH 2351 Cultural Anthropology 3-0-3
Study of human behavior (nations and societies) the world over, comparing and describing their cultural patterns. An introduction to the various theories and anthropologists is reviewed as well as the relationship of Cultural Anthropology to the other social sciences (Psychology, Sociology, History, etc.).

ARCE Computer Aided Drafting and Design

ARCE 2415 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: ENGR 1304 or DFTG 1405, or concurrent enrollment.

ARTC Graphics and Printing *see also GRPH*

ARTC 1313 Digital Publishing I 2-4-3
The fundamentals of using digital layout as a primary publishing tool and the basic concepts and terminology associated with topography and page layout.

ARTC 2313 Digital Publishing II 2-4-3
Layout procedures from thumbnails and roughs to final comprehensive and printing; emphasis on design principles for the creation of advertising and publishing materials, and techniques for efficient planning and documenting projects. Recommended prerequisite: ARTC 1313

ARTC 2348 Digital Publishing III 2-4-3
A project based page layout course from concept to completion addressing design problems, preflight of files, color separations, and trapping techniques. Recommended prerequisite: ARTC 2313

ARTS Arts

ARTS 1303 Art History I 3-0-3
This course is a survey of the major and minor arts from prehistoric times to the 14th century. Prerequisite: None

ARTS 1304 Art History II 3-0-3
This course is a survey of the major and minor arts from the 14th century to the present. Prerequisite: None.

ARTS 1311 Design I 2-4-3
This course gives basic instruction in the elements and principles of design, with emphasis on the study of form and color theory. It is a study of design in two-dimensional formats. Prerequisite: None

ARTS 1312 Design II 2-4-3
This course gives basic instruction in the principles and elements of design as applicable to three-dimensional design problems. Prerequisite: None.

ARTS 1316 Drawing I 2-4-3
This course involves a study of the basic drawing skills including both abstraction and expressive drawing in charcoal, pencil, pen, wash, conte, and mixed media. Prerequisite: None

ARTS 1317 Drawing II 2-4-3
This course continues the development of skills, application of drawing media, and personal expression explored in Drawing I. Prerequisite: ARTS 1316.

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, fasteners, professional responsibilities, and 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 batteries, charging and starting systems, and electrical accessories. Emphasis on electrical schematic diagrams and service manuals. Recommended prerequisites or co-requisites: AUMT 1405 and 2305.

AUMT 1410 Automotive Brake Systems 2-6-4
Operation and repair of drum/disc type brake systems. Emphasis on safe use of modern equipment. Topics include brake theory, diagnosis, and repair of power, manual, anti-lock brake systems, and parking brakes. Recommended prerequisite or co-requisite: AUMT 1405.

AUMT 1416 Automotive Suspension and Steering Systems 2-6-4
A study of automotive suspension and steering systems including tire and wheel problem diagnosis, component repair, and alignment procedures. Recommended prerequisite or co-requisite: AUMT 1405.

AUMT 1419 Automotive Engine Repair 3-3-4
Fundamentals of engine operation, diagnosis and repair including lubrication systems and cooling systems. Emphasis on overhaul of selected engines, identification and inspection, measurements, and disassembly, repair, and reassembly of the engine. Recommended prerequisites: AUMT 1405, 2305 and 2434.

AUMT 1445 Automotive Heating and Air Conditioning 2-6-4
Theory of automotive air conditioning and heating systems. Emphasis on the basic refrigeration cycle and diagnosis and repair of system malfunctions. Covers EPA guidelines for refrigerant handling and new refrigerant replacements. Recommended prerequisites: AUMT 1405, 1407, 1472 and 2437.

AUMT 1471 Automotive Fuel Systems 2-7-4
This course provides the student with a working knowledge of automotive fuel systems. Carburetors, fuel pumps, filter systems, air fuel ratios, electronic fuel injection and computer controlled systems, and exhaust emission systems will be covered. The student will troubleshoot, diagnose, repair and adjust these systems. Recommended prerequisites: AUMT 1405, 1407, 1472, 2305 and 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. Recommended prerequisites: AUMT 1405, 1407, 2437.

AUMT 2305 Theory of Automotive Engines 2-2-3

Fundamentals of engine operation and diagnosis including lubrication and cooling systems. Emphasis on identification of components, measurements, inspections, and repair methods. Recommended prerequisite or co-requisite: 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 of transmissions and drive lines. Recommended prerequisite or co-requisite: AUMT 1405.

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

A study of the operation, hydraulic principles, and related circuits of modern automatic transmissions and automatic transaxles. Diagnosis, disassembly, and assembly procedures with emphasis on the use of special tools and proper repair techniques. Recommended prerequisite or co-requisite: AUMT 2413.

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

A study of diagnosis and repair of emission systems, computerized engine performance systems, and advanced ignition and fuel systems; and proper use of advanced engine performance diagnostic equipment. Recommended prerequisites: AUMT 1407, 1471, 1472, 2305, and 2437.

AUMT 2437 Automotive Electronics 3-3-4

Topics address electrical principles, semiconductor and integrated circuits, digital fundamentals, microcomputer systems, and electrical test equipment as applied to automotive technology. Recommended prerequisites: AUMT 1405 and 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. Recommended prerequisite: Satisfactory completion of all other technical courses in the program.

AVIM Aviation Science see also AIRP**AVIM 2331 Airline Management 3-0-3**

An examination of the organization, operation, and management of airlines. Topics include financing, aircraft selection, route feasibility studies, load factors, and marketing.

AVNC Aviation Maintenance Technology see also AERM**AVNC 2337 Landing Gear, Hydraulic, and Fuel Systems-A 2-3-3**

Advanced concepts of commercial fuel and hydraulic systems, landing gear, pneumatic systems, and safety.

BCIS Computer Science see also COSC**BCIS 1405 Business Computer Applications 3-3-4**

Computer terminology, hardware, software, operating systems, and information systems relating to the business environment. The main focus of this course is on business applications of software, including word processing, spreadsheets, databases, presentation graphics, and business-oriented utilization of the internet.

BIOL Biology**BIOL 1308 General Biology I 3-0-3**

A study of selected topics of biological science for the non-science major. Topics include the cell concept, systems of the human body, aging, and introduction to genetics, evolution, and ecology.

BIOL 1406 General Biology I 3-3-4

Study of the fundamental principles of living organisms at the cellular level. Includes cell structure and function, photosynthesis/cellular respiration, mitosis/meiosis, DNA, Mendelian and modern genetics, bacterial structure and gene control, and population genetics. Prerequisite: Test score of 240 on both math and reading sections of the THEA exam or equivalent. No students are exempt from testing. Co-requisite: BIOX 1406.

BIOL 1407 General Biology II 3-3-4

Aspects of systematics, survey of plant kingdom (structure/functioning/life cycles), survey of the animal kingdom, structure and functioning of animal systems, and aspects of ecology. Prerequisite: Test score of 240 on both math and reading sections of the THEA exam or equivalent. No students are exempt from testing. Co-requisite: BIOX 1407.

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, with emphasis on the functions and interactions of, between, and among, the systems identified in Anatomy and Physiology I with emphasis on cardiovascular, respiratory, nervous, and endocrine systems. Prerequisite: BIOX 2401. Co-requisite: BIOX 2402.

BIOL 2421 Microbiology 3-3-4

Fundamental principles of microbiology. Includes study of morphology, physiology, and classification of microbes and their relationships with soil, food, water, disease, and immunology. Designed for nursing and all allied health-related majors. Prerequisite: BIOX 1406 with a grade of "C" or above, must have been taken within the last 5 years. Co-requisite: BIOX 2421.

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 1303 Principles of Management 3-0-3

Concepts, terminology, principles, theory, and issues that are in the field of management.

BMGT 1325 Office Management 3-0-3

Systems, procedures, and practices related to organizing and planning office work, controlling employees' performance, and exercising leadership skills.

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). 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 including how managers plan, exercise leadership, organize, and control the operations. Members of the Students in Free Enterprise (SIFE) organization that participate during the entire training program can be awarded credit for this course with the approval of the SIFE 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 and operating a small business. Topics include facts about a small business, essential management skills, how to prepare a business plan, financial needs, marketing strategies, and legal issues.

BUSI Business Administration and Management**BUSI 1301 Business Principles 3-0-3**

Introduction to the role of business in modern society. Includes overview of business operations, analysis of the specialized fields within the business organization, and development of a business vocabulary.

BUSI 1307 Personal Finance 3-0-3

Personal and family accounts budgets, and budgetary controls, bank accounts, charge accounts, borrowing, investing, insurance, standards of living, renting, home ownership, wills, and trust plans.

BUSI 1311 Salesmanship 3-0-3

Principles of personal salesmanship including methods and tasks applicable to a wide variety of industries and commercial settings.

BUSI 2301 Business Law 3-0-3

Principles of law which form the legal framework for business activity.

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. Recommended prerequisite or co-requisite: 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. Recommended prerequisite: Satisfactory completion of all other technical courses in the program.

CDEC Early Childhood Professions

*All CDEC courses require a lab except CDEC 1195.

CDEC 1195 Special Topics in Child Care 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. This course has different topics and may be repeated.

CDEC 1303 Families, School and Community 2-2-3

A study of the relationship between the child, the family, the community, and early childhood educators, including a study of parent education, family and community lifestyles, multi-culture instruction, child abuse, and current issues.

CDEC 1311 Educating Young Children 2-2-3

An introduction to the profession of early childhood education, focusing on developmentally appropriate practices, types of programs, historical perspectives, ethics, and current issues.

CDEC 1313 Curriculum Resources for Early Childhood Programs 2-2-3

Fundamentals of curriculum design and implementation in developmentally appropriate programs for young children.

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

Based on the requirements for the Child Development Associate (CDA) National Credential. Three of the 13 functional areas of study include family, program management and professionalism. Topics on CDA overview, general observation skills, and child growth and development overview.

CDEC 1318 Wellness of the Young Child 2-2-3

A study of nutrition, health, safety, and related activities, including skill development in management of issues, guidelines, and practices in nutrition, as well as community health, hygiene, safety, and legal implications. Integration of these principles apply to a variety of settings.

CDEC 1319 Child Guidance 2-2-3

An exploration of common behavior problems of young children in an early childhood setting. Emphasis on positive guidance techniques for effective behavior management. Practical application through direct participation in an early childhood setting.

CDEC 1321 The Infant and Toddler 2-2-3

A study of appropriate infant and toddler (birth to 3 years) programs, including an overview of development, quality caregiving routines, appropriate environments, materials and activities, and teaching/guidance techniques.

CDEC 1335 Early Childhood Development: 3-5 Years 2-2-3

This course covers the principles of normal growth and development from three to five years. Emphasis is on physical, emotional, and social development.

CDEC 1340 Instructional Techniques for Children with Special Needs 2-2-3

Exploration of development and implementation of curriculum for children with special needs. The focus is on how to adapt curriculum activities for children with special needs.

CDEC 1354 Child Growth & Development 2-2-3

A study of the principles of normal child growth and development from conception to adolescence. Focus on physical, cognitive, social, and emotional domains of development.

CDEC 1356 Emergent Literacy for Early Childhood 2-2-3

An exploration of principles, methods, and materials for teaching young children language and literacy through a play-based, integrated curriculum.

CDEC 1358 Creative Arts for Early Childhood 2-2-3

An exploration of principles, methods, and materials for teaching young children music, movement, visual arts, and dramatic play through process-oriented experiences to support divergent thinking.

CDEC 1359 Children with Special Needs 2-2-3

A survey of information regarding children with special needs including possible causes and characteristics of exceptionalities, educational intervention, available resources, referral processes, and the advocacy role and legislative issues.

CDEC 1371 Physical Development and Disorder in Children 2-2-3

This course is designed for the paraprofessional working in integrated early childhood settings. Roles and responsibility of the paraprofessional, including IEP and ISFP lesson plan teaching strategies, and hands-on training in physical management and care skills of the child with special needs are emphasized. Instruction in basic sign language, and an overview of current learning technologies to assist the child with disabilities, is included. Emphasis is placed on methods and materials for promoting activities of daily living.

CDEC 1391 Special Topics in Family Day Care Homes 2-2-3

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. The focus is on setting up a FDCH and activities for children.

CDEC 1393 Special Topics in Family Living & Parenthood 2-2-3

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.

CDEC 2307 Math & Science for Early Childhood 2-2-3

An exploration of principles, methods, and materials for teaching young 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 (CDA) National Credential. The six functional areas of study include safe, healthy, learning environment, self, social, and guidance.

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

A continuation of the study of the requirements for the Child Development Associate (CDA) National Credential. The four functional areas of study are creative, cognitive, physical, and communication.

CDEC 2326 Administration of Programs for Children I 2-2-3

A practical application of management procedures for early care and education programs, including a study of operating, supervising, and evaluating programs. Topics on philosophy, types of programs, policies, fiscal management, regulations, staffing, evaluation, and communication.

CDEC 2328 Administration of Programs for Children II 2-2-3

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, and technical applications in programs.

CDEC 2341 The School Age Child 2-2-3

A study of appropriate age (5 to 13 years) programs, including an overview of development, appropriate environments, materials and activities, and teaching/guidance techniques.

CDEC 2384 Cooperative Education in Child Development 0-15-3

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Includes a lecture component.

CETT Computer Electronics Technology
see also CPMT, EECT, ELMT, INTC and ITCC

CETT 1403 DC Circuits 3-3-4

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

CETT 1405 AC Circuits 3-3-4
A study of the fundamentals of alternating current including series and parallel AC circuits, phasors, capacitive and inductive networks, transformers, and resonance. Prerequisite: CETT 1403.

CETT 1421 Electronics Fabrication 3-3-4
A study of electronic circuit fabrication techniques including printed circuit boards, wire wrapping, bread boarding, and various soldering techniques.

CETT 1425 Digital Fundamentals 3-3-4
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 or co-requisite: CETT 1405.

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 1425 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, Kirchoff's laws, networks, transformers, resonance, phasors, capacitive and inductive and circuit analysis techniques.

CETT 2445 Color Television Repair 3-3-4
An advanced study of television theory and basic repair including television receiver tuning system, remote control, I-F amplifiers, automatic gain control and video amplifiers, television power supplies, and deflection circuits. Prerequisite CETT 1425 and CETT 1429.

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. Prerequisite: 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.

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

CHEF 1301 Basic Food Preparation 1-8-3
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.

CHEF 1305 Sanitation and Safety 3-0-3
The fundamentals of sanitation practices, laws, methods, and techniques of food handling for protection, safety, and accident prevention. Upon completion of this course, the student will have sufficient knowledge to pass the Educational Institute of National Restaurant Association (NRA) certification sanitation examination.

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. Subject includes history, soup, salads, cured and smoked foods, sausage, terrines, pates, galantines, hors d'oeuvres and appetizers. 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 2-3-3
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 1411 General Chemistry I 3-4-4
The first of two courses for science-related majors, this course is a study of the fundamental theories and laws of chemistry, chemical nomenclature, metals and non-metals and their compounds, states of matter, solutions, and the quantum theory of structure. Emphasis is placed on problem solving. Prerequisite: MATH 1414 or consent of the Department Chair. Co-requisite: CHEX 1411.

CHEM 1412 General Chemistry II 3-4-4
The second of two courses for science-related majors, this course covers kinetics, chemical equilibrium, acid-base concepts, electrochemistry, elementary thermodynamics, and introduction to nuclear chemistry. Prerequisite: CHEM 1411. Co-requisite: CHEX 1412.

CHEM 2423, 2425 Organic Chemistry I and II 3-4-4

A mechanistic approach is used to provide a thorough foundation in organic chemistry. The student is introduced to planning a synthesis in lecture. The laboratory introduces students to basic techniques and synthesis of compounds. Designed for science majors and minors. Prerequisites for CHEM 2423: CHEM 1411 and 1412 or the consent of the Department Chair. Prerequisite for CHEM 2425: CHEM 2423. Co-requisite courses: CHEM 2423, 2425, respectively.

CHLT Mental Health Services See also CMSW, DAAC, GERS and PSYT**CHLT 1309 Community Ethics 3-0-3**

This course will include discussions on the role of ethics as it pertains to health care and community settings. It will include ethical decision-making, teamwork and the impact of illness on the individual and the social setting. Professional ethical and legal conduct in human services will be explored.

CJCR Criminal Justice

See also CJLE, CJSA and SLPS

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 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: CRIJ 1301/CJSA1322 and CRIJ 2301/CJCR 2324 or CRIJ 2313/CJCR 1307 and consent of the Department Chair.

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, CJSA and SLPS**CJLE 1006 Basic Peace Officer I 146 clock hours**

Introduction to fitness and wellness, history of policing, professionalism and ethics, United States Constitution and Bill of Rights, criminal justice system, Texas Penal Code, Texas Code of Criminal Procedure, civil process, and stress management. This course taken in conjunction with Basic Peace Officer II, III, and IV will satisfy the TCLEOSE-approved Basic Peace Officer Training Academy.

CJLE 1012 Basic Peace Officer II 174 clock hours

Basic preparation for a new peace officer. Covers field note taking, report writing, "use of force" law and concepts, problem solving, multiculturalism, professional policing approaches, patrol procedures, victims of crime, family violence, MHMR, crowd management, HAZMAT, and criminal investigation. This course taken in conjunction with Basic Peace Officer I, III, and IV will satisfy the TCLEOSE-approved Basic Peace Officer Training Academy.

CJLE 1018 Basic Peace Officer III 159 clock hours

Basic preparation for a new peace officer. Covers laws pertaining to controlled substances, crowd management, personal property, and crime scene investigation. This course taken in conjunction with Basic Peace Officer I, II, and IV will satisfy the TCLEOSE-approved Basic Peace Officer Training Academy.

CJLE 1024 Basic Peace Officer IV 148 clock hours

Basic preparation for a new peace officer. Covers laws directly related to police field work. Topics include Texas Transportation Code, intoxicated driver, Texas Penal Code, elements of crimes, Texas Family Code, Texas Alcoholic Beverage Code, and civil liability. Requires the demonstration and practice of the skills of a police officer including patrol, driving, traffic stop skills, use of force, mechanics of arrest, firearm safety, and emergency medical care. Also includes study of the techniques and procedures used by police officers on patrol. Includes controlled substance identification, handling abnormal persons, traffic collision investigation, note taking and report writing, vehicle operation, traffic direction, crowd control, and jail operations. This course taken in conjunction with Basic Peace Officer I, II, and III will satisfy the TCLEOSE-approved Basic Peace Officer Training Academy.

CJLE 1029 Basic Peace Officer V 113 clock hours

Supplemental course taken in conjunction with Basic Peace Officer Courses I, II, III, and IV. This course taken in conjunction with Basic Peace Officer I, II, III, and IV will satisfy the TCLEOSE – approved Basic Peace Officer Academy.

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 1329 Basic Peace Officer V 3-0-3

Supplemental course taken in conjunction with Basic Peace Officer Courses I, II, III, and IV. This course taken in conjunction with Basic Peace Officer I, II, III, and IV will satisfy the TCLEOSE – approved Basic Peace Officer Academy.

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 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.

CJLE 1370 Terrorism: Groups, Strategies and Responses 3-0-3

This course provides a foundation toward understanding and responding to the threat of terrorism. Topics include: major terrorist organizations operating throughout the world today; tactics terrorists utilize to terrorize the target population; police and governmental responses to the incidence of terrorism; and defending against the various munitions utilized by the terrorists.

Prerequisites: CRIJ 1301/CJSA 1322 or CRIJ 1307/CJSA 1312 and CRIJ 2314/CJSA 1342 for fire students FIRT 1301 and FIRT 1303.

CJLE 1506 Basic Peace Officer I 3-7-5

Introduction to fitness and wellness, history of Policing, professionalism and ethics, United States Constitution and Bill of Rights, criminal justice system, Texas Penal Code, Texas Code of Criminal Procedure, civil process, and stress management. This course, taken in conjunction with Basic Peace Officer II, III, and IV, will satisfy the TCLEOSE-approved Basic Peace Officer Training Academy.

CJLE 1512 Basic Peace Officer II 3-7-5

Basic preparation for a new peace officer. Covers field note taking, report writing, "use of force" law and concepts, problem solving, multiculturalism, professional policing approaches, patrol procedures, victims of crime, family violence, MHMR, crowd management, HAZMAT, and criminal investigation. This course, taken in conjunction with Basic Peace Officer I, III, and IV, will satisfy the TCLEOSE-approved Basic Peace Officer Academy.

CJLE 1518 Basic Peace Officer III 3-7-5

Basic preparation for a new peace officer. Covers laws pertaining to controlled substances, crowd management, personal property, and crime scene investigation. This course, taken in conjunction with Basic Peace Officer I, II, and IV, will satisfy the TCLEOSE-approved Basic Peace Officer Academy.

CJLE 1524 Basic Peace Officer IV 3-8-5

Basic preparation for a new peace officer. Covers laws directly related to police field work. Topics include Texas Transportation Code, intoxicated driver, Texas Penal Code, elements of crimes, Texas Family Code, Texas Alcoholic Beverage Code, and civil liability. Requires the demonstration and practice of the skills of a police officer including patrol, driving, traffic stop skills, use of force, mechanics of arrest, firearm safety, and emergency medical care. Also includes study of the techniques and procedures used by police officers on patrol. Includes controlled substance identification, handling abnormal persons, traffic collision investigation, note taking and report writing, vehicle operation, traffic direction, crowd control, and jail operations. This course, taken in conjunction with Basic Peace Officer I, II, and III, will satisfy the TCLEOSE-approved Basic Peace Officer Training 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-Law Enforcement/Police Science 0-19-4

A basic or intermediate or advanced type of non-health professions work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Direct supervision is provided by the faculty or the work supervisor. An internship may be paid or unpaid learning experience. Prerequisite: Consent of the Department Chair.

CJSA Criminal Justice see also CJCR, CSLE and SLPS

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 2334 Contemporary Issues in Criminal Justice 3-0-3
A series of lectures and class participation exercises presenting selected topics currently confronting criminal justice personnel and the public they serve. Prerequisite: Consent of Department Chair and CRIJ 1301/CJSA 1322 and either CRIJ 1307/CJSA 1312 or CRIJ 2314/CJSA 1342.

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 CHLT, DAAC, GERS and PSYT

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. The guided external experience is conducted under the supervision of professionals from the host agency. Liability insurance, transportation, physical exam, documentation of required immunizations, CPR/First Aid, and medical insurance will be provided by the student. This course is the Capstone Experience for students exiting the program with an Advanced 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. It provides a final external learning experience that allows the student to apply broad knowledge of the profession. Prerequisites: Departmental Approval, PSYT 1329, CMSW 1309, DAAC 1319, DAAC 2354 Recommended Prerequisites: (CMSW 1313, SOCW 2361 Depending on Specialization)

CMSW 1309 Problems of Children and Adolescents 2-4-3
This course will provide an examination of the particular problems of children and youth; and their implications for the delivery of social services. Emphasis is on social service institutions of a preventive and rehabilitative nature.

CMSW 1313 Assessment and Service Delivery 2-4-3
This course will provide a study of interviewing and assessment instruments and approaches for working with a multicultural population. There will be an emphasis in service delivery systems and those services which directly and indirectly affect children, adolescents and their caregivers.

CMSW 1319 Adolescent Development 3-0-3
The study of the development phases from adolescence through young adulthood will be explored. Identification of the task and goals to be achieved during these stages of development will be discussed. Topics include physical and psychological changes as well as the areas of interpersonal relationships and the individual's ability to relate to the social environment.

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. Recommended prerequisite: All other technical courses in the program except CBFM 2487.

COSC Computer Science see also BCIS

COSC 1300 Introduction to Computing 3-1-3
Overview of computer information systems. Introduces computer hardware, software, procedures and human resources. Explores integration and applications in business and other segments in society. Fundamentals of computer problem solving and programming may be discussed and applied. Prerequisite: None.

COSC 2425 Computer Organization and Machine Language 3-3-4
A study of hardware and software characteristics of digital computers. Designed to give the student an understanding of how the fundamental principles by which computers work affect and govern programming techniques. Topics include data representation, machine instruction types, fetch and execution cycles, interrupt schemes, metaprograms, I/O handling and assembler concepts. Prerequisite: None.

CPMT Computer Electronics Technology see also CETT, EECT, ELMT, INTC and ITCC

CPMT 1403 Introduction to Computer Technology 3-3-4
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 1445 Computer Systems Maintenance 3-3-4
Examination of the functions of the components within a computer system. Development of skills in the use of test equipment and maintenance aids. Prerequisite CETT 1425 and CETT 1429

CPMT 1449 Computer Networking Technology 3-3-4
Networking fundamentals, terminology, hardware, software, and network architecture. Includes local and wide area networking concepts and networking installations and operations. Prerequisite: CETT 1421, CETT 1425, CETT 1403, and CPMT 1403.

CPMT 2350 Industry Certification Preparation 2-2-3
Overview of the objectives for industry specific certification exam(s). Prerequisite: ITCC 1342. Co-requisite: ITCC 1346.

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 1445

CRIJ Criminal Justice

CRIJ 1301 Introduction to Criminal Justice 3-0-3
History, philosophy, and ethical considerations of criminal justice; the nature and impact of crime; and an overview of the criminal justice system, including law enforcement and court procedures.

CRIJ 1306 Court Systems and Practices 3-0-3
The study of the judiciary in the American criminal justice system and the adjudication processes and procedures.

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
Study of criminal law, its philosophical and historical development, major definitions and concepts, classifications and elements of crime, penalties using Texas statutes as illustrations, and criminal responsibility.

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
A study of the role of corrections in the criminal justice system. Topics include organization of correctional systems, correctional role, institutional operations, alternatives to institutionalization, treatments and rehabilitation, 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
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.

CRPT Maintenance Technology See also CBFM, CNBT, ELPT, MBST, PFPB and WDWK

CRPT 1411 Conventional Roof Systems 3-3-4
Principles of design and construction of a conventional roof system incorporating gable, hip, and intersections. Emphasis given to safe work practices and the selection, use, and maintenance of tools and equipment. Recommended prerequisite or co-requisite: CRPT 1429.

CRPT 1415 Conventional Wall Systems 3-3-4
Conventional wall systems with emphasis on wood frame construction. Includes identification of components; construction of a wall system; safe work practices; and the selection, use, and maintenance of tools and equipment. Recommended prerequisite or co-requisite: CRPT 1429.

CRPT 1423 Floor Systems 3-3-4
An introduction to common floor systems. Topics include component identification, construction of a floor system, safe work practices; and the selection, use, and maintenance of tools and equipment. Recommended prerequisite or co-requisite: 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 CHLT, CMSW and PSYT

DAAC 1167 Practicum (or Field Experience) - Alcohol/ Drug Abuse Counseling 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. The guided external experience is conducted under the supervision of professionals from the host agency. Liability insurance, transportation, physical exam, documentation of required immunizations, CPR/First Aid, and medical insurance will be provided by the student. This is the first of two required practicum courses for the advanced certificate and AAS in Chemical Dependency Counseling. Prerequisites: Departmental Approval; DAAC 1319, PSYT 1329, CMSW 1309, DAAC 1309, DAAC 2354.

DAAC 1304 Pharmacology of Addiction 2-4-3

This course will study the psychological, physiological, and sociological effects of mood altering substances and behaviors. The course emphasizes pharmacological effects of tolerance, dependency/withdrawal, cross addiction, and drug interaction.

DAAC 1309 Assessment Skill of Alcohol and other Drug Addictions 2-2-3

This course examines procedures and tools used to identify and assess a client's strengths, weaknesses, problems and needs in order to develop treatment strategies. Emphasis is on current tools in the field. Prerequisite: DAAC 1319.

DAAC 1311 Counseling Theories 2-2-3

This course provides an introduction to the major counseling theories and current treatment modalities used in working with individuals, families and groups.

DAAC 1319 Introduction to Alcohol and other Drug Addictions 2-4-3

Causes and consequences of drug abuse and addiction as they relate to the individual, family, community, and society are discussed. Overview of alternatives regarding prevention, intervention, treatment, education, and prevention are reviewed. Competencies and requirements for licensure in Texas are explained. Addiction issues related to diverse populations are presented.

DAAC 2307 Addicted Family Intervention 2-2-3

This course will explore the family as a dynamic system focusing on the effects of addiction on family roles, rules, and behavior patterns. The course will discuss the impact of mood altering substances, behaviors, and therapeutic alternatives as they relate to the family from a multicultural and transgenerational perspective.

DAAC 2330 Multicultural Counseling 2-4-3

Characteristics of minorities and diverse populations encountered by counselors will be explored. The primary focus will include issues among those groups which affect the counseling process including communication patterns. Prerequisites: CMSW 1309, DAAC 1304, DAAC 1319, DAAC 2354, PSYT 1329, PSYT 2321, PSYT 2331.

DAAC 2341 Counseling Alcohol and other Drug Addictions 2-4-3

Special skills and techniques in the application of counseling skills for the Alcohol and Other Drug (AOD) client will be explored. Development and utilization of advanced treatment planning and case management skills are surveyed. Prerequisites: Departmental Approval, DAAC 1167, DAAC 1304, DAAC 1309, DAAC 1319, DAAC 2354, CMSW 1309, PSYT 1329, PSYT 2321, PSYT 2331.

DAAC 2354 Dynamics of Group Counseling 2-4-3

This course provides for exploration of group counseling skills and techniques. Stages of group development and working with multicultural groups will be discussed. Prerequisites: Departmental Approval, CMSW 1309, DAAC 1304, DAAC 1319, PSYT 1329, PSYT 2321, PSYT 2331.

DAAC 2367 Practicum (or Field Experience) - Alcohol/ Drug Abuse 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. The guided external experiences may be paid or unpaid. Liability insurance, transportation, physical exam, documentation of required immunizations, CPR/First Aid, background check, drug screen and medical insurance will be provided by the student. This course is the Capstone Experience for the student exiting the program with an Advanced Certificate and the AAS Degree in Chemical Dependency Counseling. It provides a final external learning experience that allows the student to apply broad knowledge of the profession.

Prerequisites: Departmental Approval; CMSW 1309, DAAC 1167, DAAC 1304, DAAC 1309, DAAC 1319, DAAC 2307, DAAC 2341, DAAC 2354, PSYT 1329, PSYT 2321, PSYT 2331.

DFTG Computer-Aided Drafting and Design**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: ENGR 1304 or DFTG 1409 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: ENGR 1304 or DFTG 1405, ENGR 1305 or 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, new paper 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: ENGR 1304 or 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: ENGR 1304 or 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 and consent of the Department Chair.

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. Emphases 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 0101 Basic Developmental Mathematics 1-1.5-1

This course helps students prepare to pursue college-level academic work. It uses varied instructional techniques to identify deficiencies and provide a review of fundamental operations in mathematics. (Fort Polk/Fort Hood only.)

DSMA 0300 Developmental Mathematics I 5-1-3

This developmental course includes adding, subtracting, multiplying, and dividing fractions, decimals, and integers; order of operations; percentages; line, bar, and pie graphs; pictographs; areas of plane figures; exponents; and an introduction to signed numbers and algebra. A laboratory is required. Offered on Central Campus, and Fort Hood.

DSMA 0301 Developmental Mathematics II 5-1-3

Designed for students who need a review of fundamental algebraic operations. Topics include operations on real numbers, polynomials, linear equations, linear inequalities, factoring, graphing, and selected application problems. A laboratory is required. Prerequisite: DSMA 0300 or appropriate test scores. Offered on Central Campus, and Fort Hood.

- DSMA 0303 Developmental Mathematics IV 5-1-3**
Topics include operations with rational expressions, exponential and logarithmic equations, systems of linear equations, radical expressions, complex numbers, quadratics, and functions. A laboratory is required. Prerequisite: DSMA 0301 or appropriate test scores. Offered on Central Campus, and Fort Hood.
- DSMA 0304 Fundamentals of Mathematics II 3-0-3**
This course includes operations with real numbers, variable expressions, simple equations, polynomials, algebraic applications, factoring polynomials, and an introduction to graphs and linear equations. Prerequisite: Appropriate test scores or equivalent. Offered at C&I locations.
- 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. Topics include adding, subtracting, multiplying, and dividing fractions, decimals, and integers; order of operations; percentages; line, bar and pie graphs; pictographs; areas of plane figures; exponents; and an introduction to signed numbers and algebra. A computer, internet connection, and designated course software to facilitate interactive learning must be available.
- DSMA 0306 Intermediate Algebra I 3-0-3**
Topics include a review of factoring, rational and radical expressions, complex numbers, radical equations, quadratics and the study of the parabola. Prerequisite: DSMA 0300 or appropriate test scores. Offered at C&I locations.
- DSMA 0307 Intermediate Algebra II 3-0-3**
Topics include the straight line, systems of equations and inequalities, determinants, functions and relations, inverses and composite functions, and an introduction to exponential and logarithmic functions. Prerequisite: DSMA 0306 or DSMA 1301. Offered at C&I locations.
- DSMA 0308 Pre-College Math 3-1-3**
This developmental course includes arithmetic operations, basic algebraic concepts and notations, geometry, and real and complex number systems. The course also covers relations and functions; inequalities; factoring; polynomials; rational expressions; and quadratics. It also provides an introduction to complex numbers; exponential and logarithmic function; determinants, matrices, sequences, and series. Offered at C&I locations and Service Area Campus.
- DSMA 0309 Fundamentals of 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. Topics include operations on real numbers, linear equations and inequalities, exponents and polynomials, systems of linear equations, factoring, rational expressions, graphing and an introduction to functions. A computer, internet connection, and designated course software to facilitate interactive learning must be available. Prerequisite: A course comparable to DSMA 0305 or appropriate test scores.
- DSMA 0310 Intermediate 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. Topics include a continuation of rational expressions, radicals, rational exponents, quadratic equations and functions, exponential and logarithmic functions and complex numbers. A computer, internet connection, and designated course software to facilitate interactive learning must be available. Prerequisite: A course comparable to DSMA 0309 or appropriate test scores.
- DSRE 0300 Developmental Reading I 2-2-3**
Developmental Reading I is designed to aid students in establishing and developing fundamental reading skills necessary for college reading and for life. This course was developed specifically for those who scored below 50 percent on the reading section of the college's placement test. Focus is on word attack skills, vocabulary development, basic comprehension skills to include stated and implied main idea and details, and fluency. A computer lab where students practice reading skills is required. Offered on Central Campus.
- DSRE 0301 Developmental Reading II 2-2-3**
Developmental Reading II is designed to aid students in developing and reinforcing the skills necessary for reading college-level materials; specifically those who scored between 50-69 percent on the reading section of the college's placement test or passed DSRE 0300. This course emphasizes vocabulary development, literal comprehension skills, critical reading and thinking skills, and fluency. A computer lab where students practice reading skills is required. Offered on Central Campus.
- DSRE 0302 Fundamentals of Reading I 3-0-3**
Fundamentals of Reading I is designed to aid students in establishing and developing fundamental reading skills necessary for college reading and for life. This course was developed specifically for those who scored below 50 percent on the reading section of the college's placement test. Focus is on word attack skills, vocabulary development, basic comprehension skills to include stated and implied main idea and details, and fluency. Includes all the objectives of DSRE 0300 without the additional laboratory reinforcement.
- DSRE 0303 Fundamentals of Reading II 3-0-3**
Fundamentals of Reading II is designed to aid students in developing and reinforcing the skills needed for reading college-level materials; specifically those who scored between 50-69 percent on the college placement reading section or passed DSRE 0302. This course emphasizes vocabulary development, literal comprehension skills, critical reading and thinking skills, and fluency. Includes all the objectives of DSRE 0301 without the additional laboratory reinforcement.
- DSRE 0311 Developmental Reading II 4-0-3**
Developmental Reading 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 reading college-level materials; specifically those who scored between 50-69 percent on the college placement reading section or passed DSRE 0300. This course emphasizes vocabulary development, literal comprehension skills, critical reading and thinking skills, and fluency. A computer, internet connection, and designated course software to facilitate interactive learning must be available. Prerequisite: A course comparable to DSRE 0300 or appropriate test scores. Offered on Central Campus.
- DSWR 0303 Fundamentals of Writing I 3-0-3**
Fundamentals of Writing I is a course in basic writing skills at the sentence and paragraph levels. The course includes instruction in basic grammar, sentence structure, punctuation, and other necessary skills leading to the proper construction of a paragraph.
- DSWR 0304 Fundamentals of Writing II 3-0-3**
This course is a continuation of DSWR 0303 and emphasizes composition skills at the paragraph and essay levels. The course includes a study of sentence-level grammar and punctuation and emphasizes the organizational skills needed to write a basic essay.
- DSWR 0305 Developmental Studies Basic Grammar Review 3-0-3**
Basic Grammar Review is an elective developmental studies course designed for native English speakers who want to improve their grammar and writing skills by specifically focusing on grammar, punctuation, and mechanics in the context of the utilization of standard English sentences and paragraphs through practice and revision.

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; specifically those who scored between 50-69 percent on the college placement writing section or passed DSWR-0301. This course emphasizes essay writing, with attention given to grammar, mechanical, and usage problems as they occur in the context of the essay. Intended for native English speakers or for those students who scored 550 or above on the Test of English as a Foreign Language (TOEFL). A computer, internet connection, and designated course software to facilitate interactive learning must be available. Prerequisite: A course comparable to DSWR-0301 or appropriate test scores.

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

Introduction to economic analysis, price-level changes, the creation of money, the Federal Reserve System and monetary policy, the national accounts, the consumption function, taxation, fiscal policy, public debts, the theory of economic growth and population problems, and foreign economic policy.

ECON 2302 Principles of Microeconomics 3-0-3

Determination of relative prices, consumer demand analysis, the competitive firm; agricultural policy, the monopolistic firm, imperfect competition, business organization and government regulation, determinants of demand, the economic view of taxation and public expenditure, regional economics, international trade and finance.

EECT Communications Electronics see also CETT, CPMT, ELMT, INTC and ITCC**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 2331 Wireless Data System 2-4-3

Principles of wireless data systems to include call processing, hand-off, site analysis, antenna radiation patterns, commonly used test/maintenance equipment and access protocol. Prerequisite: ITCC 1306.

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, EECT, INTC and ITCC**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 preventative maintenance. Emphasis on safety and proper use of test equipment. May be offered as a capstone course. Recommended prerequisite: CETT 1425, CETT 1429, CETT 2445.

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. Recommended prerequisite: ELPT 1411.

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

Instruction, demonstration, and driving range practice to prepare drivers of emergency vehicles to operate their vehicles safely in the emergency and non-emergency mode.

EMSP 1145 Basic Trauma Life Support 1-0-1

Intense skill development in emergency field management, systematic rapid assessment, resuscitation, packaging, and transportation of patients. Includes experience necessary to meet initial certification requirements.

EMSP 1147 Pediatric Advanced Life Support 1-0-1

A course in a system of protocols for management of the pediatric patient experiencing difficulties in medical and/or trauma related emergencies.

EMSP 1149 Pre-Hospital Trauma Life Support 1-0-1

The course is designed to provide the practicing pre-hospital provider with specific knowledge related to the pre-hospital assessment and care of the trauma patient. Advances in pre-hospital trauma intervention techniques, along with new combinations and applications of existing skills and knowledge are included. Offered at the Europe Campus only. Offered at Europe Campus only.

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

A basic, intermediate, or advanced type of health professions work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Close and/or direct supervision is provided by the clinical professional (faculty or preceptor), generally in a clinical setting. 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

An intermediate or advanced type of health professions work-based instruction that helps students gain practical experience in the discipline, enhance skills, and integrate knowledge. The emphasis is on practical work experience for which the student has already acquired the necessary theoretical knowledge and basic skills. 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 1441 and EMSP 1355, students are eligible to take the exam to be certified as an EMT-I. This course is only offered with EMSP 1441 and EMSP 1355.

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

An intermediate or advanced type of health professions work-based instruction that helps students gain practical experience in the discipline, enhance skills, and integrate knowledge. The emphasis is on practical work experience for which the student has already acquired the necessary theoretical knowledge and basic skills. 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 1191 Special Topics - Europe Only

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

An intermediate or advanced type of health professions work-based instruction that helps students gain practical experience in the discipline, enhance skills, and integrate knowledge. The emphasis is on practical work experience for which the student has already acquired the necessary theoretical knowledge and basic skills. 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 Health and/or National Registry of EMT. Prerequisites: Current CPR certification. co-requisite: EMSP 2143. See also admission requirements.

EMSP 1270 Emergency Medical Technician - Basic Refresher 1-2-2

The EMT-Basic refresher course is designed to provide training in skills and equipment necessary to help maintain basic life support. Instruction is given in basic Anatomy and Physiology, patient assessment, and the theory behind the procedures used in giving pre-hospital care to the sick and injured. This course will serve as a First Responder, Emergency Care Attendant and an Emergency Medical Technician-Basic refresher course. Emphasis of this course will be on the requirements of the national and state accrediting agencies.

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.

EMSP 1305 Emergency Care Attendant 2-3-3

Basic first responder course in basic emergency medical care. Emphasis on requirements of national and state accrediting agencies.

EMSP 1355 Trauma Management 2-3-3

A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of patients with traumatic injuries. Upon successful completion of this course, EMSP 1441 and EMSP 1166, students are eligible to take the exam to be certified as an EMT-Intermediate. 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 1370 Emergency Medical Technician - Paramedic Refresher 2-4-3

This course is designed to provide training in skills and equipment necessary to help maintain basic life support. Instruction is given in basic Anatomy and Physiology, patient assessment, and the theory behind the procedures used in giving pre-hospital care to the sick and injured. Emphasis of this course will be on the requirements of the national and state accrediting agencies. Upon successful completion of the course, the student is eligible to take the exam to be certified as an Emergency Medical-Paramedic and/or to renew EMT -paramedic by the Texas Department of Health and/or National Registry EMT.

EMSP 1391 Special Topics

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

Introduction to the level of Emergency Medical Technician (EMT) - Basic. Includes all the skills necessary to provide emergency medical care at a basic life support level with an ambulance service or other specialized services. 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 Health and/or National Registry of EMT. Prerequisite: Current CPR certification. See also admission requirements.

EMSP 1441 Emergency Medical Technician - Intermediate 2-6-4

Introduction to the advanced life support program. Emphasis on the Department of Transportation Emergency Medical Technician (EMT) - Intermediate guidelines in all aspects of pre-hospital emergency care. Upon successful completion of this course, EMSP 1166 and EMSP 1355, students are eligible to take the exam to be certified as an EMT-Intermediate by the Texas Department of Health and/or National Registry of EMT. Prerequisites: Current CPR certification, EMSP 1401 and, EMSP 1160, or national registry certification, or any state certification as an EMT-Basic. See also admissions requirements.

EMSP 2135 Advanced Cardiac Life Support 1-0-1

Skill development for professional personnel practicing in critical care units, emergency departments, and paramedic ambulances. Establishes a system of protocols for management of the patient experiencing cardiac difficulties.

EMSP 2143 Assessment Based Management 0-3-1

The capstone course of the EMSP program. Designed to provide for teaching and evaluating comprehensive, assessment-based patient care management. 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 Health and/or National Registry of EMT. Prerequisites: Current CPR certification, EMSP 2330. co-requisite: EMSP 1268. See also admission requirements.

EMSP 2147 Pediatric Education for Pre-Hospital Providers 1-0-1

A course in a system of protocols for management of the pediatric patient experiencing difficulties in medical and/or trauma-related emergencies.

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

Instruction in teaching methodology for instructors of emergency medical services.

EMSP 2330 Special Populations 2-2-3
A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of ill or injured patients in nontraditional populations. Upon successful completion of this course, EMSP 2444, EMSP 2434, EMSP 1167, EMSP 2143 and EMSP 1268, students are eligible to take the exam to be certified as an EMT-P by the Texas Department of Health and/or National Registry of EMT. Prerequisites: Current CPR certification, EMSP 1167. See also admission requirements.

EMSP 2338 EMS Operations 3-0-3
A detailed study of the knowledge and skills necessary to reach competence to safely manage the scene of an emergency. Prerequisites: Current CPR certification, EMSP 1401. See also admission requirements.

EMSP 2434 Medical Emergencies 3-3-4
A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of patients with medical emergencies. Upon successful completion of this course, EMSP 2444, EMSP 1167, EMSP 2330, EMSP 2143 and EMSP 1268, students will be eligible to take the exam to be certified as an EMT-P by the Texas Department of Health 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
A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of patients with cardiac emergencies. Upon successful completion of this course, EMSP 2434, EMSP 1167, EMSP 2330, EMSP 2143 and EMSP 1268, students will be eligible to take the exam to be certified as an EMT-P by the Texas Department of Health and/or National Registry of EMT. Prerequisites: Current CPR certification, EMSP 1401 and EMSP 1160. See also admission requirements.

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: DSWR 0302 or equivalent with a grade of "C" or above or appropriate test score(s).

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: Completion of ENGL 1301, or equivalent, with a grade of "C" or above.

ENGL 1312 Business Writing 3-0-3
Instruction in grammar and diction, writing expository papers, writing effective business correspondence and reports, and oral presentations. Prerequisite: DSWR 0302 or equivalent with a grade of "C" or above or appropriate test score(s).

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 an earned course grade of "C" or above.

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 ENGL 1312, or equivalent, with an earned course 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 an earned course 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 an earned course 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 an earned course 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 an earned course 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 ENGL 1302, or equivalent, with an earned course 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 ENGL 1302, or equivalent, with an earned course grade of "C" or above.

ENGR Engineering

ENGR 1201 Introduction to Engineering 2-0-2
Introduction to engineering as a discipline and a profession. Includes instruction in the application of mathematical and scientific principles to the solution of practical problems for the benefit of society. Prerequisite: MATH 1314 or equivalent with a grade of "C" or above.

ENGR 1304 Engineering Graphics I 2-4-3
Freehand and instrument drawing, dimensioning, fastening, pictorial methods, charts and graphs, projections drawing, geometry of graphical construction and an introduction to Computer-Aided Drafting. Required for beginning engineering students.

ENGR 1305 Engineering Graphics II 2-4-3
Involves point, line, and plane relationships; auxiliary views; intersections; and flat-pattern development. Emphasis is placed on practical solutions to realistic engineering problems relating to aerospace, mining, and geology. Prerequisite: ENGR 1304.

ENGR 2301 Engineering Mechanics I – Statics 4-0-3
Calculus-based study of composition and resolution of forces, equilibrium of force systems, friction, centroids, and moments of inertia. Prerequisite: PHYS 2425. co-requisite: MATH 2414.

ENGR 2302 Engineering Mechanics II – Dynamics 4-0-3
Calculus-based study of dynamics of rigid bodies, force-mass-acceleration, work-energy, and impulse-momentum computation. Prerequisite: ENGR 2301 and MATH 2414.

ENVR Environmental Science

ENVR 1401 Environmental Science I 3-3-4
General interest course requiring a minimum of previous science background and relating scientific knowledge to problems involving energy and the environment. Emphasis is placed on a global approach to principles and problems in our environment. Topics include: the importance of biodiversity, population dynamics; pest control; human population demographics; land use and abuse; weather; air and water pollution; water use and management; and various forms of conventional and sustainable energy resources. Lab includes methods of measurement, analysis and interpretation of environmental data; and certification for the Texas Watch Program through the Brazos River Authority. Co-requisite: ENVX 1401.

ETMC Europe Microcomputer

ETMC 1103 Implementing a MS Windows Server 2003 Network Infrastructure: Network Host 1-0-1
The course is designed to prepare students for the MCSE exam. Students will be able to describe the Transmission Control Protocol/Internet Protocol (TCP/IP), convert Internet Protocol (IP) addresses between decimal and binary, calculate a subnet mask, and create subnets using Variable-length Subnet Mask (VLSM) and other networking issues. Prerequisite: Recommended that student has 6-12 months of experience as an administrator of client and network operating systems. Students must also have complete ETMC 1202 and be concurrently enrolled in ETMC 1204.

ETMC 1201 Managing and Maintaining a Windows Server 2003 Environment 2-0-2
This course provides students with the knowledge and skills that are required to manage accounts and resources, maintain server resources, monitor server performance, and safeguard data in a Microsoft Windows Server 2003 environment. Prerequisite: Recommended that student has 6-12 months of experience as an administrator of client and network operating systems, and completed ETMC 1103, ETMC 1202 and ETMC 1204.

ETMC 1202 Implementing and Supporting Microsoft Windows XP Professional 2-0-2
This course addresses the implementation and desktop support needs of customers that are planning to deploy and support Microsoft Windows XP Professional in a variety of stand-alone and network operating system environments. Prerequisite: Recommended that student has 6-12 months of experience as an administrator of client and network operating systems.

ETMC 1204 Implementing a MS Windows Server 2003 Network Infrastructure: Network Services 2-0-2

The course is designed to prepare students for the MCSE exam. Students will be able to describe implementation of routing; implementing managing and maintaining Dynamic Host Configuration Protocol (DHCP), Domain Name System (DNS), and Windows Internet Name Service (WINS); securing Internet Protocol (IP) traffic with Internet Protocol security, and other networking issues. Prerequisite: Recommended that student has 6-12 months of experience as an administrator of client and network operating systems. Students must also have completed ETMC 1201, ETMC 1202 and be concurrently enrolled in ETMC 1103.

ETMC 1205 Planning and Maintaining a MS Server 2003 Network Infrastructure 2-0-2

The course is designed to prepare students for the MCSE exam. Students will be able to plan a TCP/IP physical and logical network, plan and troubleshoot a routing strategy, plan a Dynamic Host Configuration Protocol (DHCP) strategy, optimize and troubleshoot DHCP, plan a Domain Name system (DNS) strategy, and other networking issues. Prerequisite: Recommended that student has 6-12 months of experience as an administrator of client and network operating systems. Students must also have completed ETMC 1201, ETMC 1202, ETMC 1103, and ETMC 1204.

ETMC 1206 Planning, Implementing & Maintaining a MS Window Server 2003 Active Directory Infrastructure 2-0-2

The course is designed to prepare students for the MCSE exam. Students will be able to plan, implement, and troubleshoot a Microsoft Windows Server 2003 Active Directory service infrastructure. Prerequisite: Recommended that student has 6-12 months of experience as an administrator of client and network operating systems. Students must also have completed ETMC 1201, ETMC 1202, ETMC 1103, ETMC 1204, and ETMC 1205.

ETMC 1207 Designing a MS Windows Server 2003 Active Directory and Network Infrastructure 2-0-2

The course is designed to prepare students for the MCSE exam. Students will be able to describe the process of designing an Active Directory Infrastructure, design a forest, and domain infrastructure, design a site infrastructure, design a group policy structure, and design an administrative structure and other networking issues. Prerequisite: Recommended that student has 6-12 months of experience as an administrator of client and network operating systems. Students must also have completed ETMC 1201, ETMC 1202, ETMC 1103, ETMC 1204, ETMC 1205, and ETMC 1206.

ETMC 1208 Updating Systems Administrator and Engineer Skills from MS Windows 2000 to Windows Server 2003

ETMC 1209 Implementing and Administering Security in a Microsoft Windows Server 2003 Network 2-0-2

The course is designed to prepare students for the MCSE exam. Students will be able analyze and evaluate technical requirements, determine security requirements, develop a security solution for a Windows network, design security for access between networks, and design security for communication channels. Prerequisite: Recommended that student has 6-12 months of experience as an administrator of client and network operating systems.

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 and 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 1331 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 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 1334 Fire Chemistry II 3-0-3

Introduction to the chemistry of carbon compounds as related to the fire service with primary emphasis on the hydrocarbons. Topics include alcohols, phenols, halogen compounds, and ethers with application 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 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, or two years of French in an accredited high school.

FREN 2312 Intermediate French II 3-0-3

This course continues reading of French masterpieces; drill on syntax as needed for reading, composition, and conversation. Prerequisite: FREN 2311 with a grade of "C" or above.

GEOL Geology

GEOL 1403 Physical Geology 3-3-4

An introductory course about the materials and processes of the Earth. Topics included are: minerals, rocks, plate tectonics, continental evolution, earthquakes, seismology, volcanoes, weathering, running water, ground water, mass wasting, and others. The study of regional rocks and minerals and the opportunity for field observation and collection are provided. Co-requisite: GEOX 1403.

GEOL 1404 Historical Geology 3-3-4

The course involves a study of the record of life forms that have developed throughout geological time. It also covers the development of the Earth from its cosmic beginning to current land forms. Principles of stratigraphy, sedimentary processes, paleontology, geologic time, plate tectonics, and hypotheses of the Earth's origin are studied in the course. The study of local and regional fossil fauna and the opportunity for field observation and collection of rocks and the fossils are provided. Co-requisite: GEOX 1404.

GEOL 1405 Environmental Geology 3-2-4

An interdisciplinary course which includes an overview of Earth materials and processes, which then goes on to focus upon specific geologic problems and possible solutions. A major emphasis of this course is that of the relationship of geology with other academic and practical matters and studies.

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, or a "passing" score on the CTC German placement test.

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; or two years of high school German from an accredited high school; or a "high passing" score on the CTC German placement test.

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

GERS Mental Health Services See also CMSW,
DAAC, CHLT, and PSYT

GERS 1343 Psychology of Adult Development and Aging 3-0-3
This course is the scientific study of a lifelong process of development with specific focus on the physical, cognitive, and psychosocial aspects of adult development and aging. The course includes a study of common cognitive disorders that affect the elderly with emphasis on mental health and optimum development.

GOVT Government

GOVT 2301 American Government I 3-0-3
An introductory, survey course on various United States, Texas, and local government topics. This course includes study of the U.S. and Texas constitutions, federalism, local governments, national elections (state and local), civil liberties, interest groups, and political parties.

GOVT 2302 American Government II 3-0-3
An introductory, survey course on various United States, Texas, and local government topics. This course includes studying institutions of national and Texas governments including the executive, legislative, and judicial branches; the bureaucracy; and public policy including defense and foreign relations.

GOVT 2304 Introduction to Political Science 3-0-3
This course is designed to introduce the student to the general area of political science and to provide knowledge and understanding of political fundamentals, public law, political dynamics, public policy, theory and organization of the modern state, and international relations.

GRPH Graphics and Printing Technology
see also ARTC

GRPH 1309 Press Operations I 2-4-3
Introduction to offset printing. Includes knowledge and skills for operating a small offset press. Emphasizes parts of the press and operation procedures, printing terminology, paper and ink type uses, make ready and cleanup. Recommended prerequisite or co-requisite: GRPH 1405.

GRPH 1374 Press Operations III 2-4-3
Covers the press transport system, preparation of water and ink system and end of press run activities to include clean up of AB Dick 360 press. Recommended prerequisite: GRPH 2338.

GRPH 1405 Introduction to Graphic Arts and Printing 3-3-4
History of printing and techniques involved in the production and distribution of printed materials. Includes methods of printing, printing terminology, and identification of career opportunities in the graphics and printing industry.

GRPH 1408 Darkroom Techniques for Plate Development 3-3-4
Basic camera operations and darkroom procedures. Includes percentage size calculations, simple line shots, film processing and basic techniques in the precise layout of simple line negative. Selection of proper plates for specific jobs and the exposing and developing of plates. Recommended prerequisite or co-requisite: GRPH 1405.

GRPH 1419 Bindery and Finishing Operations 3-3-4
An overview of bindery and finishing equipment and techniques. Emphasis on parts and operation. Demonstration of sorting, folding, cutting, labeling, wrapping, packaging, and binding methods. Recommended prerequisites or co-requisites: GRPH 1405 and GRPH 1474.

GRPH 1472 Graphics and Printing Applications 3-3-4
Allows the student to put all the skills learned in previous courses to practice by performing the function of a print shop employee. Includes paper selection and cutting, darkroom functions, platemaking, ink selection, press operations, bindery operation, storing flats and plates and equipment maintenance and repair. Recommended prerequisite: All other technical courses in the program except GRPH 2488.

GRPH 1474 Preventive Maintenance 3-3-4
This course covers preventive maintenance of the offset printing press. It also includes bindery operations such as paper characteristics and identification, proper paper jogging and padding procedures, figuring paper cuts, and paper cutter operations. A thorough study of the adjustments, preventive maintenance and simple repair on darkroom, composing room, press room, and bindery equipment. Recommended prerequisites: (GRPH 1405 and GRPH 2338) or (GRPH 1405 and GRPH 1374).

GRPH 2336 Prepress Techniques 2-4-3
Hands-on experience in both electronic file imaging and/or traditional graphics camera use. Electronic file output and troubleshooting, graphics camera knowledge, traditional film assembly, and proofing process. High-end color scanning. Recommended prerequisite: GRPH 1471.

GRPH 2338 Press Operations II 2-4-3
Maintenance and operation of sheet-fed offset press systems. Includes production of process-color jobs with close registration. Recommended prerequisite: GRPH 1309.

GRPH 2488 Internship - Graphics & Printing Equipment Operator, General Production 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. Recommended prerequisite: Satisfactory completion of all other technical courses in the program.

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

HAMG 1308 Introduction to the Hospitality Industry 3-0-3

An introduction to lodging and food service operations. Topics include growth, development and organization of the lodging industry; growth, development, organization, structure, and management of food service operations; human resources, marketing, security, engineering, and maintenance of hospitality operations; and opportunities within the travel and tourism industry. 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 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. 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 1319 Computers in Hospitality 2-4-3

An introduction to computers and their relationship as an information system to the hospitality industry. This course addresses essential aspects of computer systems, such as hardware and generic applications; focuses on computer-based property management systems for both front and back office functions; and on computer-based restaurant management.

HAMG 1324 Hospitality Human Resource Management 3-0-3

A study of the principles and procedures of managing people in the hospitality workplace. 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 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. 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 1342 Guest Room Maintenance 3-0-3

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. 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 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. 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 2337 Hospitality Facilities Management 1-5-3

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 2370 Hospitality Financial Management II 3-0-3

This course serves as a bridge between basic accounting and managerial accounting courses. Covers such areas as specialized accounting for hotel revenue and expenses; periodic inventory accounting for food and beverage areas; hospitality payroll accounting; intangible assets; accounting for inventory, property and equipment; financial information systems; hotel departmental financial statements; the income statement, balance sheets and statement of cash flow; the analysis of financial statements; and interim and annual reports. 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. Prerequisite: HAMG 2332.

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 0-17-3

A basic, intermediate, or advanced type of non-health professions work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Direct supervision is provided by the faculty or the work supervisor. An internship may be a paid or unpaid learning experience. 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.

HART 1403 A/C 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. Recommended prerequisite: HART 1401.

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.

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. Recommended prerequisite or co-requisite: HART 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.

HART 2431 Advanced Electricity 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. Recommended prerequisites: HART 1401 and HART 1403.

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. Recommended prerequisites: HART 1401, 1403, 1407, 1441, and 2442.

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. Recommended prerequisites: HART 1401 and HART 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. Recommended prerequisites: HART 1401 and HART 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. Recommended 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. Recommended prerequisites: HART 1403 and HART 1441.

HART 2471 Advanced Heat Pumps 3-3-4
An introduction to geothermal heat pumps, polyethylene butt and socket fusion, geothermal applications, ground heat exchangers (vertical, horizontal and slinky loops), flow controls, system design, troubleshooting, repair and system service. Recommended prerequisites: HART 2449 and 2431.

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. Recommended prerequisite: Satisfactory completion of all other technical courses in the program.

HIST History

HIST 1301 United States History I 3-0-3
English colonization, the Revolution, adoption of the Constitution, growth of nationalism, cotton and the slavery problem, civil war, and reconstruction.

HIST 1302 United States History II 3-0-3
New social and industrial problems, rise of the progressive movement, United States' emergence as a world power, World War I, reaction and the New Deal, World War II, and contemporary America.

HIST 2301 Texas History 3-0-3
A survey of Texas from the Spanish exploration to the present.

HIST 2311 Western Civilization I 3-0-3
A survey course examining social, political, economic, and technological developments of early civilizations of the Near East through European exploration and conquests of the Far East and the New World. Additional topics include examination of the Greek and Roman civilizations, the European Medieval Period, the rise and spread of Islam, the Middle Ages, and the European Renaissance and Reformation.

HIST 2312 Western Civilization II 3-0-3
A survey course examining social, political, economic, and technological developments of Europe from the Seventeenth through Twentieth centuries. Particular topics include the formation of modern nation-states, the Enlightenment, the scientific and industrial revolutions, political upheavals in Europe and the New World, the clash of ideologies, imperialism, and nationalism, the world wars, and the Cold War.

HIST 2381 African-American History 3-0-3
The purpose of this course is to familiarize students with the general study of African-American history from the early days of West Africa to American slavery and freedom and ending with the modern civil-rights movement of the 1950s and 1960s.

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 is an introductory course designed to give the student a fundamental understanding of the creation and appreciation of diverse modes of expression through the visual arts, within the context of Fine and Applied Arts. 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, ITSY

IMED 1416 Web Page Design I 3-3-4
Instruction in web page design and related graphic design issues including mark-up languages, web sites, and browsers. Prerequisite: ITSC 1409

IMED 2409 Internet Commerce 3-3-4
An overview of the Internet as a marketing and sales tool with emphasis on developing a prototype for electronic commerce. Topics include database technology, creating web sites in order to collect information, performing on-line transactions, and generating dynamic content. Prerequisite: ITNW 1437, or ITSC 1409, or BCIS 1405.

INTC Computer Electronics Technology see also CETT, CPMT, EECT, ELMT and ITCC

INTC 1307 Electronic Test Equipment 2-4-3
A study of the theory and application of analog and digital meters, oscilloscopes, frequency generation, frequency measurements, and special measuring instruments. Emphasis on accuracy and limitations of instruments and calibration techniques.

ITAL Italian

ITAL 1311 Beginning Italian I 3-0-3

This course is designed to help learners build proficiency in Italian and appreciation for the Italian language. It will also help students to develop an understanding of the Italian culture while providing contexts that reinforce the usefulness of the Italian language while living and traveling in Italy. This course is only available, under contract, to the Navy Pace Campus.

ITAL 1312 Beginning Italian II 3-0-3

This course is a continuation of ITAL 1311, Beginning Italian I. This course will build upon skills developed in Beginning Italian I, with continued emphasis on understanding Italian culture. Prerequisite: ITAL 1311. This course is only available, under contract, to the Navy Pace Campus.

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

ITNW 1273 MS Windows 2000 Network and Operating System Essentials II (Fort Hood)

ITNW 1358 Network+ 2-2-3

Prepares individuals for a career as a Network Engineer in the Information Technology support industry. Includes the various responsibilities and tasks required for service engineer to successfully perform in a specific environment. Prepares individual to pass the Computing Technology Industry Association (CompTIA) Network+ certification exam. (Fort Hood Microsoft System Administrator)

ITNW 1372 Managing a Microsoft Windows 2000 Network Environment II (Fort Hood)

ITNW 1425 Fundamentals of Networking Technologies 3-3-4

Instruction in networking technologies and their implementation. Topics include the OSI reference model, network protocols, transmission media, and networking hardware and software. Prerequisite: ITSC 1405 or ITSC 1409.

ITNW 1437 Introduction to the Internet 3-3-4

Introduction to the Internet with emphasis on using the World Wide Web to locate, transfer, and publish information. Survey of emerging technologies on the Internet. Prerequisite: None.

ITNW 2405 Network Administration 3-3-4

Topics include network components, user accounts and groups, network file systems, file system security, and network printing. Prerequisite: ITSC 1405.

ITNW 2435 Troubleshooting and Support 3-3-4

Troubleshoot and support networks with emphasis on solving real world problems in a hands-on environment. Topics include troubleshooting and research techniques, available resources, and network management hard/software. Prerequisite: ITNW 2405 and ITNW 1425.

ITNW 2435 Network Troubleshooting and Support (A+ Training) 3-3-4

Troubleshoot and support networks with emphasis on solving real world problems in a hands-on environment. Topics include troubleshooting and research techniques, available resources, and network management hard/software. (Fort Hood Microsoft System Administrator)

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

ITSC 1301 Introduction to Computers 3-1-3

Overview of computer information systems. Introduces computer hardware, software, procedures, and human resources. Explores integration and applications in business and other segments in society. Fundamentals of computer problem-solving and programming may be discussed and applied. Examines applications and software relating to a specific curricular area. Prerequisite: None

ITSC 1405 Introduction to PC Operating Systems 3-3-4

A study of personal computer operating systems. Topics include installation and configuration, file management, memory and storage management, control of peripheral devices, and use of utilities. Prerequisite: eight hours of computer science courses.

ITSC 1409 Integrated Software Applications I 3-3-4

Integration of applications from popular business productivity software suites. Instruction in embedding data, linking and combining documents using word processing, spreadsheets, databases, and/or presentation media software. Prerequisite: None.

ITSC 1411 AS/400 Operating System I 3-3-4

A study of the AS/400 operating system including multi-user concepts, terminal emulation, use of system editor, basic AS/400 menus, commands, and help screens. Topics include introductory system management concepts and file management. Prerequisite: 8 semester hours in computer science courses.

ITSC 1492 Special Topics in Management Information Systems and Business Data Processing, General 1-6-4

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. Prerequisite: 8 semester hours of computer science courses and consent of the Department Chair.

ITSC 2439 Personal Computer Help Desk 3-3-4

Diagnosis and solution of user hardware and software related problems with on-the-job projects in either a Help Desk lab or in short-term assignments for local business. Prerequisite: 12 semester hours of 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. Prerequisite: 24 semester hours of computer science courses.

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

ITSE 1414 Introduction to RPG Programming 3-3-4

Introduction to computer programming using RPG. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files. Prerequisites: ITSE 1431 and ITSC 1411.

ITSE 1422 Introduction to C Programming 3-3-4

Introduction to programming using C. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Prerequisite: None.

ITSE 1431 Introduction to Visual BASIC Programming 3-3-4

Introduction to computer programming using Visual BASIC. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Prerequisite: None.

ITSE 1450 System Analysis and Design 3-3-4

Comprehensive introduction to the planning, design, and construction of computer information using the systems development life cycle and other appropriate design tools. Prerequisites: Must have 16 semester hours of computer science courses.

ITSE 1491 Special Topics in Computer Programming 1-6-4

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. Prerequisites: 8 semester hours of computer science course work and departmental approval.

ITSE 2413 Web Authoring 3-3-4

Instruction in designing and developing web pages that incorporate text, graphics, and other supporting elements using current technologies and authoring tools. Prerequisites: (ITSC-1409 and ITSC-1413) OR (ITSC-1409 and ITNW-1437).

ITSE 2417 JAVA Programming 3-3-4

Introduction to JAVA programming with object-orientation. Emphasis on the fundamental syntax and semantics of JAVA for applications and web applets. Prerequisite: ITSE 1431

ITSE 2431 Advanced C++ Programming 3-3-4

Further application of C++ programming techniques including subjects such as file access, abstract data structures, class modeling, and other object oriented programming. Prerequisite: ITSE 1422.

ITSE 2451 Advanced COBOL Programming 3-3-4

Further applications of programming techniques using COBOL, including file access methods, data structures and modular programming, program testing and documentation. Prerequisites: ITSE 1418.

ITSE 2486 Internship - Computer Programming 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: 24 hours in computer science courses.

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

ITSW 1401 Introduction to Word Processing 3-3-4

An overview of the production of documents, tables, and graphics. Prerequisites: none.

ITSW 1404 Introduction to Spreadsheets 3-3-4

Instruction in the concepts, procedures, and importance of electronic spreadsheets. Prerequisites: none.

ITSW 1407 Introduction to Database 3-3-4

Introduction to database theory and the practical applications of a database. Prerequisites: ITSW 1401 OR ITSW 1404 OR ITSC 1409.

ITSW 2486 Internship - Data Processing 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. Prerequisites: 24 hours in computer science courses.

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

ITSY 2400 Operating System Security 3-3-4

Safeguard computer operating systems by demonstrating server support skills, and designing and implementing a security system. Identify security threats and monitor network security implementations. Use best practices to configure operating systems to industry security standards. Prerequisite: 15 semester credit hours of computer science courses or ITSC 1405.

JAPN Japanese

JAPN 1311 Beginning Japanese I 3-0-3

Introduction to Japanese with emphasis on conversation, grammar, and the written forms. There will also be readings of simple texts dealing with Japanese life and culture.

JAPN 1312 Beginning Japanese II 3-0-3

Continuation of Japanese conversation, grammar and the written forms. Emphasis is on reading texts dealing with Japanese life and culture. Prerequisite: JAPN 1311 with a grade of "C" or above.

JAPN 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.

LGLA Paralegal/Legal Assistant

LGLA 1300 Elder Law 3-0-3

Students will be introduced to topics in the law affecting older persons. Such topics as financial and estate planning, health care, personal planning and protection, and consumer protection will be covered in the course.

LGLA 1303 Legal Research 3-0-3

This course provides a working knowledge of the fundamentals of effective legal research. Topics include law library techniques, computer assisted legal research, briefs, and legal memoranda.

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

The United States military legal system. Includes an introduction to the Uniform Code of Military Justice, military regulations, and court decisions involved in military law. Emphasizes emerging issues of national security laws including the U.S.A. Patriot Act, terrorism and national security crimes, national security detentions and trials, military tribunals, and clandestine operations.

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

This course provides an overview of the law and the legal professions. Topics include legal concepts, systems, and terminology; ethical obligations and regulations; professional trends and issues with particular emphasis on the paralegal.

LGLA 1317 Law Office Technology 2-2-3

This course introduces computer technology and its applications within the law office. Topics include the use of computer technology in the delivery of legal services with particular emphasis on the paralegal's role. Lab included. Recommended co-requisite: ITSW 1401.

LGLA 1343 Bankruptcy 3-0-3

This course presents fundamental concepts of bankruptcy law and procedure with emphasis on the paralegal's role. Topics include individual and business liquidation and reorganization.

LGLA 1345 Civil Litigation 3-0-3

This course presents fundamental concepts and procedures of civil litigation with emphasis on the paralegal's role. Topics include pretrial, trial, and post trial phases of litigation. Prerequisites: LGLA 1307 (LGLA 1317 is also recommended for students taking this course through online delivery).

LGLA 1349 Constitutional Law 3-0-3

This course provides an overview of the United States Constitution and its articles, amendments, and judicial interpretations. Topics include separation of powers, checks and balances, governmental structures and process, and individual rights in relation to government.

LGLA 1351 Contracts 3-0-3

This course presents fundamental concepts of contract law with emphasis on the paralegal's role. Topics include formation, performance, and enforcement of contracts under the common law and the Uniform Commercial Code. Prerequisite: LGLA 1307 (LGLA 1317 is also recommended for students taking this course through online delivery).

LGLA 1353 Wills, Trust and Probate Administration 3-0-3

This course presents fundamental concepts of the law of wills, trusts, and probate administration with emphasis on the paralegal's role. Recommended co-requisite: LGLA 1345.

LGLA 1355 Family Law 3-0-3

This course presents fundamental concepts of family law with emphasis on the paralegal's role. Topics include formal and informal marriages, divorce, annulment, marital property, and the parent-child relationship.

LGLA 1357 Juvenile Law 3-0-3

This course presents fundamental concepts of juvenile law with emphasis on the paralegal's role. Topics include differences between the criminal and juvenile justice systems, detention, adjudication and certification procedures, and related issues within the public education system. Prerequisites: LGLA 1307 and LGLA 1355.

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.

LGLA 2303 Tort and Personal Injury Law 3-0-3

This course presents fundamental concepts of tort law with emphasis on the paralegal's role. Topics include intentional torts, negligence, and strict liability.

LGLA 2307 Law Office Management 3-0-3

This course presents the fundamentals of law office management and organization including basic principles and structure of management, administrative and substantive systems in the law office, and law practice technology. Recommended prerequisite: LGLA 1307.

LGLA 2309 Real Property 3-0-3

This course presents fundamental concepts of real property law with emphasis on the paralegal's role. Topics include 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.

LGLA 2311 Business Organizations 3-0-3

This course presents basic concepts of business organizations with emphasis on the paralegal's role. Topics include law of agency, sole proprietorships, forms of partnerships, corporations, and other emerging business entities. Recommended prerequisite LGLA 1351.

LGLA 2313 Criminal Law and Procedure 3-0-3

This course introduces the criminal justice system including procedures from arrest to final disposition, principles of federal and state law, and the preparation of pleadings and motions. Prerequisite: LGLA 1307.

LGLA 2321 Military Law II 3-0-3

This course presents an in-depth look at the operation and management of military law. Topics include detailed coverage of criminal law, claims, military administrative law, legal assistance, and civil law as it applies to the military.

LGLA 2331 Advanced Legal Research and Writing 3-2-3

This course builds upon the skills acquired in prior legal research and writing courses including computerized research techniques and preparation of complex legal documents such as briefs, legal office memoranda, and citation forms. Prerequisite: LGLA 1303.

LGLA 2433 Advanced Legal Document Preparation 3-3-4

Preparation of legal documents based on hypothetical fact situations drawn from various areas including real estate, family law, contracts, litigation, and business organizations (lab included). This is a capstone course for advanced students and requires department consent.

LGLA 2480 Cooperative Education - Paralegal/Legal Assistant 0-22-4

An advanced course with lecture and work-based instruction that helps students gain practical experience in the discipline, enhance skills, and integrate knowledge. Indirect supervision is provided by the work supervisor while the lecture is provided by the college faculty or by other individuals under the supervision of the educational institution. This is a paid experience. This is a capstone course for advanced students and requires departmental consent.

LGLA 2488 Internship- Paralegal/Legal Assistant 0-19-4

A basic, intermediate, or advanced type of non-health professions work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Direct supervision is provided by the faculty or the work supervisor. An internship may be a paid or unpaid learning experience. This is an unpaid experience. This is a capstone course for advanced students and requires department consent.

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: DSMA 0303 or equivalent with a grade of "C" or above or acceptable evaluation scores.
- MATH 1324 Mathematics for Business and Social Sciences I (Finite Mathematics)** 3-0-3
Topics include systems of linear equations, linear programming, and the simplex method, set theory, counting techniques, combinatorics, probability, statistics, and functions. Prerequisites: A score on the CTC approved assessments that is equivalent to a 250 on the THEA, or DSMA 0303 or MATH 1342 or equivalent with a grade of "C" or above. This course is not above the level of College Algebra and does not satisfy the CTC Core Curriculum mathematics (020) requirements for AA or AS degrees.
- MATH 1325 Mathematics for Business and Social Sciences II (Business Calculus)** 3-0-3
Topics include elementary, differential and integral calculus that apply to business and economics. Prerequisites: MATH 1314 or MATH 1324 with a grade of "C" or above.
- 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: Minimum passing score on the CTC approved assessments or DSMA 0301 or equivalent with a grade of "C" or above. This course is for non-mathematics, non-science, and non-business students seeking mathematics credit for an AAS degree only. This course is not above the level of College Algebra and does not satisfy the CTC Core Curriculum mathematics (020) requirements for AA or AS degrees.
- 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: A score on the CTC approved assessments that is equivalent to a 240 on the THEA, or DSMA 0301 or equivalent with a grade of "C" or above. This course is not above the level of College Algebra and does not satisfy the CTC Core Curriculum mathematics (020) requirements for AA or AS degrees.
- 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: DSMA 0303 or equivalent with a grade of "C" or better or acceptable evaluation scores.
- MATH 2318 Linear Algebra** 3-0-3
An introductory course in linear algebra covering vector spaces, linear transformations, matrices, systems of linear equations. Prerequisite: MATH 2414 with a grade of "C" or above.
- MATH 2320 Differential Equations** 3-0-3
First and second order differential equations and their applications. Laplace Transforms, Fourier Series, and their applications. Prerequisite: MATH 2414 with a grade of "C" or 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 1314 with a grade of "C" or above. (A previous study of trigonometry is helpful but not required.)
- MATH 2413 Calculus I** 3-1-4
A first course in differential calculus with emphasis on the limit definitions of derivatives and integrals, applications of derivatives. Derivatives and integrals of the trigonometric functions and their inverses, the hyperbolic functions, exponential, logarithmic, and inverse functions. Prerequisites: MATH 1314 and MATH 2412 with a grade of "C" or above.
- MATH 2414 Calculus II** 3-1-4
A second course in differential and integral calculus. Topics include applications of integration, techniques of integration, infinite series, conics, parametric equations, polar coordinates, vectors, and the geometry of spaces. Prerequisites: MATH 2412 and MATH 2413 with a grade of "C" or above.
- MATH 2415 Calculus III** 3-1-4
A third course in differential and integral calculus. Topics include vector-valued functions, functions of several variables, multiple integrations, and vector analysis. Prerequisites: MATH 2414 with a grade of "C" or above.
- MBST Maintenance Technology** see also CBFM, CBPT, 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/or block. Recommended prerequisite or co-requisite: CRPT 1429.
- 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, 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 and examination of the legal and ethical issues of organizations which affect salespeople.

MT- Military Technology

MTHO 1370 Historical Principles of War 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)

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 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.

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

PFPB 2409 Residential Construction 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. Recommended prerequisite or co-requisite: CRPT 1429.

PFPB 2445 Residential Construction Plumbing II 3-3-4
 Installation of commonly used residential bathroom and kitchen plumbing fixtures in single- and multi-family housing. Recommended prerequisite: PFPB 2409.

PHED Physical Education

PHED 1101 Softball 0-3-1

PHED 1102 Beginning Badminton 0-3-1

PHED 1103 Beginning Bowling 0-3-1

PHED 1104 Soccer 0-3-1

PHED 1106 Swimming: Beginner I 0-3-1

Water adjustment skills will be taught including: intro to rhythmic breathing, front and back float, front and back glide, crawl stroke, elementary backstroke, backstroke, sidestroke, and breaststroke. Treading water, survival floating and personal safety, and beginning diving skills will also be discussed.

PHED 1107 Beginning Tennis 0-3-1

PHED 1108 Beginning Golf 0-3-1

PHED 1110 Karate I 0-3-1

PHED 1114 Volleyball 0-3-1

PHED 1115 Basketball 0-3-1

PHED 1116 Fitness Walking 0-3-1

PHED 1118 Jogging 0-3-1

PHED 1120 Body Building 0-3-1

PHED 1123 Advanced Bowling 0-3-1

PHED 1124	Advanced Swimming	0-3-1	PHED 1153	Lifeguard Training	0-3-1
PHED 1125	Intermediate Tennis	0-3-1	A complete course in lifesaving techniques. Students have the opportunity to earn American Red Cross Certification in CPR, standard first aid, lifeguard training, AED and oxygen administration. Lifeguard techniques taught include how to carry a victim to safety, how to manage a suspected spinal injury in the water, and how to use water rescue equipment, how to use an AED, and how to administer oxygen. An additional fee will be charged in this course for Red Cross books and supplies. To enroll in this course, a student must pass a skills test requiring performance of the following skills: (1) swim 500 yards continuously using each of the following strokes for at least 50 yards: crawl, breaststroke, elementary backstroke, and sidestroke, (2) surface dive to a minimum of 9 feet and bring a 10 pound diving brick to the surface, (3) surface dive to a minimum of 5 feet and swim underwater for a minimum of 15 yards, and (4) tread water for one minute.		
PHED 1126	Advanced Golf	0-3-1	PHED 1158	Aquatic Fitness	0-3-1
PHED 1129	Advanced Badminton	0-3-1	This course is designed to promote fitness through the use of water-related activities compatible with a pool environment. Emphasis is on water resistance exercises, cardiovascular fitness, and a variety of aquatic games. The class is open to both swimmers and non-swimmers.		
PHED 1130	Physical Conditioning	0-3-1	PHED 1159	Water Aerobics	0-3-1
A course which introduces the student to the health-related components of physical fitness. Emphasis is on developing a personal fitness program based on sound physiological principles.			This is a complete fitness workout for swimmers and non-swimmers exercising to music in the shallow and deep ends of the pool. There is an emphasis on cardiovascular conditioning, but exercises that develop flexibility, muscular strength, and endurance are also included. Waling, jogging, aerobics, water-resistance exercises, and aquatic games will be used to promote fitness.		
PHED 1131	Aerobics	0-3-1	PHED 1301	Introduction Physical Fitness and Sport	3-0-3
PHED 1133	Weight Training	0-3-1	A course which introduces the student to the fields of health, physical education, and recreation. Emphasis on the scope and organization of professional activities, opportunities and qualifications of the professional physical educator. This course does not replace the physical activity course(s) requirement for the award of the Associate of Arts, Associate of Science, Associate of Applied Science, Associate of General Studies nor the Associate of Applied Science of Applied Technology degrees.		
PHED 1136	Lifetime Fitness	0-3-1	PHED 1306	First Aid	3-0-3
PHED 1138	Rhythmic Aerobics	0-3-1	First aid topics include how to assess and act in the event of injuries (including cuts, burns, joint injuries, and temperature-related illnesses). Splinting and bandaging techniques are covers. CPR topics include how to recognize an emergency, caring for conscious and unconscious choking victims, recognizing signs of a heart attack, rescue breathing, and cardiopulmonary resuscitation, and provides an introduction to Automatic External Defibrillation. American Red Cross certification in Standard First Aid Responding to an Emergency as well as Adult/Child/Infant CPR certifications may be earned. An additional fee will be charged in this course for Red Cross books and supplies. This course does not replace the physical activity course(s) requirement for the award of the Associate of Arts, Associate of Science, Associate of Applied Science, Associate of General Studies nor the Associate of Applied Science of Applied Technology degrees.		
This course is designed to improve cardiovascular conditioning through the use of musical movement. Both low-impact aerobic dance and step-aerobics will be used to improve cardiorespiratory functioning.			PHED 1308	Sports Officiating I	3-0-3
PHED 1140	Karate II	0-3-1	Theory and practice in techniques of officiating. This course does not replace the physical activity course(s) requirement for the award of the Associate of Arts, Associate of Science, Associate of Applied Science, Associate of General Studies nor the Associate of Applied Science of Applied Technology degrees.		
PHED 1141	Swimming: Beginner II	0-3-1	PHED 1321	Coaching/Sports/Athletics I	3-0-3
This class will work on perfecting all five major strokes: sidestroke, backstroke, crawl, breaststroke, and butterfly; diving and swimming underwater, work on turns, and competent lap swimming. Prerequisite: PHED-1106, or ability to swim 500 yards.			Techniques and theories underlying the coaching of men's and women's sports. Special emphasis upon AIDS, equipment, organization, and administration of the program. This course does not replace the physical activity course(s) requirement for the award of the Associate of Arts, Associate of Science, Associate of Applied Science, Associate of General Studies nor the Associate of Applied Science of Applied Technology degrees.		
PHED 1142	Beginning Ballet	0-3-1	PHED 2155	Water Safety	0-3-1
Introductory course designed for the student with little or no previous training. Emphasis is on ballet dance technique, placement and alignment of the body, stretches, footwork, musicality and other preparatory work necessary for the establishment of a basic technical foundation.			Participation and instruction in advanced aquatic activities. Prerequisite: Demonstrated swimming skills.		
PHED 1143	Jazz Dance	0-3-1			
Introductory course designed for the student with little or no previous training. Emphasis is on Jazz dance technique, placement and alignment of the body, stretches, footwork, musicality and other preparatory work necessary for establishment of a basic technical foundation.					
PHED 1144	Yoga I	0-3-1			
PHED 1145	Jujutsu	0-3-1			
PHED 1146	Indoor Cycling	0-3-1			
PHED 1147	Kickboxing/Aerobics	0-3-1			
PHED 1148	Intermediate Jazz Dance	0-3-1			
Practice dance sequences emphasizing articulation and coordination of body parts, rhythm, musicality, and expressive qualities of movement. Emphasis also on stretching, jazz technique, turns, jumps and choreography. Prerequisites: PHED 1143 or consent of the instructor.					
PHED 1149	Jazzercise	0-3-1			
This comprehensive course is designed to increase and enhance cardiovascular endurance, strength and flexibility. Elements of jazz dance, resistance training, Pilates, yoga, kick-boxing, and more are combined to create an effective workout for people of all ages and fitness levels. Participants will reap the benefits of exercise and improve their well-being.					
PHED 1151	Scuba Diving I	0-3-1			
PADI open-water, level-one certification may be earned.					
PHED 1152	Scuba Diving II	0-3-1			
Advanced open-water certification may be earned.					

PHIL Philosophy

PHIL 1301 Introduction to Philosophy 3-0-3

A general introduction to critical and reflective thinking as applied to the basic problems of existence and the meaning of human life and institutions; study of methods and types of evidence utilized by authority, intuition, revelation, reason and scientific methods, and a study of the nature of philosophy, including its relation to religion, science, and art.

PHIL 1304 Introduction to World Religions 3-0-3

A survey course dealing with the origins, tenets, and development of the major world religions. Deductive method used to understand religion as a phenomenon in man's life. Discussion of Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity, and Islam.

PHIL 1316 History of Religions I 3-0-3

In a historical survey of major religions, this course focuses on the history and literature of Ancient Judaism during the Old Testament period emphasizing its development of social, political, and religious institutions and ideas.

PHIL 1317 History of Religions II 3-0-3

In a historical survey of major religions, this course focuses on the history and literature of Early Christianity during the New Testament period emphasizing its origin, development, and expansion of religious institutions and ideas.

PHIL 2303 Introduction to Logic 3-0-3

Nature and methods of correct reasoning, deductive proof, inductive proof, fallacies, and arguments.

PHIL 2306 Introduction to Ethics 3-0-3

Study of basic principles of the normal life, with critical examination of traditional and current theories of the nature of goodness, happiness, duty, and freedom.

PHIL 2307 Introduction to Social and Political Philosophy 3-0-3

Critical examination of the major philosophical theories concerning the organization of societies and the role and scope of government.

PHYS Physical Science

PHYS 1305 Survey of Physics 3-0-3

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. This course is only available, under contract, to the Navy Pace Campus.

PHYS 1311 Survey of Astronomy 3-0-3

A non-mathematical approach to the solar system. Beginnings of astronomy, motions of celestial bodies, members of the solar system, atoms and light are studies. Only offered as a telecourse.

PHYS 1411 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. Prerequisite: None. Co-requisite: PHYX 1411.

PHYS 1412 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. Prerequisite: None. Co-requisite: PHYX 1412.

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

POFI 1301 Computer Applications I 2-4-3

Overview of computer office applications including current terminology and technology. Introduction to computer hardware, software applications, and procedures.

POFI 1349 Spreadsheets 2-4-3

Spreadsheet software for business applications. Prerequisite: An introduction to a computer application course or equivalent recommended.

POFI 1481 Cooperative Education - Business/Office Automation/Technology/Data Entry 0-22-4

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Department Approval required.

POFI 2301 Word Processing 2-4-3

Word processing software focusing on business applications. Prerequisite: Keyboarding proficiency recommended.

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. Keyboarding and word processing skills or concurrent enrollment in word processing course recommended.

POFI 2340 Advanced Word Processing 2-4-3

Advanced applications in merging, macros, graphics, and desktop publishing. Includes extensive formatting for technical documents. Emphasis on business applications. Prerequisites: Keyboarding and word processing skills recommended.

POFI 2386 Internship - Business/Office Automation/Technology/Data Entry 2-7-3

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 2-7-3

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.

POFI 2481 Cooperative Education - Business/Office Automation/Technology/Data Entry 0-22-4

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Prerequisite: POFI 1481 or equivalent. Departmental approval required.

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

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. Keyboarding skills or current enrollment in a keyboarding course required.

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

Introduction to basic records and information management. Includes the life cycle of a record, manual and electronic records management, and basic filing procedures and rules. Keyboarding skills or other computer literacy course recommended.

POFT 1325 Business Math and Machine Applications 2-4-3

Skill development in the use of electronic calculators and business mathematical functions. Emphasis on business problem-solving skills using spreadsheet software and/or electronic calculator/keyboard.

POFT 1329 Beginning Keyboarding 2-4-3

Skill development in the operation of the keyboard by touch applying proper keyboarding techniques. Emphasis on development of acceptable speed and accuracy levels and formatting basic documents.

POFT 1349 Administrative Office Procedures II 2-4-3

In-depth coverage of office applications with special emphasis on decision making, goal setting, management theories, and critical thinking. Concurrent enrollment in or completion of second year office technology courses recommended. Departmental approval required.

POFT 1481 Cooperative Education - Administrative Assistant/Secretarial Science, General 0-22-4

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Department approval required.

POFT 1482 Cooperative Education - General Office/ Clerical and Typing Services 0-22-4

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Department approval required.

POFT 2312 Business Correspondence and Communication 2-4-3

Development of writing and presentation skills to produce effective business communications. Prerequisites: Keyboarding and document formatting skills recommended. POFT 1301 recommended

POFT 2333 Advanced Keyboarding 2-4-3

Study of advanced concepts in a variety of office-simulated correspondence activities with emphasis on organization, prioritizing, decision making, composition, placement, accuracy, and speed development. Keyboarding and word processing skills recommended.

POFT 2386 Internship - Administrative Assistant/ 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/ 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.

POFT 2481 Cooperative Education - Administrative Assistant/Secretarial Science, General 0-22-4

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Departmental approval required.

POFT 2482 Cooperative Education - General Office Occupations and Clerical Services 0-22-4

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. 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 2331 Advanced Pastry 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.

PSYC Psychology

PSYC 2301 General Psychology 3-0-3

Basic principles of human experience and behavior involving biological, environmental and sociocultural studies. An overview course including an introduction to the major studies of psychology.

PSYC 2308 Child Psychology 3-0-3

The purpose of this course is to develop an understanding of children and to engender a real interest in them. Consideration is given to the human organism as it develops physically, mentally, emotionally, and socially from birth through adolescence.

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

This course will study the relationship of the physical, emotional, social and mental factors of growth and development of children and adults through the life span.

PSYC 2315 Psychology of Adjustment 3-0-3

A study of psychological concepts and principles related to healthy personality and social adjustments.

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 CHLT, CMSW, DAAC and GERS

PSYT 1309 Health Psychology 2-2-3

This course provides for an exploration of behavioral medicine and the interdependence of mind, body, and spirit. Topics include stress and its effect on body systems, mind/body interactions, and techniques for improving and maintaining health.

PSYT 1313 Psychology of Personal Adjustment 2-2-3

This course focuses on the development of personal, social, and work adjustment skills. Students will explore a variety of issues relevant to health social interactions.

PSYT 1325 Death and Dying 2-2-3

This course is a study of the cultural and social norms, values, beliefs, and activities associated with the dying and their survivors. Topics include theories, communication skills, and activities to assist with coping for the dying and their survivors.

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.

PSYT 1345 Principles of Behavior Management and Modification 2-2-3

This course provides for the study of behavior management and cognitive theories and techniques with emphasis on their applications. Recommended prerequisite: PSYC 2301.

PSYT 1393 Special Topics in Clinical Psychology 2-2-3

Topics address recently identified current events, skills, knowledges, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency.

PSYT 2303 Social Psychology 2-2-3

This course will focus on the study of social perception, social influence, and social relations on individual and group interactions. Recommended prerequisite: PSYC 2301

PSYT 2321 Crisis Intervention 2-2-3

This course is a study of the principles and theories of assisting the individual in a crisis situation. Topics include coping skills to increase potential reinstatement of equilibrium to an individual's lifestyle and suicide prevention.

PSYT 2331 Abnormal Psychology 2-2-3

This course provides for the study of the theories and processes involved in the diagnosis and treatment of mental disorders. Recommended prerequisite: PSYC 2301

RELE Real Estate

RELE 1303 Real Estate Appraisal 3-0-3

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

RELE 1311 Law of Contracts 3-0-3

A review of real estate contracts required by Section 6A (3) of the Real Estate License Act with emphasis on general contract law requirements. Also covers the purpose, history, and working process of the Broker-Lawyer Committee. Includes preparation of real estate contract forms with emphasis on the most commonly used forms. Includes the elements of a contract, offer and acceptance, the statute of frauds, specific performance and remedies for breach, unauthorized practice of law, commission rules relating to use of adopted forms and owner disclosure requirements. This course meets the Texas Real Estate Licensing Act (TRELA) requirement for a core course on Real Estate contract law.

RELE 1315 Property Management 3-0-3

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

RELE 1325 Real Estate Mathematics 3-0-3

Mathematical logic and basic arithmetic skills including percentages, interest, time values of money, depreciation, amortization, proration, and estimation of closing statement.

RELE 1406 Real Estate Principles 4-0-4

An overview of licensing as a real estate broker and salesperson, ethics of practice as a license holder, titles to and conveyance of real estate, legal descriptions, law of agency, deeds, encumbrances and liens, distinctions between personal and real property, contracts, appraisal, finance and regulations, closing procedures, and real estate mathematics. Also covers at least three hours of classroom instruction on federal, state, and local laws relating to housing, discrimination, housing credit discrimination, and community reinvestment. This course meets the Texas Real Estate Licensing Act (TRELA) requirements for a core course on Real Estate principles. Fulfills the 60 hour requirement for salespersons license.

RELE 2301 Law of Agency 3-0-3
A study of law agency including principal-agent and master-servant relationships, the authority of an agent, the termination of an agent's authority, the fiduciary and other duties of an agent, employment law, deceptive trade practices, listing or buying procedures, and the disclosure of an agency. This course meets the Texas Real Estate Licensing Act (TRELA) requirement for a core course on Real Estate Agency Law.

RELE 2488 Internship- Real Estate 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: RELE 1311, 1406, 2301, and consent of the Department Chair.

RELE 2489 Internship- Real Estate 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: RELE 2488, BMGT 2488 or BMGT 2370 and consent of the Department Chair.

RNSG Nursing

RNSG 1209 Introduction to Nursing 2-0-2
Overview of nursing and the role of the associate degree nurse as a provider of care, coordinator of care, and member of a profession. Topics include knowledge, judgment, skills and professional values within a legal/ethical framework. The use of medical terminology and study and test-taking skills for technical courses and computer competency are included. This course lends itself to a blocked approach. The concepts of communications, caring, community and critical thinking are used throughout the course. Prerequisite: Admissions to Central Texas College.

RNSG 1301 Pharmacology 3-0-3
Introduction to the science of pharmacology with emphasis on the actions, interactions, adverse effects, and nursing implications of each drug classification. Topics include the roles and responsibilities of the nurse in safe administration of medications within a legal/ethical framework. This course lends itself to a blocked or integrated approach. The concepts of communication, caring, community, and critical thinking will be included throughout the course. Prerequisites: Admission to Central Texas College.

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.

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. 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 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. 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 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. 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 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. 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 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 2380 Cooperative Education - Food and Beverage/Restaurant Operations Manager 0-17-3
An intermediate or advanced course with lecture and work-based instruction that helps students gain practical experience in the discipline, enhance skills, and integrate knowledge. Indirect supervision is provided by the work supervisor while the lecture is provided by the college faculty or by other individuals under the supervision of the educational institution. Cooperative education may be a paid or unpaid learning experience.

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.

SLPS Criminal Justice see also CJCR, CJLE and CJSA

SLPS 2488 Internship-Security and Loss Prevention Services 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.

SMER Small Gas Engine

SMER prefix courses are not offered on the Texas Campus.

SMER 1372 Shop Organization and Management 3-0-3

This course is designed to provide the student with an understanding of small engine repair business management. Areas of study include customer relations, warranty provisions, service, salesmanship, organization and shop lay-out, and the financial and operational aspects of managing a small engine repair business. Recommended prerequisite: Sophomore standing.

SMER 1404 Marine Equipment Service Principles 3-3-4

Principles of operation of two and four stroke marine engines and associated systems. Emphasis on troubleshooting and analysis of faulty systems and their individual components. Recommended prerequisites: SMER 1471 and SMER 1428.

SMER 1428 Small Engine Service Principles 3-3-4

Principles of operation of small engines and associated systems. Emphasis on troubleshooting and the analysis of faulty systems and their components. Recommended prerequisite or co-requisite: SMER 1471.

SMER 1431 Small Engine Tune Up 3-3-4

Tune up procedures for small engines including analysis, valve train, ignition fuel, starter, cutter, and safety compliance systems. Emphasis on the use of appropriate equipment and procedures. Recommended prerequisites: SMER 1471 and SMER 1428.

SMER 1434 Small Engine Two-Stroke Overhaul 3-3-4

Overhaul procedures for two-stroke small engines as used in lawn and garden applications. Emphasis on proper shop procedures for overhaul of two-stroke small engines and their applicable drive systems. Recommended prerequisites: SMER 1431, SMER 1471 and WLDG 1425.

SMER 1437 Small Engine Four-Stroke Engine/Transmission 3-3-4

Overhaul procedures for four-stroke small engines, transmissions, and transaxles. Emphasis on shop procedures for overhaul, transmission troubleshooting, transmission inspection, and transaxle inspection. Recommended prerequisites: SMER 1428 and SMER 1434.

SMER 1471 Small Gas Engine Fundamentals 3-3-4

A study of the fundamental principles and operation of the two- and four-stroke air-cooled engines. Testing and maintenance procedures are performed on the ignition, compression, fuel, starting and lubrication systems of 2-HP and 8-HP engines. Recommended prerequisite or co-requisite: DEMR 1401, or AUMT 1405.

SMER 1473 Large Air-Cooled Engines 3-3-4

This course is designed to provide the student with an understanding of the theory and operating principles of large air-cooled engines used in lawn mowers, RV, and generator applications. Single- and twin-cylinder engines will be included. Emphasis will be placed on inspection, testing, diagnosing, and repair/overhaul procedures. Recommended prerequisites: SMER 1428 and SMER 1471.

SOCI Sociology

SOCI 1301 Introduction to Sociology 3-0-3

The study of human society, human behavior and personality as a product of group life, community organization, social change and current social problems.

SOCI 1306 Social Problems 3-0-3

A study of identification and analysis of contemporary social problems and development of criteria for evaluating these issues for social betterment.

SOCI 2301 Marriage and The Family 3-0-3

A study of problems in courtship, marriage, and family living as they relate to the social structure of American society.

SOCI 2319 Minority Studies I 3-0-3

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

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 or a "passing" score on the CTC Spanish placement exam.

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 or two years of Spanish at an accredited high school and a "high passing" score on the CTC Spanish placement test.

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 or "the highest passing" score on the CTC Spanish placement test.

SPCH Speech

SPCH 1144 Forensic Activities I 1-0-1

Study and practice of the nine individual speaking events that are commonly a part of forensic competition. Stresses research of subject matter, performance, and professionalism as a competitive speaker. Will include some travel to area forensic tournaments as a member of CTC's speech team.

SPCH 1145 Forensic Activities II 1-0-1

Study and practice of the nine individual speaking events that are commonly a part of forensic competition. Stresses research of subject matter, performance, and professionalism as a competitive speaker. Will include some travel to area forensic tournaments as a member of CTC's speech team.

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 2144 Forensic Activities III 1-0-1
Study and practices of the nine individual speaking events that are commonly a part of forensic competition. Stresses research of subject matter, performance, and professionalism as a competitive speaker. Will include some travel to area forensic tournaments as a member of CTC's speech team.

SPCH 2145 Forensic Activities IV 1-0-1
Study and practices of the nine individual speaking events that are commonly a part of forensic competition. Stresses research of subject matter, performance, and professionalism as a competitive speaker. Will include some travel to area forensic tournaments as a member of CTC's speech team.

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 Early Childhood Professions

TECA 1303 Families, School and Community 2-2-3
A study of the relationship between the child, the family, the community, and early childhood educators, including a study of parent education, family and community lifestyles, child abuse, multicultural instruction techniques, and current issues.

TECA 1311 Educating Young Children 2-2-3
An introduction to the profession of early childhood education, focusing on developmentally appropriate practices, types of programs, historical perspectives, ethics, and current issues.

TECA 1318 Wellness of the Young Child 2-2-3
A study of nutrition, health, safety, and related activities, including skill development in management of issues, guidelines, and practices in nutrition, as well as community health, hygiene, safety, and legal implications. Integration of these principles applied to a variety of settings.

TECA 1354 Child Growth & Development 2-2-3
A study of the principles of normal child growth and development from conception to adolescence. Focus on physical, cognitive, social, and emotional domains of development.

TRVM Hospitality Management see also CHEF, HAMG, IFAW, 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 1313 Ticketing Forms and Procedures 2-2-3
A study of manual travel agency operations and basic hands-on computerized reservations techniques in manual travel agency operations; emphasis on making air, hotel, tour and cruise reservations; writing itineraries; reading and interpreting brochures; and ticketing rules, credit card sales, ticket refunds, exchanges, and re-issues. Topics include building a simple Passenger Name Record on an airline computer reservation system, accessing availability, fares, and miscellaneous related information.

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.

TRVM 2305 Travel Industry Management 3-0-3
The preparation for mid-management positions in the travel and tourism industry. Topics include business organization, Airline Reporting Corporation requirements and regulations, bookkeeping requirements, equipment decisions and airline computer system affiliation, as well as staff development and employee relations, experiential team building applications, and the interviewing process.

TRVM 2366 Practicum - Travel and Tourism 0-21-3
Practical general training and experiences in the workplace. The college, with the employer, develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. Prerequisites: TRVM 1300 and TRVM 1313.

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. Finishing techniques include proper sanding, sealing, and staining techniques. Recommended 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 laying, and customer and co-worker relations. Recommended prerequisite: WDWK 1413.

WLDG Welding

WLDG 1413 Introduction to Blueprint Reading for Welders 3-3-4
A study of industrial blueprints. Emphasis placed on terminology, symbols, graphic description, and welding processes, including systems of measurements and industry standards. Interpretation of plans and drawings used by industry. Recommended prerequisite or co-requisite: WLDG 1423.

WLDG 1423 Welding Safety, Tools, and Equipment 3-3-4
An introduction to welding careers and safety practice, including welding safety; OSHA and the Hazardous Communication Act; Material Safety Data Sheets (MSDS); basic mathematics; measuring systems; shop operations; use and care of precision measuring tools; and the use and care of the hand and power tools. Instruction on various types of welding equipment and processes, basic welding gases, fluxes, rods, electrodes, symbols, and blueprints.

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. Recommended prerequisite or co-requisite: WLDG 1423.

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

An introduction to 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. Recommended prerequisite or co-requisites: WLDG 1423 and WLDG 1425.

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

A study of the principles of gas metal arc welding, setup and use of GMAW equipment, and safe use of tools and equipment. Instruction in various joint designs. Recommended prerequisites: WLDG 1423 and WLDG 1428.

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

An introduction to the principles of gas tungsten arc welding (GTAW) setup and use of GTAW equipment, and safe use of tools and equipment. Welding instruction in various positions on joint designs. Recommended prerequisites: WLDG 1423 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. Recommended 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 all test positions. Recommended prerequisite: WLDG 1428.

WLDG 2406 Intermediate Pipe Welding 3-3-4

A comprehensive course on the welding of pipe using the shielded metal arc welding (SMAW) process. Position of welds will be 1G, 2G, 5G, and 6G using various electrodes. Topics covered include electrode selection, equipment setup, and safe shop practices. Recommended prerequisite: WLDG 1435.

**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, gas metal arc welding, flux-cored arc welding, gas tungsten arc welding or any other approved welding process. Recommended prerequisite: Consent of Welding Instructor or Department Chair.

WLDG 2435 Advanced Layout and Fabrication 3-3-4

A continuation of the Intermediate Layout and Fabrication course which covers production and fabrication of layout tools and processes. Emphasis on application of fabrication and layout skills. Recommended prerequisite: Satisfactory completion of all WLDG courses in the program except WLDG 2488.

**WLDG 2443 Advanced Shielded Metal Arc
Welding (SMAW) 3-3-4**

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. Recommended prerequisite: WLDG 1423 and WLDG 1457.

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

Advanced topics in GMAW welding, including welding in various positions and directions. Recommended prerequisite: WLDG 1430.

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

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

WLDG 2453 Advanced Pipe Welding 3-3-4

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. Recommended 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. Recommended prerequisite: Satisfactory completion of all other technical courses in the program.